

Resisting Dams and ‘Development’: Contemporary Significance of the Campaign against the Narmada Projects in India

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Studies on environmental campaigns in developing countries tend to highlight their grassroots character and view them as producing visions of a sustainable future. In reviewing the campaign against the Sardar Sarovar (Narmada) Projects in India this contribution advances two related arguments: first, that the success of the campaign is largely because of resources mobilised in multi-level networks and, second, that the contemporary significance of the movement against the projects lies in the abilities of actors to politicise uncertainties and risks surrounding these projects. The analysis leads to the conclusion that ‘risk politics’ in such movements can have national and global policy implications as they draw attention to perceived gaps in policy frameworks and appraisal methods of large river valley interventions.

I. INTRODUCTION

Construction work on the controversial Sardar Sarovar Project (hereafter SSP) on the Narmada river in Gujarat has been suspended since 1995 on the orders of the Supreme Court of India. The highest court of the land is currently hearing a public interest petition filed by the Narmada Bachao Andolan (Save

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Narmada Movement, hereafter NBA), a movement launched in 1989 to lead the campaign against the SSP. The petitioners seek necessary court orders to stall further construction on the dam which is now 80 metres high from a final height of 136 metres, citing incomplete studies and plans, lack of full consultation and participation of the affected people. The petition includes an option of restricting the dam height to 93 metres, which according to the NBA will significantly lower the submergence area in the state of Madhya Pradesh (hereafter MP) without affecting the proposed benefits to the state of Gujarat under whose jurisdiction lies the construction and management of SSP.

The NBA has been hailed as a good example of the environmental movement in India [*Shiva and Bandopadhyaya, 1989; Gadgil and Guha, 1995*]. Although the anti-SSP campaign has attracted scholarly attention [*Wood, 1993; Omvedt, 1993; Baviskar, 1995*], the movement has awaited a comprehensive profile. This study is a step towards filling this empirical gap. In the process, the paper levies a critical gaze at the characterisation of such campaigns as 'grassroots environmental actions' and/or as 'people's movements'.

In broader terms, literature on the environmental movements in India, whether considering them together with social movements in other arenas [*Omvedt, 1993, Sethi, 1993a, Seth, 1983, Kothari, 1984*]¹ or by themselves [*Gadgil and Guha, 1995, Shiva and Bandopadhyaya, 1989*], view them as reflecting disenchantment with state-led development strategies and creating alternative political visions to the dominant development paradigm [*Wignaraja, 1993, Escobar, 1992, Kothari, 1990, Parajuli, 1991*]. In generic terms, the visions of alternatives may be loosely linked with perhaps every social movement as each tends to affect the development imaginary. Instead of merely valorising the transformation potential of contemporary environmental mobilisations by alluding to their imaginary and visions, this study attempts to unravel the underlying, and hitherto unacknowledged, significance of 'risk politics' in such formations.

The analysis has two broad objectives. The first objective is to demonstrate the operations of contemporary environmental campaigns in multi-level networks that spread from the local to the global. The second objective is to account for the syncretic language of protest and the cognition of risks that such forms of politics bring into the public domain. Both these objectives are pursued in the empirical context of the mobilisation campaign against the SSP in India.

In social movement studies there is no one way of looking at the involved actors. Moreover, received wisdom on movement studies weighs heavily against 'ongoing' social movements. Viewed positively, there exists ample scope for flexibility in devising analytical frameworks to handle research objectives. The framework of this study rests on three main arguments which,

in a sense, influence its structure: (a) as temporal processes, social movements are movements in time changing shape and orientation; (b) articulatory practices of contemporary movements spread across different arenas and multiple levels; and (c) environmental mobilisations acquire syncretic language of protest through each of the several axes of networks.

The study consists of the following sections. Section II takes a cursory glance at some conceptual and methodological issues relating to environmental movements. Section III outlines the backdrop and conjunctural opportunities that led to the anti-SSP campaign. In section IV, the multi-level articulations and practices of the NBA are outlined focusing on protest events and tangible gains. In section V, we elaborate on the NBA's language of protest and introduce its politics of risk, drawing mainly on the insights of Beck [1992, 1995] and Giddens [1990]. In section VI we pose some identifiable dilemmas that pertain to displacement risks of project-affected people. Some concluding comments are made in the final section.

II. SOME CONCEPTUAL AND METHODOLOGICAL ISSUES

The concept of social movement according to Diani and Eyerman [1992] serves primarily as an evocative label attached to a series of empirical phenomena easily analysed under the rubric of social conflict, collective action or political protest. In a minimalist sense however, social movements may be defined as forms of collective action: (a) expressing social and other conflicts [Lindberg, 1995; Gadgil and Guha, 1995]; (b) based on large mobilisations [Cohen, 1985] and (c) challenging or breaking the limits of the system in which action occurs [Melucci, 1989].

New Social Movements: What is 'New'?

In recent years, the term 'new social movement' has evoked a great deal of scholarly interest. Originating in the works of Alain Touraine and the European school, the term denoted new structural conflicts in post-industrial or advanced capitalist societies [Touraine, 1981; 1985, Habermas, 1981, Melucci, 1989; 1992]. The genre consisted of mobilisations around peace, students, women and environment-related issues. The exponents viewed these campaigns as primarily over symbolic goods – meanings, lifestyles – rather than over material goods. The newness was also attributed to the nature of social formations that were outside the working class or peasant movements – the subjects of class struggle in classical Marxism. Studies in Europe and elsewhere have shown that the core members of these movements belong mostly to the middle class living in material conditions that facilitate their relative neglect of material, economic and redistributive demands [Offe, 1985, Eder, 1995].

The theoretical underpinnings for new social movements in the developing countries are, however, more nuanced. In Latin America, the core of the new social movements constitute a multiplicity of action groups – urban squatter movements, neighbourhood councils, coalitions for the defence of indigenous traditions and regional interests. Rather than against the economic ruling class, such struggles are often in opposition to the state and other political and socio-cultural institutions and have been considered as resulting from the multi-layered structural crises facing modern Latin American societies [Laclau, 1985, Evers, 1985]. They are judged to be economic and cultural denoting struggles over meanings and over resources [Castells, 1983, Escobar, 1992]. As Fiske [1989: 10] has argued, these struggles are to be understood as ‘semiotic resistance’ originating in the ‘desire of the subordinate to exert control over the meanings of their lives’.

In the Indian context, ‘new social movement’ has been used mainly to denote the women’s movement emerging in the late 1970s, articulating cultural radicalism; the *dalit* (oppressed caste) movement and the *adivasi* (indigenous people) movement for regional autonomy and cultural identity; environmental action groups resisting development projects and farmers’ movements of the 1980s demanding remunerative prices for farm outputs and lower prices for inputs [Omvedt, 1993; Brass, 1995]. The ‘newness’ in them is attributed to their being (a) non-party political formations [Kothari, 1984, Seth, 1983], outside the realm of institutionalised party politics on the one hand and the trade unions and lower class peasant politics on the other, and (b) forces heralding a new vision of development by ‘redefining politics and articulating alternative forms of governance’ [Sethi, 1993a].

These new social movements are considered to emanate from the structural failure of the modernisation project largely practised and controlled by a developmentalist state that has so far exercised domination over knowledge and power [Parajuli, 1991]. While the modernisation project is viewed as being Eurocentric [Wignaraja, 1993] and therefore essentially colonising (in the context of the ecological as well as the women’s movement in India see Shiva [1988]), the post-colonial state is theorised as a hegemonic formation, serving the interests and values of the dominant national elite, in the process subjugating women, dalits, adivasis, minorities and the poor, and attempting ‘to regulate both accumulation and legitimisation as well as capitalism and democracy’ [Parajuli, 1991: 175]. Within this scenario of domination and subordination, new social movements are counter-hegemonic formations resisting domination, albeit in differing forms and degrees, as well as ‘providing some basis for a developmental and democratic alternative to the system as it now works’ [Wignaraja, 1993: 5]. To the extent that such movements straddle class borders rather than polarising around them they are a close approximation to their counterparts in advanced countries.

The Indian Environment Movement

The conceptualisation of new social movements in the developing countries as reflecting a developmental crisis, as struggles over resources and meanings and as manifestations of pluralistic paradigms of development and governance is evident in the theorisation of the Indian environment movement. Nature-related conflicts and struggles reflect a strong material basis emanating from state hegemony over water, forests and land resources which serve the subsistence and livelihood needs of the majority of the population. To some scholars such movements are primarily resistance movements geared towards stopping economic activities that destroy the environment and impoverish local communities [*Gadgil and Guha, 1995: 2*]. Others emphasise their capabilities to redefine the concepts of development and economic values, of technological efficiency and scientific rationality [*Shiva, 1991: 24*]. There is however, unanimity among scholars over the fact that such movements have occurred due to socio-ecological impact of a narrowly conceived development which is based only on short-term commercial criteria of control and exploitation of natural resources and which almost exclusively serves the needs and interests of the rich minority.

The sites of environmental struggles and movements are resource-intensive industrial activities and major development projects such as exploitation of mineral resources, large river valley projects, mechanised fishing and state controlled commercial forestry [*Shiva, 1991; Shiva and Bandopadhyaya, 1988; Gadgil and Guha, 1995; Sethi, 1993a*]. Alongside large scale destruction and/or transfer of natural resources these activities and projects frequently involve displacement of local communities. In other words, such productive activities plant the seeds of conflict by their very nature. Environmental movements are mediations in these conditions of conflict. Depending on their nature and intensity they could denote a redefinition of usufruct and control rights over the resource in question, an environmental response seeking correctives through legal and policy shifts, or more radically, an ecological reaction, rejecting the dominant development paradigm and seeking to alter fundamentally existing conceptions on and modes of resource use [*Sethi, 1993a*].

Of the numerous environmental struggles that dot the Indian landscape, the best known and most studied movement is the Chipko Movement [*Guha, 1989; Weber, 1987; Shiva, 1991; Rangan, 1993; 1996*]. In many ways the Chipko Movement marks a watershed in the Indian environmental movement. It was one of the first struggles launched in the post-independence era that drew world-wide attention to the damaging effects of commercial forestry and logging practices in the foothills of the Himalayas, both on the inhabitants as well as on the wider eco-system of the Garhwal-Kumaon belt in the

Uttarakhand region. It took place at a time when not much was known in India and the world over about the significance of environmentally sustainable development. The movement derives its name from the collective action it espoused – the hugging of trees by local people, to prevent forest officials and contractors from cutting them down.² Chipko succeeded in achieving a 15-year ban on commercial logging in the region. But more importantly it inspired similar struggles in other parts of India, the Appiko Chaluvali struggle in the Uttara Kannada district in south India being one [Shiva, 1991: 117].

Movement Analyses: Some Methodological Issues

Approaches to the study of social movements fall broadly under two categories. The first approach focuses on macro-level structural foundations underpinning the movements, usually factors of political economy and/or systemic crisis. That is to say social movements are approached through structural conditions that cause and influence them. The critical point of inquiry is the ‘why’ of the social movement. As the focus remains on the contradictions of the larger system, the tendency in this approach is to valorise the transformation potential of such movements [Salman, 1990: 112]. The second approach takes as its explanatory domain, the politics of the movement – interests, protest events, leadership and organisation as well as issues of strategies and alliances. The accent is on organisational displays and material and ideological resources (on the ‘how’ of the movement), the assumption being that there has always been an autonomous dimension of politics that is not exclusively a reaction or response to structural conditions and crises. This approach is evident in micro-studies of particular movements.

The inherently dialogical character of social movements – that is, interacting systems and actors – poses the challenge of maintaining an analytical equilibrium between the two modes of analysis [Eder, 1995: 11]. As our focus is on the resources mobilised in the campaign against the SSP, in methodological terms, this study comes closer to the second approach. Having stated that, one is very much aware of the fact that social movements cannot be explained as a mere manifestation of an aggregate of people organising resources to fight for their interests or as political reactions to (new) forms of (structural) domination and exploitation. From contemporary scholarship we draw three elements central to movement formation and development to transcend the binary methodological divide: movement actors mediate through networks of social relationships [Melucci, 1992: 243]; construct collective identity [Castells, 1997: 6]; and produce (new) systems of meaning and knowledge [Diani and Eyerman, 1992: 9].

The attempt in this study to combine hitherto distinct methods needs to be highlighted. The first relates to mobilisation and having to situate it in a wider political structure of opportunities and constraints. As Tarrow [1994] suggests,

resources and factors external to a movement such as cleavages among elites, shifts in ruling alignments and availability of influential allies play a vital role in influencing mobilisation and strategies. The constraints could arise from the growth of counter-campaigns that rival in claims, state repression as well as policy-making innovations of governments that generate problems of representations.

The second relates to the movement's identity and practices. Castells [1997: 69–70] argues that 'social movements must be understood in their own terms: namely, *they are what they say they are*. Their practices are their self-definition' (italics in original). We develop this reading to outline two aspects of movement practices: the first, following Laclau and Mouffe [1985] is its articulatory practice³ and the second, following Eyerman and Jamison [1991] is its cognitive practice.⁴ The first is derived from events and achievements of multi-level networks and alliances and the second from the movement's language of protest.

Connected to the second method is the third, related to knowledge production. An attempt is made to separate a movement's vision from its political orientation. While we admit that such methodological separation probably lacks supportive scholarly evidence, the plea is to read into the attempt the need for understanding the contemporary significance of environmental movements rather than accounting for their future visions. To discount methodologically its future we characterise the movement's vision as a discursively acquired rhetoric. Its contemporary meaning is then unravelled by associating its language with the sociology of risks [Redclift and Woodgate, 1993, Krimsky and Golding, 1992].

III. THE EMERGENCE OF THE ANTI-SSP MOVEMENT

Sardar Sarovar Project: An Overview of Inter-State Conflicts

The Sardar Sarovar Dam is the terminal dam in the Narmada Valley Development Project master plan that envisages the construction of 30 major dams, 135 medium dams and 3,000 minor dams on the river Narmada and its tributaries. Together the projects would irrigate 4 to 5 million hectares of agricultural land, provide 2700 MW of hydro-electricity and supply water for domestic and industrial use. According to the latest official estimates, the SSP alone over the next thirty years is expected to irrigate 1.8 million hectares of land, supply drinking water to 40 million people and will have an installed capacity of 1450 MW of power. The planned reservoir when filled to its maximum water level will cover 410 sq.km of land while its main irrigation canal will be approximately 440 km in length. The project is to submerge 37590 ha of land and affect 245 villages in the reservoir area with an estimated

population of 130,000. While the affected villages in the states of Maharashtra and Gujarat have a near total *adivasi* population, in Madhya Pradesh (M.P.), about 140 villages to be affected lie in the fertile Nimad plains inhabited, amongst others, by a class of prosperous cash-crop farmers with access to irrigation.

The protest movement around the SSP on the Narmada river can be seen as a relatively contemporary chapter in a project which spans almost five decades. The idea of harnessing water from the Narmada dates back to the 1940s, when the first technical studies were conducted and 16 sites identified for irrigation and hydro-electric projects. A terminal dam was proposed with a height of 48m which was subsequently raised to 96m in 1959.⁵ The construction of project headquarters began in 1961 in Kevadia, in which over 5,000 people from nearby villages were displaced.

The distribution of water from Narmada, the shape of the project and the distribution of benefits sparked off an inter-state dispute in India. Amidst competing claims to the river water by the riparian states of Gujarat, M.P. and Maharashtra, the site of the dam was shifted slightly upstream in 1962 to its present site. Under the Bhopal agreement of 1963⁶ between the chief ministers of Gujarat and M.P. it was further raised to 127m. However, as the M.P. government did not ratify the agreement the matter was referred to a central government committee which recommended a height of 150m. With disagreements continuing, Gujarat formerly registered a complaint under the Inter-State Water Disputes Act in 1968 and a year later the Narmada Water Disputes Tribunal was constituted. The Tribunal gave its final order in 1978 which was constitutionally binding on all the interested parties (states of Gujarat, M.P., Maharashtra and Rajasthan⁷). It set the height of the SSP at 136m. It also allocated water and hydro-power and distributed costs among the state governments and laid down principles and practices for resettlement and rehabilitation of those to be displaced.

The Nimad plains witnessed the first intense agitation against the Sardar Sarovar Project immediately after the Narmada Water Disputes Tribunal (NWDT) presented its final award on 16 August 1979. The affected Nimad villages, largely from the districts of Western Nimad and Dhar, launched the 'Narmada Bachao-Nimad Bachao Sangharsh Samiti' (Save Narmada, Save Nimad Struggle Committee) which gained instant support from the Congress Party, the opposition in the Madhya Pradesh Legislative Assembly. The Congress Party gave it organisational support. Several state-level functionaries, the student wing and the youth wing of the M.P. Congress actively participated in the struggle. While the agitation aroused a general feeling of M.P. being the loser in the Tribunal Award, the brunt of the struggle in this first phase was directed at renegotiating the height of the Navagam Dam (the name by which the terminal dam was known), in order to save some of the

Nimad villages from being submerged. Madhya Pradesh was indeed a loser in many ways. Most of the submergence was to occur in M.P., including fertile agricultural land in the Nimad belt. Moreover, the proposed sites for two M.P. government projects, Harinfal⁸ and Jalsindhi,⁹ fell within the submergence area of SSP. The M.P. Congress party, therefore, projected the issue of the Navagam Dam as a conflict between the interests of Gujarat and M.P.¹⁰ The agitation soon petered out as the Congress party withdrew its support after coming to power in M.P. and elsewhere in the elections of 1980.

Environment, Displacement and the Demand for Fair Rehabilitation

In the early 1980s, environmentalists and environmental groups were instrumental in initiating a campaign against large dams.¹¹ These groups had tasted some degree of success in the late 1970s, both in the Chipko movement and in the campaign to save the Silent Valley in Kerala and now took initiatives in research, documentation and raising general awareness of the impact of large dams. With regards to the SSP, a Delhi based environmental group called Kalpavriksh, together with the Hindu College Nature Club, conducted a study in the months of July and August 1983 in the Narmada Valley and pointed out some 'serious inadequacies and distortions in the information base' [*Kalpavriksh, 1986: 4*].¹² In 1983, ARCH-Vahini,¹³ an NGO working on the issues of health and environment in Mangrol, Gujarat, approached the World Bank drawing attention to the plight of those to be evicted by the project. That year, the World Bank commissioned Thayer Scudder, an international expert on displacement and resettlement, as part of a mission on the relocation component of the Sardar Sarovar Project. Scudder's report, which pointed out several inadequacies in the rehabilitation proposals, was widely circulated among international NGOs such as Oxfam and Survival International in the UK and the Environmental Defence Fund in the USA; they even began lobbying with the World Bank as it was negotiating the loan proposal with the Government of India and the states for the SSP.¹⁴

On 8 March 1984, affected people from fourteen tribal villages in Gujarat and nine tribal villages in Maharashtra, marched to the project headquarters at the Kevadia Colony from Vadagam village in Gujarat. This first public demonstration, demanded a thorough revision of the Gujarat government's resettlement policy outlined in its government resolution of 11 June 1979 which offered compensation only to those with revenue land holdings. In a memorandum submitted by the affected people and their representing NGOs – ARCH-Vahini and Rajpipla Social Service Society – to the government of Gujarat, the demand was put forward for landless, 'encroachers' and major sons to be treated on a par with people holding land titles.¹⁵

The struggle for better resettlement intensified in the following years. In Gujarat, ARCH-Vahini spearheaded the boycotting of project authorities;

blockades to stop work on the rock fill dykes,¹⁶ a writ petition in the Gujarat High Court and later in the Supreme Court of India, and the intensification of the international campaign with the support of NGOs abroad. Later the *Narmada Asargrasta Samiti* (NAS)¹⁷ was formed as a platform for the 5,000 or so people displaced during the construction of the SSP headquarters back in 1960. In Maharashtra activists¹⁸ from an NGO based in Ahmedabad had initiated work among the adivasi villages helping them to form village level committees.¹⁹ In April 1986, the *Narmada Dharangrasta Samiti* (NDS) was formed in Dhulia, a committee comprising of activists from SETU and representatives of the affected villages under the leadership of Medha Patkar.²⁰ In a memorandum submitted to the government of Maharashtra that month, the NDS demanded the release of degraded forest land for the purpose of rehabilitation if large quantities of revenue land were unavailable [*ARCH-Vahini*, 1991]. A few months later, Maharashtra witnessed its first major demonstration held in Bombay and organised by a left-led 'Committee of Dam and Project Evictees' under the slogan, 'first rehabilitation then the dam' [*Omvedt*, 1993]. Two distinguishing features marked this phase of the struggle. First, demands for better provisions for resettlement and rehabilitation were voiced in no uncertain terms. Second, it was the first time that *adivasi* [tribal] villages in both Gujarat and Maharashtra were mobilised.

In the state of M.P. the situation was more fluid. The initial stirring focused more on the Narmada Sagar Project (NSP) which was to be constructed at Punasa in the Khandwa district in Central M.P., and less on the SSP.²¹ The initial response of the activist groups and environmentalists to the NSP was one of total opposition.²² This response was shaped not only by accumulated experiences with the Tawa and Bargi projects²³ in M.P., but also by the orientation of involved activist groups in the region (central M.P.) towards 'appropriate technology'.²⁴

In western M.P., particularly in Jhabua district, several organisations and activist groups had been working among the tribal villages. The *Khedut Mazdoor Chetna Sangath*²⁵ was one such organisation. Working with over a hundred villages in Alirajpur tehsil from which the Sangath draws its membership, since its formation in 1983 it has launched several struggles against the state forest department over access and control of forest resources. The coming of the SSP affected 26 villages of the Sangath area. In 1986, the Sangath facilitated a survey conducted by Multiple Action Research Group (MARG), an NGO for research and policy advocacy based in Delhi, in these villages.²⁶ The objective of the survey was to find out 'what kind of rehabilitation the affected people wanted, what rehabilitation they were offered and the extent to which it was satisfactory' [*MARG 1986: 1*].²⁷ Unlike its counterparts in central M.P., the Sangath focused on the problems of displacement and resettlement in the initial years, disseminating information

on the likely impact of the SSP, the extent of forest loss, the number of villages facing submergence, resettlement provisions as per the Tribunal award, the World Bank credit agreements and the government resolutions and peoples entitlements as per these provisions.

The fluid situation in M.P. notwithstanding, demands for a fair rehabilitation package for SSP oustees were voiced by most of the activist groups. The demands voiced at this point of the agitation assume particular significance, since it marked the beginning of the project implementation phase.²⁸ Between 1984 and 1987, the loan deal with the Bank had been signed, financial clearance had been received from the Planning Commission, and conditional environmental clearance for the project had been granted by the Ministry of Forests and Environment. The conditional environmental clearance accorded to the SSP and NSP in June 1987 activated a chain reaction.

Environmentalists and NGOs outside the valley strongly protested against the decision of the government to approve the projects when sufficient studies on the environmental and social impact of the project had not been initiated, and those which had begun had not been completed. A month earlier in May 1987, Medha Patkar – the then leader of NDS – had written to the Environment Defence Fund (EDF), an international NGO in the USA, that the environmental clearance to the SSP was expected despite incomplete studies but that the NDS would intensify its struggle for rehabilitation none the less. She also mentioned that she had persuaded NGOs in M.P. who were arguing for a 'no dam' position to mobilise and organise tribals to put up joint rehabilitation demands (cited in Patel [1995]).

Patkar's initiative revitalised the *Narmada Ghati Nav Nirman Samiti* (NGNS) in M.P. with the participation of the activists of the Khedut Mazdoor Chetna Sangath. Together with the Narmada Dharanagrasta Samiti (NDS), the NGNS made several demands on resettlement and rehabilitation in 1987. These demands included the right to information on the technical aspects of the dam, the extent and schedule of submergence, land availability including amount, place, quality and legal status of the land selected for compensation; fresh land surveys to include those areas excluded from earlier surveys, the extension of rehabilitation benefits to those affected by the project headquarters at Kevadia, the canal network in Gujarat and the compensatory afforestation programmes were also made; and assertion of the rights of those affected to settle in their own states as per guidelines laid down by the NWDT award.

From Better Resettlement to Total Opposition

On 23 December 1987, the government of Gujarat announced substantial modifications to its Resettlement and Rehabilitation (R&R) package through

government resolutions of 4, 14 and 17 December 1987. This announcement followed pressures from the NGO movement for R&R in Gujarat, M.P. and Maharashtra and from a series of Bank missions, particularly in April and November/December that year. The major features of the new R&R policies were: (a) landed oustees were eligible to receive a minimum of 2 hectares of land of their choice, and the difference between the compensation paid by the government and the market price of two hectares of land as per the choice of the displaced was to be borne by the government through an *ex-gratia* payment; (b) cultivators of government waste land and forest land as well as the landless were to be accorded the same benefits as in (a). It needs to be mentioned here that to date the Government of India has no national policy on R&R and the approach of states towards relocation has been extremely *ad hoc* and inconsistent. Under these circumstances, the government of Gujarat rightly claimed that its R&R policy in SSP was a 'revolutionary' step.

The policy announcements resulted in the split of the NGO movement that had so far spearheaded the agitation. NGOs in Gujarat, notably the ARCH-Vahini, endorsed the new policies and offered critical support to the government for implementing them, the Vahini claiming that the implementation of the R&R policies required 'objective, fair and continuous watch dogging' [ARCH Vahini, 1991: 14]. The NGO movement in Maharashtra and M.P., however, took a completely different turn.

In November 1987, in a joint memorandum to the Narmada Control Authority, the NGNS (M.P.) and the NDS (Maharashtra) put forward a list of thirty eight demands relating to rehabilitation. The memorandum warned that if a clear decision was not taken on these demands by 15 December, then a movement would be launched to have their demands met. On 5 December, a meeting of NGO activists, environmentalists, and intellectuals was convened in New Delhi. The meeting marked the formulation of what was called the 'Narmada Action Plan', largely governed by the feeling that 'it would be very difficult (but not impossible) to stop the SSP at that stage' (correspondence between A. Kothari and A. Mehta, 16 September 1988), but that a demand for a complete, reliable appraisal of the project was justified and needed to be strongly pursued.²⁹

The proposed policy changes by the Gujarat government were not well received by the activist groups outside Gujarat. Doubts were raised about the government's capabilities and will to implement the policies,³⁰ as well as the availability of the large quantity of land required for rehabilitation. International NGOs stepped up their campaign against the project: in June 1988, two organisations, the EDF and Friends of the Earth, testified before the Subcommittee on Foreign Operations, Committee on Appropriations, US Senate [EDF, 1988] on the inadequate environmental impact assessments and cost-benefit analysis undertaken by the project authorities as well as

inadequacies in the R&R policies of the government of M.P. and Maharashtra and the unavailability of quality land for rehabilitation. In July 1988, the Gandhian social worker Baba Amte organised a meeting of social workers and environmentalists, the consequence of which was the adoption of the 'Anandwan Declaration against Large Dams'.³¹

In August 1988, the NDS and NGNS announced total opposition to the SSP on environmental, social and economic grounds, preferring to 'be drowned by the rising water of the dam if the government insists on building the dam, rather than giving tacit approval to these destructive schemes by agreeing to shift' (press release, NDS, 1988). Thus was born the slogan *Dubenge par Hatenge Nahin!* (We shall drown, but not move!). The rationale for opposing the entire project was first, that proper rehabilitation of all those to be displaced was impossible since the governments had no real idea of the extent and impact of displacement; second, the extremely high environmental costs of the SSP had neither been assessed nor properly accounted for in the cost-benefit analysis and the governments had no action plans to undertake mitigating measures in this regard. A year later, a radical environmental opposition known as the Narmada Bachao Andolan (Save Narmada Movement) was forged.

'Why Do We Oppose': NBA's Evaluation of SSP

The resolve for a total opposition to the construction of SSP, according to the movement, rested on 'definite information and fundamental principles' [NDS, undated: 1]. The opposition was justified on the grounds that

even the most preliminary information regarding the number and families of villages affected, the extent of the areas to be submerged, the number of hamlets likely to be displaced ... was not available with the governments ... leave aside the detailed plan for rehabilitation ... Whatever promises the government may make on paper, the organisations of the oustees have come to the painful conclusion after full discussions, deliberations, studies and investigation that the government will never be in a position to give "land for land" for all 245 project affected villages [*ibid.*: 3-4].

Sustainable rehabilitation of all the oustees was therefore considered as an impossible task.

However, opposition was not just over the question of inadequate R&R measures and impracticable policies but on a wider issue that involved a major sacrifice by some, for an ill-defined, unestablished 'national good'. The wider issue involved the exercise of a democratic right to information with regard to all aspects of the SSP in particular and development projects in general, and the obligation of the government to establish clearly the 'public interest' of

such projects. The questions raised in the process were as follows: (a) whose development? (b) at whose cost? (c) what are the quantifiable and non-quantifiable costs and do they outweigh the benefits? (d) is this development sustainable and just? (e) is the project in the national interest? (f) who are the people being asked to make sacrifices in the national interest? (g) can their community life and resource base ever be compensated? (h) are the decisions taken only after complete and comprehensive investigations? (i) since people are dependent on the natural resources affected by the project, are their rights to decide on the harnessing and utilisation of such resources being recognised?³²

These questions brought to the fore issues related to the distributional effects of development projects, their planning, execution and scale, their environmental costs, the financial implications of such investments as well as issues of democratic governance and human rights. In the NBA's understanding, the SSP implied 'unprecedented displacement,³³ violation of right to life and livelihood of people, the degradation of land, water and forest resources,³⁴ the untenability of benefits,³⁵ the staggering financial burden³⁶ and the consequent international debt trap ...' [*NBA, 1992: 4*].³⁷ The displacement had been planned without the affected population being informed (as required by law) and without any scope for their meaningful participation in the project denying them the right to information and participation. The SSP thus stood for a 'faulty, non-viable, unjust and destructive project' (Campaign Letter, NBA, 10 Nov. 1994).

Against a Development Model: Self-Definition of a Movement

As the struggle against the SSP began to crystallise, the movement was seen to be one against a development model of which the SSP and similar other projects were manifestations. An extract from a campaign letter entitled 'We want Development not Destruction', is illustrative:

Since independence a preference for gigantism has come to dominate our development paradigm. Our planners, politicians and experts have opted wholesale for large dams and gigantic industrial units, and have dug mines and exploited forests in pursuit of their elitist vision of progress and development. The cumulative ill-effects of all this 'development' are now assuming disastrous proportions for a large section of the population, particularly for its most depressed strata – the tribals, the peasants and labourers – along with the already depleting natural resource base and our scarce financial resources [*Action Committee for National Rally Against Destructive Development, 1989: 1*].

At a national convention on 'Development, Planning and Mega Projects' organised by the NBA a few years later, it reiterated its critique of the gigantic

development projects and expressed opposition to 'the human rights violation entailed in forcible displacement, the unsustainability of large-scale environmental disruption, the lack of public accountability of decision makers, the absence of any genuine peoples' participation in development planning and the neo-imperialism of multi-lateral financial agencies' [NBA, 1992].³⁸

In the emerging critical discourse on state-led development projects and the 'elitist vision of gigantism', the movement linked 'large dams, the green revolution package, and the unmindful industrial-urban package' to the edifice of 'capital intensive technology and western indicators of development'. To the NBA leadership, the development model entailed 'increasing centralisation, capitalistic tendencies and vulgar consumerism' while causing 'degradation of land, water and forests, increasing socio-economical deprivation and inequality and erosion of basic human rights' [NBA, 1992: 1-2].

The NBA considers itself a challenge to this 'larger reality'. It is self-defined as 'one of the major struggles in post-independence era to save the land, forest, the people and their resources, which are being inequitably consumed and destroyed by a few in the name of public purpose [and] development' [NBA, 1992: 1]. As Kothari [1995: 428] notes, 'movement leaders argue that what they are doing is nothing short of challenging the fundamental structures of power and patronage, received categories and ideologies as well as representative processes that discriminate against the primary victims of economic development'.

Critical Responses of State and Civil Society Actors to NBA

The politics of radical opposition has had to confront both governmental and non-governmental actors. Whereas the SSP constitutes NBA's major struggle arena, in Gujarat it is viewed as the only solution to drought and shortage of water. Throughout the 1980s, in conditions of persistent drought, the government had mobilised public support for the SSP projecting it as the 'pride of Gujarat'. Industrial interests and farmers' associations backed the project expecting to benefit from power, irrigation and industrial water. Quite expectantly, the announcement of total opposition drew sharp reactions from the government of Gujarat. It dubbed the movement as anti-Gujarat and anti-development and clamped restrictions on the movement. In 1988 the dam site, the project headquarters at Kevadia and twelve adjacent villages were subject to the Official Secrets Act, 1923. The nearby Bharuch district was declared a 'prohibited area'. A few years later, the NBA office in Gujarat was ransacked. To counter the movement's criticisms of the SSP, the Gujarat government organised rallies, festivals and exhibitions throughout Gujarat to highlight the benefits of and organise support for the SSP. In a short time, all major political parties, a large number of Gujarati NGOs, the chambers of commerce,

farmers' associations and even Gandhian social activists in Gujarat extended support to the project. The project became popular as the 'real lifeline of Gujarat'.

With the NBA's radical opposition, the NGO movement for better resettlement in the valley had split into those focused on resettlement issues and those integrating it with a wider set of issues. The perceptions of ARCH-Vahini – an NGO in Gujarat – were clearly shaped by the conditions within which it was embedded. Its immediate struggle was for fair compensation for affected villages in Gujarat. It therefore deemed the Gujarat government's policy announcements as a big achievement for the struggle, 'realising fully its responsibility to ensure the implementation of the policies' (interview, Anil Patel, Director, Arch-Vahini, 12 Feb. 1996). For it, the next logical step in the struggle was to demand similar policy modifications from the governments of M.P. and Maharashtra and to work towards their implementation [ARCH-Vahini, 1988a].

The ARCH-Vahini responded to the radical opposition by dismissing it as a 'lofty ideal', and demanded to know 'if those who are making this radical shift will ... really ask the oustees to drown themselves in the rising water ...' It called for delinking the issue of rehabilitation from 'the battle on the wider front'. It did not 'share the strategic perceptions of those who are wittingly and unwittingly using the issue of rehabilitation of oustees in the cause of the fight against the dam' as this was 'not responsible activism' [ARCH-Vahini, 1988b: 14]. For the Vahini, the argument 'rehabilitation is impossible' was based on the 'alleged fact that enough land is not available'. It also called into question the NBA's arguments that 'oustees should not be asked or encouraged to identify the land they would prefer or that high prices of the land should not be given to the land sellers' [ARCH-Vahini, 1988b: 8] because these arguments went against the interests of affected people seeking quality land.

In Maharashtra, critical responses came from those groups who should have been NBA's natural allies. The Committee of Dam and Project Evictees (CDPE), a left outfit and the Shramik Mukti Dal (SMD), found the NBA's total opposition couched in rhetoric and romanticism. Whereas its romantic image could capture media attention, it had little strategy to gain mass-backing [Omvedt, 1993: 269]. The appeal of its leadership to sentiments and idealism was considered no substitute for the strategy of mass-based politics. Omvedt mentions that NBA's politics did not cut much ice with the popular farmers' movement in Maharashtra led by the *Shetkari Sangathana*. The Sangathana ignored the NBA's radical critique on the grounds that it divided the peasantry into losers and beneficiaries. For the Sangathana, the peasantry constitutes the mainstay of rural India and struggles against the exploitation and appropriation by urban-industrial interests. Therefore it could not support the NBA's division of the peasantry into rich cash crop farmers of Gujarat pitched against poor

farmers in M.P. and Maharashtra.³⁹

Some of these early critical responses spurred the NBA to intensify mobilisation in the Narmada valley, as well as in the national and global arena. Between 1990 and 1993 the NBA made dramatic gains in its support base. It assumed the shape of a multi-level network. It drew upon discourses from different constituents; its language of protest became more syncretic.

IV. MAPPING THE CONTOUR: PROTEST EVENTS AND ARTICULATORY PRACTICES

Mass Mobilisation and Protest Events in the Narmada Valley

NBA's success of mobilisation among the affected people is evident from several protest activities organised in the Narmada valley. Periodic setting up of road blocks at strategic points, demonstrations and rallies, blockades of project authorities – Narmada Control Authority and the World Bank – and political party leaders at different levels were combined with specific events such as obstructing the construction of bridges across the Narmada, uprooting stone markers from the proposed submergence areas and dumping them outside the Legislative Assembly in Bhopal and uprooting planted saplings of the project afforestation scheme to draw public attention to the species monoculture. Less frequently, the NBA has targeted specific groups such as women and adivasis for mobilisation; of considerable significance was a 1500 strong all-women's rally in January 1993 in the town of Badwani that demonstrated the NBA's ability to mobilise women in the submergence zone.

Tools of protest such as *satyagrahas* (a Gandhian term denoting political action based on truth and non-violence), *jal samarpan* (sacrificial drowning) and hunger strikes have been combined with strategies of *rasta roko* (road blockades) and *gaonbandi* (refusing the entry of state officials into the village). While the former set of tools symbolically highlight suffering and pain of the affected people, the latter strategies suggest symbolic delinking from centres of power and non-cooperation with state agencies. Two major protest events organised by the NBA in the Narmada valley are worth noting in some detail.

The first is the Harsud Rally of 28 September 1989 held at a NSP affected township in M.P.⁴⁰ The rally called for the adoption of a socially just and ecologically sustainable pattern of development and an end to all projects affecting the environment and destroying people's livelihoods. The rally marked the beginning of the syncretic protest language in which the struggle against the SSP was considered part of a wider struggle against a development model that benefited a few at the cost of the large majority of people and their environmental resources. The campaign newsletter of the NBA described the rally in the following words:

People struggling against past or proposed displacement and environmental degradation by massive irrigation and power projects such as Sardar Sarovar and Narmada Sagar, Bhopalpatnam-Inchampalli and Koel Karo, defence projects such as Baliapal, nuclear power projects such as Kaiga, came together in an unprecedented show of strength. [The] defiant message to the politicians and planners was that people are no longer prepared to watch in mute desperation as project after destructive project is heaped on them in the name of development and progress [*Narmada, 1990a: 4*].

The 20,000 who gathered at Harsud, including affected people and representatives of NGOs and activist groups from different parts of the country, put the NBA at the centre stage of the environment movement in India. Its campaign against the SSP received a tremendous boost in the country [*ibid: 10-11*]⁴¹ and its activists emerged as the accepted spokespersons of the affected people in the Narmada valley. While the rally received solidarity support from at least a hundred NGOs from abroad, in India it brought several civic organisations and groups together on one platform for the first time. The direct outcome was the formation of the *Jan Vikas Andolan* (Movement for People's Development), a broad alliance of a 'wide range of movements, organisations and individuals, with its roots in a variety of struggles taking place in the country' [*Narmada, 1990b: 25*].

The second major event, the *Jan Vikas Sangharsh Yatra* (Struggle March for People's Development) was organised a year later. Considered to be 'the first move in the "final phase" of the anti-SSP movement ... its stated objective was to physically stop work on the dam, by offering *satyagraha* at the dam site and thereby pressurise the government to comprehensively review the SSP' [*Narmada, 1991: 3*]. The Sangharsh Yatra was a test case for the NBA's support base both in the valley and outside and the participation of more than 8,000 people in the six-day march to the project site bolstered its claim of steadily increasing support. The march (on foot) covered a distance of about 200 km before it was stopped at the M.P.–Gujarat border by the Gujarat government.⁴² The Sangharsh Yatra pitched camp at the border where it stayed for a month. To pressurise the Gujarat government, seven marchers including the NBA leader Medha Patkar went on an indefinite hunger strike. However, with the Gujarat government not relenting, the NBA decided to withdraw from the border 22 days into the strike. Baba Amte, a noted Gandhian social worker and the then leader of the NBA, who had been allowed to camp on the Gujarat side of the border, returned to the *Sangharsh Gaon*⁴³ on 30 January to declare: 'Gandhism has died in Gujarat, and on the day Gandhi died, I return to the valley where Gandhi's ideal still lives' [*Narmada, 1991: 15*]. On 31 January 1991, the Yatra withdrew from the border with a pledge to take the struggle

back to the villages under the slogan *Hamara Gaon mein Hamara Raj* (Our Village, Our Rule).

Translated into policies and actions, the slogan implied non-cooperation with an unresponsive government and the development of self-reliant institutions and actions in the villages. The resolve was that villages would henceforth boycott government activities like census operations and oppose all survey work related to resettlement. They would also take up reconstruction activities such as soil conservation, irrigation works, health training and adult education. The NBA newsletter described this as a 'gigantic social experiment ... [that] can offer crucial insights into exploring alternative systems of governance and development' [*Narmada*, 1991: 24].

From 1991 to 1996 on a yearly basis the NBA organised the monsoon *Satyagrahas*. In the first satyagraha in 1991, groups of *Samarpit Dal* (Drowning Squads) were formed who would let themselves drown in the rising water of the river. The rallying call of the action was '*Dubenge par hatenge nahin*' (we will drown but not move). Amidst criticism, that it was promoting collective suicide, the NBA reasoned that the people in the valley were only honouring their pledge '*Koi Nahin Hatega Bandh Nahin Banega*' (No one will move, the dam will not be built). Although the monsoon water did not rise high enough to engulf *Narmadayi* (a hut constructed to house the Samarpit Dal in one of the affected villages), the *satyagraha* resulted in impressive press coverage for the NBA and a wave of 'solidarity' support from different parts of the country and abroad.⁴⁴

Subsequently and up to 1997, monsoon *satyagrahas* in selected affected villages have been periodically offered with varying degrees of success. While the 1992 monsoon *satyagraha* was less dramatic than the previous year,⁴⁵ in 1993 the threat of *jal samarpan* reached a new height when the drowning squads demanding a review of the project went underground (amidst a police hunt) in their resolve to drown. The government of India yielded to the pressure and set up an independent team to discuss issues with the NBA. After 1993, *satyagrahas* have been less dramatic.

Apart from mobilising affected people, the NBA has drawn support from a wide range of national and global NGOs, citizen and action groups. National and international attention has been drawn to the violation of habitat rights of the people in the valley. By questioning the projected benefits and the financial implications of the project (see Appendix), the NBA has framed the SSP as a sunk investment which sets out to squander scarce resources coming from international and national tax-payers. The articulatory practices and achievements of the global and national campaigns of the NBA are discussed below.

Globalising Protest: Articulating Support, Achieving Ends

The appeal to the global citizenry has been a carefully constructed strategy of the NBA. The impetus for such a move was the loan agreement reached between the World Bank and central and state governments in India. International NGOs had opposed the loan agreement on social and environmental grounds. The Bank on its part had constantly revised its policies and operational guidelines on these aspects and sought their implementation in the SSP. Its consultants on displacement and resettlement had expressed apprehension that proper rehabilitation of the displaced would not be possible unless the project authorities substantially modified policies and improved implementation mechanisms.⁴⁶ This was fertile ground for the NBA's international campaign primarily directed at getting the World Bank to withdraw from the project.

Between 1990 and 1993, the NBA mobilised significant international support, intensifying its campaign against the World Bank's involvement. Three activists of the NBA testified at a special hearing of the US Congress Sub-Committee on Natural Resources, Agricultural Resources and Environment.⁴⁷ The Sub-committee followed up the hearing by urging the Bank to reconsider its involvement with the SSP. In May 1990, 120 members of the Finnish Parliament wrote to the Bank stating that the Narmada Projects 'should not receive any Bank funding before alternatives have been thoroughly considered and before the R&R problems have either been solved or at least re-evaluated'.⁴⁸ In June, the Japanese government who had earlier sanctioned soft loans under OECF (Overseas Economic Cooperation Fund) for turbine generators for the riverbed power house of the SSP (the supply orders having been bagged by Japanese companies Sumitomo, Hitachi and Toshiba) announced the cancellation of a \$150 million loan at a meeting of Bank donors in Paris, citing grossly inadequate assessments of the social and environmental costs undertaken by the World Bank.⁴⁹

International support crystallised with the formation of the 'Narmada Action Committee' – representing organisations from fifteen countries. Active political and financial support (lobbying, advocacy and occasional solidarity demonstrations abroad)⁵⁰ by the network culminated in the formation of the Independent Review Mission (hereafter IRM) by the World Bank. The Bank management, under pressure from (influential sections of) its Board of Directors took this unprecedented step in June 1991. The IRM was appointed 'to assess the implementation of the resettlement and rehabilitation of the population displaced/affected and the amelioration of the environmental impact of all aspects of the projects' [*IRM, 1992: 359*].

The NBA, after initially disapproving the terms of reference of the IRM, extended necessary support and facilitated field visits by the mission.⁵¹ It also

successfully prevailed upon the IRM to endorse its position on the SSP. In a communication to the World Bank President Lewis Preston in July 1992, the IRM chief wrote:

We think that the Sardar Sarovar Projects as they stand are flawed, that resettlement and rehabilitation of all those displaced by the projects is not possible under prevailing circumstances and that the environmental impacts of the projects have not been properly considered or adequately addressed. Moreover we believe that the Bank shares the responsibility with the borrower for the situation that has developed ... If essential data were available, if impacts were known, if basic steps had been taken, it would be possible to know what recommendations to make. But we cannot put together a list of recommendations ... when in so many areas no adequate measures are being taken on the ground or are even under consideration. Important assumptions upon which the projects are based are questionable or known to be unfounded ... Assertions have been substituted for analysis ... [T]he wisest course would be for the Bank to step back from the Projects and consider them afresh [*IRM, 1992: xii-xxv*].

To the NBA, the IRM report was an independent validation of its standpoint and a corroboration of 'everything that those opposed to the project have been saying' [*Narmada, 1992b: 9*]. It was termed a 'blockbuster report which laid bare all the pretences which either the Bank or the Indian authorities had regarding the SSP'. A deadline of a month was set for the Bank to withdraw from the project or face intensified opposition to its presence in India.

Meanwhile, NBA activists canvassed in the USA, Japan and other European countries, meeting international NGOs, the media and members of the Japanese Diet. In July 1992 the European Parliament passed a resolution on the 'Narmada Dam' calling 'on all member states to ... urge their executive directors to vote against further World Bank support for the project' and calling 'on the World Bank to withdraw from the project, pay compensation to those who have suffered as a result of the SSP and write off the US\$250 million spent on building the dam if it is not completed' [*EP, 1992*].

The Bank management tried its best to salvage the situation. However, on 29 March 1993 the Indian government announced the decision to terminate its contract with the World Bank. The victory of the Bank's 'withdrawal' caused widespread celebration in the valley. But there were fears that the state may become more repressive and less accountable in the absence of the World Bank. To 'prevent and document' state violation of human rights, the Narmada International Human Rights Panel was formed consisting of 43 environmental and human rights organisations from 16 countries.⁵²

The support networks activated at the global level enabled the NBA to link the SSP to a much larger trend of dam building around the world. The involvement of the World Bank and other multilateral lending agencies in infrastructure projects on a world-wide scale, particularly in the developing world⁵³ was strong reason to globalise the resistance against the SSP.⁵⁴ In July 1994, the international campaign of the NBA resulted in the *Manibeli Declaration*, calling for a moratorium on World Bank funding of large dam projects all over the world. Within three months, 2152 NGOs in 43 countries had signed the Declaration.⁵⁵ Three years later, in March 1997, the international campaign against dams led to the *Curitiba Declaration* reiterating the need for an independent international commission to review all large dams financed and supported by international aid and credit agencies.⁵⁶

The globalisation of protest also brought international recognition to the NBA and its leaders. In 1991 the 'Narmada Bachao Andolan, led by Medha Patkar and Baba Amte', received the Right Livelihood Award 'for their steadfast opposition to the ecologically and socially disastrous Narmada Dams – the largest river development project in the world – and their clear articulation of an alternative water and energy strategy that would benefit both the rural poor and the natural environment' [*RLA, 1991*].⁵⁷ This was followed by the 1992 Goldman Environmental Prize for Medha Patkar 'in recognition of outstanding environmental achievement in Asia'.

Opportunities and Articulations at National and State Levels

At the state and national levels, the NBA constantly engaged project authorities, national ministries and the two state governments of Gujarat and M.P. by seeking alliances and activating networks among various civil society groups. However it must be stated at the outset that state institutions played a significant role – directly and indirectly – in providing an opportune environment for the fostering of NBA politics. The Central Ministry of Environment and Forests (hereafter MEF) took a tough stand on the SSP. At various stages its reports were used by the NBA to bolster their critique of the project. More significant is the M.P. government's tacit support of the NBA. In two national review fora discussed below, the NBA and the M.P. government have articulated similar positions on the SSP.

The role of the MEF – since its formation as an independent central government department in 1980 and then upgraded to a Ministry in 1985 – has been to demand full compliance from the SSP and NSP authorities with its rather stringent conditions. Periodically the MEF has voiced its concern over the lack of environmental impact assessment studies, detailed proposals for mitigative measures such as catchment area treatment and compensatory afforestation programmes and a master plan on rehabilitation. Between 1985 and 1987, it was the MEF that withstood pressure from the World Bank and

the government of India for the mandatory environmental clearance to the SSP. Again in December 1993, the MEF asked for a halt in construction work as project authorities had failed to meet its conditionalities regarding the environmental and resettlement measures. While in the early years of the movement, activists had criticised the Ministry for adopting a rigid approach to the release of forest land for resettlement, the Ministry's reports and comments later became extremely useful resources for their cause.

The tacit support of the M.P. government for the NBA came in two public review fora – the independent Five Member Group (FMG) formed in 1993 and the Supreme Court of India. The FMG was the culmination of intense agitation; a 14-day hunger strike in Bombay in June 1993 followed by the threat of *jal samarpan* (ending life by drowning) in the monsoon month of July. During the hunger strike, the Central Minister for Water Resources had promised a review of the SSP.⁵⁸ However, in the absence of follow-up actions, 'drowning squads' of the NBA posed a serious dilemma for the government.⁵⁹ The FMG was the way out; an independent team of prominent citizens set up by the Ministry of Water Resources, Government of India yielded to 'continue discussions with the NBA on all issues related to the SSP'.⁶⁰ In its preliminary meeting, the FMG, expressed deep concern 'to hear that the NBA proposes to proceed with its plan of *jal samarpan* ... [and was] anxious to prevent such an unfortunate occurrence which may have incalculable consequence' [FMG, 1994]. Its appeal to the NBA to defer its *jal samarpan* – as it was 'prepared to give careful consideration to any points or issues that the NBA may wish to raise' [*ibid.*] – was heeded and the *samarpan* was called off.

The Gujarat government had opposed the formation of the FMG and refused to participate in the group's proceedings as had the government in M.P. Only the government of Maharashtra participated in the proceedings. However towards the end of the FMG's term, a new government in M.P. participated by requesting a reduction in the dam height of 6m, citing insurmountable problems of resettlement and environmental amelioration measures while arguing that the lower height would not alter the irrigation and water benefits for Gujarat.⁶¹

In the new M.P. government the NBA found a supporting ally. In November 1994 when the NBA held the Bhopal agitation⁶² to protest against the decision of the Gujarat government to accelerate construction on the dam, the M.P. government responded favourably. It formed two high level committees: one, comprising members of the M.P. Legislative Assembly to look into the problems of M.P. affected people resettled in Gujarat and the other, comprising members of Parliament from M.P. to recommend measures to tackle the problems of Scheduled Tribes in the state.⁶³ Both committees recommended that the M.P. government should stall further work on the SSP and seek a reduction in the height of the dam.

The writ petition filed by the NBA before the Supreme Court challenges the construction of the SSP on 'social, environmental, technical, economic and financial grounds' arguing that the project as conceived was 'not in the national interest'.⁶⁴ In earlier years the NBA had taken legal recourse in local courts in Maharashtra and Gujarat and the High Court in Gujarat raising wide-ranging issues – seeking the status of project-affected people for those left out from official lists, asking for changes in land titles for people who were given unsuitable land as compensation, requesting a stay on survey work undertaken by the project authorities, seeking detailed schedules of construction, submergence and rehabilitation as well as seeking redress for cases of forcible eviction and police excess.⁶⁵ The fight in the courts pertained to specific cases of legal violation by the project authorities,⁶⁶ concern for the rule of law,⁶⁷ and adequate participation and access to information.⁶⁸ The Supreme Court petition however sought (a) to halt any further construction on the project (b) to ensure the completion of all necessary studies on the project (c) a comprehensive review of the project and in addition (d) to place a ceiling of 93m on the height of the dam.

The Supreme Court's inquiry was as follows. It made the FMG report public and asked state governments to submit their responses to the report 'uninhibited by any legal implications'.⁶⁹ This implied that the NWDT Award on the Narmada Projects, considered final and binding on all the riparian states, could be renegotiated. The M.P. government submitted an affidavit to the Supreme Court seeking a reduction in the height of the Navagam dam⁷⁰ whereas the Gujarat government has strongly opposed any height reduction. This situation of stalemate continues as subsequently the case has become enmeshed in constitutional matters. The Gujarat government has raised the question whether the Supreme Court can reopen a case which has been settled by a Water Disputes Tribunal Award. The matter has since moved from the 'division bench' to a 'constitutional bench' of the Supreme Court.⁷¹ However, since January 1995, by the order of the Supreme Court, further construction of the dam has stopped at 80 metres.

These developments suggest that the NBA has successfully used the conflicts between riparian states as well as avenues of democratic institutions and practices to its advantage. At the national level, activists of the NBA in general and Medha Patkar in particular have with equal zest addressed NGOs, activist groups, parliamentarians, trade unions, student and professional bodies, academic conferences and Rotary and Lions Clubs. Liaison with academia and the press has been actively pursued, ensuring both critical inputs towards reviewing the project components and unprecedented publicity for the NBA. However moving beyond the parameters of the SSP, the forging of formal regional and national alliances around struggles related to development has been a crucial achievement of NBA's civil society networking.

One of the early alliances was the Jan Vikas Andolan (JVA), mentioned earlier in the paper. According to its founders:

[The JVA is a] movement against the development paradigm being practised in post-independence India whereby a narrow elite primarily benefits at the cost of a very large population that continues to be marginalised, displaced, and pauperised along with large scale plundering of our natural resource base. The movement ... maintains that what today goes in the name of development is not genuine development but it is in fact socially disruptive, biologically and genetically homogenising and environmentally destructive [*Narmada, 1990: 25*].

The formation of this broad front was of enormous help to the NBA in seeking support for its stand of total opposition to the SSP as it focused on a 'wider set of issues' – the non-participatory nature of planning and implementation processes as well as the social and environmental costs of development projects – than just resettlement and rehabilitation. The JVA however failed to make any significant impact and has since folded up.

Few years later, the NBA became a part of the National Alliance for Peoples Movement (NAPM). The NAPM is a sort of consortium, that includes a number of local peoples' movements across the country, functioning under a common minimum programme. Although its inception dates back to 1992, it is only in the last couple of years that the NAPM has gained some credibility and publicity. The professed objective of the NAPM is to 'challenge the current paradigm of development, oppose globalisation, privatisation and liberalisation' and to work towards 'a just, egalitarian, secular, non-violent and ecologically sustainable society' [*NAPM, 1996*]. For the NAPM, local communities are losing control over land, forests and water, at the same time as globalised control over technology, fertilisers, seeds and water is rapidly destroying the self-sufficiency of agricultural communities and 'alienating them from their natural habitat and resource base'. Hence the need to widen the struggle frontier to oppose the 'intrusion of foreign multi-nationals and their increasing grip over the economy and polity' [*NAPM, 1995*].⁷² At one level, the ideologues of the NAPM view the trend towards globalisation as part and parcel of the present development model. In this sense globalisation strategies are extensions of state-led development strategies. However, the NAPM also perceives that the current 'economic reforms' pursued by the Indian state have led to dramatic changes in the priorities of the Indian state and its agencies. With concern it notes that:

Earlier the government used to plan projects for drinking water, irrigation, roads, education, health etc. The focus of government today is on projects like national highways, airports, modern sophisticated sea-

ports, telecommunications and electricity for big industries. In other words, [these are facilities] that foreign MNCs demand.⁷³

The NBA is one of the leading actors in the NAPM; its leader Medha Patkar is currently one of the three convenors. Whereas both JVA and NAPM are national level alliances, in western M.P. – an area with a predominantly *adivasi* population – the NBA has activated the *Jan Mukti Morcha* (Peoples Liberation Front) along with three other local organisations: the KMCS in Alirajpur, the *Adivasi Mukti Sangathan* in Sendhwa⁷⁴ and the *Ekta Parishad* in Dahi. The *Morcha* has intensified the campaign against the liquor trade, the exploitation of the *adivasis* and supports their demand for self-rule [*swaraj*] in the region.

V. COGNITIVE PRACTICES AND THE LANGUAGE OF PROTEST

Syncretic Idioms and Meanings

In NBA's politics, the language of protest shows a fascinating array of discourses. A cursory listing of the multiplicity of discourses that the NBA has drawn upon may be useful to demonstrate the discursivity in its language of protest: (1) displacement risks and resettlement provisions; (2) environmental impact, mitigative measures and sustainability issues; (3) appraisal and evaluation techniques and financial implications of the project; (4) forceful evictions and violation of civil liberties; (5) democratic rights such as access to information and participation in decision-making processes; (6) distributive justice and sharing of benefits; (7) institutional aspects governing river valley planning and water and power management; (8) alternative development and appropriate technology; (9) Western growth model and neo-imperialism; and (10) political decentralisation, cultural autonomy, indigenous knowledge and local control of resources and empowerment. Supportive links with a wide variety of organisations and people enable the movement to draw from each of these discourses and to enframe cognitively the SSP as breeding inequality, unsustainability and inefficiency.

Syncretic language is a movement imperative for articulating support at different levels. To fight against a development project that is backed by interest groups pervading the local and global in a certain sense requires such a strategic syncretisation of idioms. In NBA's politics, the syncretic language is its definitive feature; its critique of SSP covers organisational, institutional and cultural dimensions around development interventions encompassing issues of norms and values on the one hand and means and ends on the other. The combination of different idioms is to be seen both as a consequence and a cause of the support networks of the NBA consisting of diverse constituencies at the local, national and global levels; animal rights activists, *adivasi* and

peasant organisations, action groups working among urban slum dwellers, civil liberty groups, trade unions, women's organisations, environmental action groups, developmental NGOs, media groups, government planners and academics. It is the hybrid nature of the NBA's idioms and networks which distinguishes it from other mobilisations against dams where the language of protest is restricted to the loss borne by the affected people and the mechanisms of compensation.

It may be noted here that when addressing different constituencies the idioms are selectively drawn upon. For instance, affected people identify with the demand for better compensation and resettlement deals. International support is mobilised around the plight of the *adivasis* (that is, support for preserving indigenous people's culture) in displacement and the environmental impact of the dam. In a protest movement, combined idioms and their selective deployment tend to create dilemmas of trade-off, a point to which we shall return later in the analysis. Here our attempt is to show how the discordant, and at times conflicting, idioms are held together in larger discourses.

To unify the diverse constituencies, movements attempt to construct what Melucci [1989] calls their 'highest meaning' – a message that seeks to overlook heterogeneous elements and interests while underscoring unity. Like most other contemporary environmental movements, the NBA seeks to construct its highest meaning by aligning with discourses on 'alternative development' and 'alternative politics'. Both these discourses question values and goals of mainstream development and politics and seek a visionary reversal of contemporary living and lifestyles and the democratisation of social life. Actors committed to these discourses simultaneously construct dystopias and utopias. Existing values and purposes are challenged and replaced with values and visions such as equity, sustainability, efficiency and participation.

In this study, it does not serve much purpose for us to accept uncritically or reject critically these 'highest meanings' of environmental movements. Suffice here to state that at one level these meanings are the high points of a given movement's language. At another level, they are its most vulnerable spots. Take for example the NBA's critique of globalism, homogenisation and capital intensive technology, the flip side of which becomes a proactively ordained discourse on localism and diversity, micro-projects and ecologically and humanly benign technology. With equal zest, this vision can be celebrated or interrogated. As with globalisms, discourses on localism are susceptible to adopting populist explanatory categories which (paradoxically) privilege homogeneity in local political economy and culture, interests and values.

Categories such as 'self-sufficient peasantry', 'local community' and 'rural people' suppress contradictions within the local while sharpening contradictions with the *other* – industry, urban community or national/global elite. As much as elite-led, mainstream development is vulnerable to criticisms

of using resource and capital intensive technologies, the eulogising of local lifestyles, livelihood strategies and indigenous knowledge and culture, the projection of an image of self-contained village communities living in harmonious ecological utopias or for that matter, the privileging of popular myths on rivers and cultures around them can be held accountable for distorting the real world of the local, its differentiation, poverty and every day struggles.

What we wish to stress here is that to overemphasise the 'highest meaning' of a protest movement, by viewing it as a 'liberation consciousness' would be to undermine its function as a rhetoric. Rather the argument is that a movement's rhetoric – its so-called highest meaning – is first and foremost a constructed strategic predisposition. In essence, movement rhetoric is a set of persuasive messages and tactics, a deliberately constructed ambiguous language for disparate constituencies to find and plant their own interests and values. Inadvertently blurring differences between rhetoric and meaning is likely to prevent a fuller exposition of the cognitive practices and significance of a protest movement like the NBA.

We reiterate that our purpose here is not to interrogate whether NBA's politics is a positive step towards alternative development and alternative politics or not. In fact, it may be useful for some readers to note that despite the ambiguous and unsettled nature of the terrain, the discourse on alternative development has spurred the NBA as well as other civic groups to propose several 'alternative technical designs' to the SSP, deemed to be more equitable, sustainable and profitable. Decentralised water harvesting and management systems that make optimum utilisation of rain water and ground water, energy conservation, effective demand management and decentralised power generation through renewable resources⁷⁵ constitute the core of these alternatives. In the context of the struggles over water resources development, it seems perfectly legitimate to develop arguments for and against questions such as: are all large dams bad; can small dams substitute large dams; do small industries not pollute; can energy conservation answer long-term power needs; what are the social costs of decentralisation in a differentiated society? What we are suggesting is that the pursuit of these questions would perhaps not take us further than either welcoming or interrogating alternative proposals for water resources development. In our view, the significance of contemporary environment movements like NBA lie not so much in their visions and goals, their highest meanings, but in their cognitive practices that generate knowledge and awareness of uncertainties and risks in major development interventions. Drawing from the insights of Beck [1992; 1995] and Giddens [1990], we term this practice 'risk politics' of environmental movements.

The Significance of Risk Politics

It is through a politics of risks that the NBA has opened up a range of issues surrounding the SSP (and other such development projects) to public dialogue. Central to the NBA's language of protest is the combating and contesting of official parameters of attributing risks and opportunities in the project. Official truth-claims are subjected to systematic and rational interrogation and in the process fudging, inconsistencies, errors and concealments are unravelled in assumptions, performance indicators, methods as well as input and costs and outputs and benefits. Defined broadly, risk politics entails politicising conditions of uncertainties and lack of information on the one hand and risks and the lack of certainty on the other. Whereas the movement rhetoric (in its hard form) conveys a populist language that is anti-science, anti-technology in tenor, the language of risk politics remains within a scientized domain – referring to scientific data and technological knowledge claims. It is this cognitive practice and the knowledge that is produced therein that gives a movement like the NBA its significance.

For development intervention like large dams, uncertainties and risks prevail in every step. The enormity of intervention scale – with engineering, technical, hydrological, economic, social, environmental, financial parameters – necessarily implies that project authorities work with an equally enormous set of probabilistic assumptions in each of these parameters. Their truth claims – how the dam will perform and what benefits and costs it will entail – rest on these assumptions.

It has been an unstated but accepted practice for project authorities to overestimate benefits and overlook costs in their appraisals. Despite expressed concerns in policy discourses on mega dam projects, such problems of overestimation and underestimation have existed not as exceptions but as the rule. In his pioneering work three decades ago, Hirschman [1967] however justified such decision making process and outlined the 'hiding hand principle' – the errors of initial overestimation of resources and benefits were offset by an initial underestimation of alternative and remedial action:

The river that is being tapped is frequently found not to have enough water for all the power, agricultural, industrial and urban uses that had been planned or that are staking claims, but the resulting shortage can then often be remedied by drawing on other sources that had not been within the horizon of the planners; ground water can be lifted by tube wells, the river flow can be better regulated by upstream dams, or water from more distant rivers can be diverted [*Hirschman, 1967: 10–11*].

Contrary to Hirschman's principle which emphasises hidden solutions and benefits that offset project risks, contemporary environmental movements

attempt to unravel hidden uncertainties and risks buried in the probabilistic assumptions made by project authorities. Whereas Hirschman recommended that project authorities should as a rule pursue the 'only feasible goal' of 'optimal rather than minimal uncertainty' [*ibid.*: 85] assuming that hidden solutions will enhance project benefits, risk politics of the NBA bring to the fore hidden uncertainties and risks and their distributional implications. In the process it deploys a discourse on 'minimal uncertainty'. It is this politics of deconstructing expert assumptions that gives movements like the NBA their meaning.

Risk politics questions trust-worthiness of project agencies and institutions that handle uncertainties, attach probabilities and calculate risks and liabilities. It exposes the fact that probabilistic assumptions of experts often tend to become political assertions about project performance. The data garnered in this process renders the official assumptions of risks and liabilities, to say the least, questionable. What ensues from this form of politics is a counter-set of knowledge claims and assertions whereby projects such as the SSP become 'faulty, non-viable, unjust and destructive' (Campaign Letter, NBA, 10 Nov. 1994).

Two central arguments drawn from the works of Giddens [1990], Beck [1993; 1995] and Buttel and Taylor [1994] indicate the significance of risk politics in environment movements. The first is that assessing risks and assigning liabilities remain the prerogative of official experts who have the mandate to alter the environment for productive transformation and function in closed institutional domains. To muster public acceptance of proposed interventions, Giddens [1990] has argued that experts tend to fudge or conceal the true nature of risks or even the fact that there are risks at all. He considers the circumstance more harmful 'where the full extent of a particular set of dangers and the risks associated with them is not realised by the experts. For in this case, what is in question is not only the limits of, or the gaps in, expert knowledge but an inadequacy which compromises the very idea of expertise'.⁷⁶

The second argument is that modern social-environmental movements are the prime vehicles of risk politics. According to Buttel and Taylor [1994: 223]:

Modern environmentalism, where the rubber meets the road, is increasingly an arena characterised by the deployment of scientific and technical knowledge, often in combat with rival data and knowledge claims that are set forth by their industrial, governmental and quasi-governmental adversaries in an attempt to deconstruct and delegitimize claims.

Giddens holds that the radical engagement and outlook of environmental movements are 'bound up with contestatory action rather than a faith in rational analysis and discussion' [1990: 137]. They question the assumptions and

assertions of official experts regarding risks and seek to mobilise societal opinion to 'reduce their impact or transcend them' [*ibid.*].

We deploy these two arguments in the specific context of the anti-SSP movement and list some claims and counter-claims in the SSP in the Appendix. The listing shows that the NBA has advanced 'expert' arguments which counter in one way or another virtually every claim made by project authorities.⁷⁷ River valley planning, assessments of environmental impact, project appraisal, project alternatives; the uncertainties and risks around all these issues have been brought into the public-political arena for fuller probing. What are not reflected in the listing are some distinguishable mechanisms in the risk politicisation process. We identify three ways in which the NBA seems to have politicised risks.

First, by framing uncertainties in the project as ignorance. Examples relate to the 'uncertainties' regarding total impact of the project on different categories of people or for that matter aspects pertaining to environmental impact assessments. Through this mechanism the movement calls for recognition of hitherto ignored areas – such as displacement and environment – as causes for concern and demands a fuller commitment to these issues.

Second, by challenging risk assessments where the odds are known. Project appraisal is a good example. Here risk assessments require a set of assumptions concerning resource availability, agricultural yields and inputs, volume of energy produced, economic values attached to benefits, implementation speed, irrigation system efficiency, water availability etc. By identifying information gaps, fudging and errors and by drawing on past experiences the movement challenges some of these assumptions, thus making the odds appear significantly higher.

Third, by highlighting disagreements over the interpretation of risk definitions and liabilities among authorities and experts. The annual utilisable water flow (hydrology) can be cited as an example. The disagreement between the M.P. and Gujarat government on this issue is more than three decades old. Given that hydrological estimates themselves are in essence probabilistic estimates, some discounting for political interests and negotiations can hardly be avoided. The movement exploits the political division over the estimate while simultaneously questioning the political means by which parameters are settled around project uncertainties and risks.

VI. DISPLACEMENT RISKS AND DILEMMAS OF REPRESENTATION

Presenting the Dilemma

The orientation towards a composite language of risks in the NBA clearly makes it a political formation that is different from organisations which focus

exclusively on displacement and resettlement related risks and seek measures to minimise these, and from those other anti-dam expressions which are anti-development, anti-science and anti-technology. Yet it may not be out of place to mention here that in order to sustain a campaign in a specific context, environmental movements such as the NBA face the dilemma of having to trade off experts and expert opinions with the interests of affected people at the grassroots. I have developed this argument elsewhere in the context of the different interests of people facing displacement and seeking better resettlement in the Narmada Valley [*Dwivedi, forthcoming*]. Here I wish to develop a related hypothesis that the more the language of NBA gets enmeshed in facts and figures, scientific claims and technological assertions, the more distant the NBA's language of protest becomes from its local moorings – the lifeworld of the affected people. While on the one hand, this language assures support and co-operation from sections of the educated citizenry – regional, national and global – for the NBA, on the other hand, interests of affected people at the local level – pertaining to displacement and resettlement risks – are increasingly diluted in the language. In other words, the success of risk politics is not without costs.

The application of a classic model of a 'people's' movement – with mass-base and local support as crucial resources – will fail to capture the dynamic multi-level alliances and networks in protest movements like the NBA. Notwithstanding, the leadership's claims of being a locally embedded representative voice of the affected people in the valley, organisationally, the NBA comprises of (a) a close-knit core group of activists from outside the valley – comprising educated professionals, (b) a charismatic leader at the helm of affairs and (c) a network of support groups – activist and advocacy groups, NGOs, academic and research institutions, media organisations – in addition to drawing support from a section of the affected people in the Narmada valley. The organisational features and the multi-level mobilisation of resources and discourses are to be viewed as imperatives to challenge powerful regional, national and global backers of large dams, as local support can be inadequate to face up to these backers. Professional experts, charisma and a network of support groups to provide and disseminate information and for lobbying and liaison therefore become important resources for any protest movement.

However, the movement's shape is also to be explained as a consequence of its (discursive) orientation towards risk politics. This is because in risk politics, what comes to be more valued as resources (compared to support among affected-people at the local level) are experts and their opinion to disprove, question or advance truth claims. I wish to reflect on this last argument.

Paradox of Risk Politics?

As noted above, modern protest movements establish networks and chains that go beyond the local. Even as the national, global links are considered as movement imperatives for articulation and representation of the problems emerging in the local, the latter should continue to remain a critical link in the chain. The question therefore arises: how does the local realm respond to risk politics?

Cernea [1990; 1995; 1996] has persuasively argued that displacement entails eight risks of impoverishment for the affected people: landlessness, joblessness, homelessness, marginalisation, increased morbidity, food insecurity, loss of access to common property and social dis-articulation. Despite these risks at the local level, perceptions of risks and resistance to displacement are crucially shaped by such factors as patterns of internal differentiation, multi-faceted relationship to the immediate environment and to the state, availability and orientation of mediating action groups and the quality of resettlement [Oliver-Smith, 1991]. Expectantly, not all affected people in the Narmada valley have supported the NBA. Some have accepted resettlement, some have evinced interest in it but have not moved, some have remained steadfast in their opposition to displacement and yet others having moved to resettlement sites have returned to their original villages.⁷⁸

Among the *adivasi* villages, the NBA has had a strong following in the 33 villages in Maharashtra. However, since 1992, its following here has considerably dwindled as the Maharashtra government has attempted to improve resettlement packages [Gill, 1995; Singh, 1997]. In M.P., the support for the NBA among *adivasi* villages had largely come through *adivasi* organisations such as the KMCS. The more radical KMCS activists have been increasingly critical of the NBA's functioning. The problem of *adivasis'* risking resettlement – despite policy and implementation inadequacies – is deemed as the failure of a protest movement to perceive appropriately and represent adequately local people's interests. The worries of a KMCS activist are worth noting:

when the [NBA] activists come to the villages, they say that their major concern is to ensure just and proper rehabilitation. When they are in city centres they talk of cost-benefit analysis, environmental hazards, growing foreign debt, earthquakes, etc. and seek support to stop the dam. To me, this is one reason why a feeling has gained among people that the NBA is not serving their interests; many have simply left it (interview, Shankar Tadwala, ex-President KMCS, 4 March 1996).⁷⁹

In the Nimad plains upstream, earlier research has indicated that affected landless agricultural labourers have remained aloof from the politics of the

NBA [Baviskar, 1995]. I have argued elsewhere that this aloofness could be linked to perceived benefits from a ruptured social fabric in the original village and from a liberal resettlement package that offers landownership (to the landless) in resettlement villages [Dwivedi, 1997]. It is among the better-off farmers in Nimad that the NBA draws its mass-base. In the SSP it is this group of farmers who are at maximum risk of marginalisation given that the liabilities prescribed in the compensation packages are inadequate and bound by legally defined limits.

On the whole, interest perceptions, political responses and actions of affected people vary along different dominant identities and time. However, notwithstanding these differences, proper and just compensation appears to be their dominant concern. Even among some of the most ardent supporters of the NBA, who express its syncretic idioms, the movement is seen as a resource to bargain for a better resettlement deal [Dwivedi, 1997].

How then should we perceive the language of compensation? Does it imply that displacement and resettlement is *the* dominant idiom that the NBA must privilege in its language of protest *vis-à-vis* the SSP? Or is it the language of a people enmeshed in a world of false consciousness, fearful of the power of the state or for that matter, narrow-minded particularisms that the NBA leadership struggles to overcome, albeit with varying degrees of success? To the NBA, the status of displacement and resettlement in its syncretic language poses a political dilemma for action. On the one hand, it needs to claim displacement and resettlement related problems as its central concern. On the other hand, it also needs to ensure that political actions do not veer around the language of fair compensation lest they undermine the significance of other risks – for example, financial risks, environmental risks, performance risks – in its language.

What emerges is a politically ambivalent and perhaps even disconcerted picture. A movement emerging around the interests of the affected people in the valley has had to discourage and obstruct all actions linked to displacement and resettlement. Government agencies, NGOs and action groups interested in displacement and resettlement related studies and mobilisation have been ‘banned’ from entering the valley [Omvedt, 1993; Dhagamwar, 1997]. Affected people interested in resettlement have been isolated, those who have sought resettlement have been left on their own and those successfully resettled have been ‘invited’ to return [Gill, 1995; Singh, 1997; Dwivedi, 1997]. And last but not the least, instead of facilitating information flows (particularly on resettlement entitlements and policy changes) the ‘core group’ – serving as the main link between the affected people and the outside world – has tended to control them.

Drawing from the discussion above, the ‘paradox of risk politics’, may be tentatively summed up as follows. For effective mobilisation of resources

protest movements require to transcend local boundaries and draw upon discourses at multiple levels. In a protest campaign like the one against the SSP, multi-level networks characterise the movement's articulatory practices. In this discursive process the movement acquires cognition on uncertainties and risks and then challenges official knowledge claims and attributions of probabilities and liabilities. It is here that a seeming paradox emerges in the political objective of the movement. Although it seeks minimal uncertainties and risks (and therefore demands proper information, reliable facts and figures, participatory evaluation and small, decentralised alternatives), it itself tends to breed uncertainties and risks (especially for the affected people) in an attempt to perpetuate and sustain its struggle for an avowed and non-negotiable goal of halting the SSP. In order to highlight the breadth of uncertainties and risks in the SSP, the NBA finds it necessary to prolong the risks to the most obvious bearers – the affected people in the valley.

VII. CONCLUDING COMMENTS

The NBA has been characterised as a campaign with which the environmental movement in India 'took a giant leap onto a political terrain posing a *new vision* of development at the level of popular consciousness' [Omvedt, 1993: 272; my emphasis]. The campaign is credited with formulating concretely the nature of exploitation and environmental destruction ensuing from projects such as the SSP as well as 'asserting popular power *from below* as opposed to enlightened state intervention from above' [*ibid.*; my emphasis]. In this paper we have presented a narrative account of the development of the NBA and analysed the limits of the prevalent characterisation of such movements.

In our view, it is difficult to model the campaign led by the NBA on a mass-base movement. Rather it is to be seen as a multi-level network in which various resources are mobilised and diverse discourses deployed for an effective campaign against the SSP. Second, the significance of the NBA lies not so much in its 'new vision' of development as earlier acclaimed but in the unacknowledged ushering in of risk politics by which official claims to expertise and truth regarding project planning and performance are subjected to contestatory interrogation.

Multi-level networks and orientation towards risk politics reinforce each other. By seeking alliances at different levels the NBA equips itself with syncretic idioms articulating a principled critique of mainstream development models. But more importantly, its campaign draws resources from these alliances for a focused and sustained struggle against the SSP. Project risks and uncertainties are highlighted in different ways. Probabilistic assumptions, input-output projections, reliability of performance indicators and methods are questioned and challenged with counter-claims and assertions. As information,

facts, figures and experts assume importance as resources in the campaign, the struggle increasingly seeks the mediation of independent juries to function as risk-arbiters and to define and determine how to limit or prevent risks or the extent to which risks can be accepted and compensated for.

In specific terms, the NBA's successful deployment of an intelligent critique of SSP has also to be seen in the light of favourable political opportunities. The long-standing dispute over Narmada water distribution and the shape of the Sardar Sarovar dam between the riparian states of Gujarat and Madhya Pradesh works in favour of the NBA's campaign against the SSP. Along with this conjunctural opportunity, which the NBA has exploited well, it also faced constraints emerging from its political orientation. A multi-level campaign and an intricate language of protest leaves it with limited ability to articulate various local interests and represent them. In stark contrast to the projected understanding of the campaign as an assertion of popular power from below, the local link in the chain of networks presently appears loose and perhaps vulnerable.

None the less, the NBA has had enormous success in bringing the hitherto closed and protected discourse on mega development projects into the public domain. It therefore opens new vistas for environmental movements particularly in the South. The pursuing of risk politics in network formations can subject the mandarins of development projects to popular political control. It can force upon them the responsibility to demonstrate clearly the public purpose of development projects and to redefine substantially the terms of liabilities and compensations. In concrete terms, and perhaps more important than posing visions of 'alternative development', risk politics in environmental movements can create conditions for 'accountable development'. In the campaign against the SSP, the significance of the NBA lies precisely in making closed institutional proponents of a major development intervention publicly accountable. The extent to which the NBA succeeds in reshaping the SSP remains to be seen. But its protest brings into fore the urgent need to address shortcomings in institutional frameworks and appraisal methodologies governing large dams.

NOTES

1. While Kothari [1990] and Sethi [1993b] include the NGO sector in non-party political formations, Omvedt [1993] prefers to exclude them from her definition of new social movement. The latter includes farmers' movements which the former exclude from their characterisation.
2. The word Chipko in Garhwali language means 'to adhere'.
3. Laclau and Mouffe [1985: 105] define articulation as a practice establishing a relation among elements such that their identity is modified as a result of the articulating practice.
4. Eyerman and Jamison [1991: 66] refer to knowledge interests of social movements that involve democratic forms of knowledge production and an ambition to de-professionalise expertise.

5. The height was raised when it appeared plausible that the water could be sent all the way up to Kutch, a perpetually water-scarce region in north-west Gujarat.
6. The site and height of the proposed dam had inter-state ramifications. While almost 98 per cent of the project's command area was to be in Gujarat, the submergence zone for the reservoir was largely in M.P.
7. The state of Rajasthan although not a riparian state was accepted as an interested party by the Tribunal as it could derive irrigation benefits from the project.
8. In the M.P government Master Plan prepared in 1965 for the Harinfal Dam, the height was fixed at 140m. In 1972, in the revised Master Plan, the height was reduced to 136m. Considering the representations of people from the submergence area that consisted of 'land thickly populated and very fertile', the height of the Harinfal Dam was further reduced to 126m in December 1972 [GOMP, 1975].
9. In April 1965 the government of M.P. and Maharashtra had entered into an agreement to co-operate in the development of hydro-electric power at Jalsindhi on the Narmada River. The detailed project report in which the height of the dam was fixed at 106m was submitted to the Central Water and Power Commission in July 1970 for clearance.
10. In Gujarat, the Congress unit welcomed the decision of the Tribunal. The Gujarati press at that time argued that most of the area coming under submergence from the Navagam Dam was in any case earmarked for submergence as a result of the now aborted Harinfal and Jalsindhi projects, so that M.P. had no right to claim foul play over the decision of the Tribunal.
11. In 1982 the Centre for Science and Environment published the First Citizens Report entitled 'the State of India's Environment'. Discussing large dams, the report read 'Despite the impressive achievements the expected benefits in terms of the actual generation of electricity, irrigation and flood control have fallen short of the planned targets. If the costs of environmental degradation such as deforestation in the catchment areas are included the price paid for these modern temples becomes truly staggering' [CSE, 1982: 58]. On the question of displacement and resettlement, the report said, the 'government's rehabilitation programme generally offers inadequate financial compensations. They fail to preserve and create the community life of the displaced population.'
12. The study pointed out several inadequacies in the resettlement plan, cost-benefit analysis as well as the magnitude of the project's impact on forests and wildlife in the valley.
13. ARCH-Vahini consists of erstwhile members of ARCH (Action Research for Community Health), and the *Sangharsh Vahini* (Volunteers for Struggle), a group formed mostly in Bihar and Gujarat during the movement against the declaration of emergency in the 1970s. This was also popularly known as the 'JP movement' after its leader Jay Prakash Narain.
14. Some international NGOs lobbied hard with their respective governments and their executive directors in the Bank pointing out the environmental impact of the project and requesting them not to finance the project (letter from the Minister of Finance, Government of Canada to Patricia Adams, Energy Probe, 2 March 1985).
15. Although the NWDI did not make any provision for compensating 'encroachers' of waste land and forest land, it had at least spelt out the requirement that families and not land-holding should be treated as the compensation unit.
16. These were part of the construction process of the water way system which would lead from the reservoir to the main channel. Five villages in Gujarat were displaced from the area to make way for the construction in the early 1980s.
17. Committee of Affected/Displaced People in the Narmada.
18. The organisation was called *Setu* (meaning bridge in Gujarati) and the activists were Achyut Yagnik and his then colleague and employee Medha Patkar.
19. These committees would prepare comprehensive household data on land possessed, location and extent of submergence, quantum of produce from land, forest and river, data on the size of the house and amount of bamboo used, with the intention of helping the government to include complete details when estimating compensation and resettlement entitlements [Parasuraman, 1993].
20. The activists of the Narmada Dharanagrasta Samiti were employees of *Setu* (see note 18). It was not until the end of 1987 that Medha Patkar parted ways from Yagnik, citing differences of perspectives on resettlement and the 'need to break free from the bondage of foreign donations'

- (speech by Medha Patkar, Support Group Conference, Pune, 1 April 1995).
21. This project had been inaugurated by Indira Gandhi, the then Prime Minister of India on October 23rd 1984. According to official statistics, the NSP would irrigate a net cropped area of 1,41,000 hectares while submerging 91,348 hectares of land. The project would also generate power with an installed capacity of 1000 MW.
 22. Personal communication, Avinash Deshpande, documentary film maker. Deshpande was then actively involved with *Vidushak Karkhana*, an activist group based in Shadol. He also produced the first documentary film on displacement entitled '*Narmada Puran*'.
 23. The environmental and social consequences of Tawa and Bargi projects were extremely adverse. The Tawa project resulted in acute water-logging in the command area resulting in a decline in crop yields after irrigation, and sparked off the *Mitti Bachao Abhiyan* (Save Soil Campaign). The displacement that occurred due to the Bargi project was much greater than what was initially claimed by the government. The compensation package offered was also extremely inadequate.
 24. A noted social activist and Gandhian, Kasi Nath Trivedi, who was instrumental in forming the Narmada Ghati Navnirman Samiti (NGNS) back in 1967, opposed the Narmada Projects on the grounds that big dams are dangerous and destructive and that they radically affect the *dharma* of the river which is to flow. The NGNS was formed in 1967 to take up issues with the then M.P. government headed by Govind Narayan Singh regarding the displacement of boat people with the building of road bridges across the Narmada (interview with Anil Trivedi, NBA, 22 Feb. 1996).
 25. Association for Awareness among Peasants and Workers.
 26. The Sangath had been made aware of the project's possible impact by the ARCH-Vahini in 1983-84 (personal communication, Amit Bhatnagar, KMCS).
 27. In later years, MARG conducted similar surveys in some villages in the districts of Khargone and Dhar [*MARG, 1987-88, Vols. 2-5*].
 28. Although the project work started in 1961 with the construction of the infrastructure at Kevadia, it was only after 1985 that work on the headway of the canal was initiated.
 29. The meeting was organised to discuss 'social and environmental aspects of the Narmada Projects' and to 'produce relevant study material on the projects related to involuntary resettlement and environmental aspects which have been ignored by the government' and to 'widen the network and to help those groups already working' (proceedings, T. Kochari, Narmada Action Plan, 5 Dec. 1987, IIPA, New Delhi). Most of the NGOs active in the valley – the NDS, the ARCH-Vahini, the NGNS, as well as NGOs such as Oxfam, Participatory Research in Asia, and Bombay Natural History Society – were represented at the meeting. Although some participants questioned the viability of the project, the consensus was to study in-depth the various dimensions of the SSP and to initiate such action plans – research, mobilisation, monitoring, documentation, media exposure and fund raising – as would keep the 'pot boiling' [*ibid*].
 30. While city based environmental groups dismissed the policies as a 'mere piece of paper', some scholars argued that the policies of the Gujarat government were primarily aimed at dividing the NGO movement around the SSP [*Parasuraman, 1993*].
 31. The declaration was signed among others by such noted activists as Sunderlal Bahuguna of the Chipko Movement and the anti-Tehri Dam movement, Anil Agarwal, the founder of the Centre for Science and Environment and the publisher of the Citizens Report on India's Environment and B.D. Sharma the then Commissioner of Scheduled Castes and Scheduled Tribes and now the leader of the *Bharat Jan Andolan* (Bharat Peoples Movement). A portion of the declaration is worth noting: 'We ... [are] all united by a common resolve to ensure that people are no longer denied their basic rights over natural resources. We affirm that the nation's rivers are the cradle of our civilisation and that they cannot be strangulated to meet the needs of the exploiting class within the society. The issues raised by the construction of big dams challenge the very concept of the pattern of the economic growth, unquestionably adopted by our planners. We appeal to the nation to halt all big dams here and now' [*Social Action, Vol.38, 1988: 297*].
 32. See NBA [1992: 3].
 33. According to the estimates of the NBA, the total number of affected people would amount to about 400,000 (writ petition (civil) No. 319 of 1994, Supreme Court of India: NBA vs Union of India and Others). However, it has been claimed elsewhere that the figure could be as high as one million [*ibid.: 1, Ram 1993: 1*]. The figure of one million includes those affected by the

- reservoir, the canal network in the command and downstream, those affected by compensatory afforestation and catchment area treatment, tenants and labourers dependent on land that is being acquired by project authorities for compensation.
34. Land degradation would be in the form of water logging in the command area, salinity ingress near the coastal areas of the command and downstream in the district of Bharuch as well as from catchment area treatment upstream. The project also submerges an estimated 13,500 hectares of forest land (dense as well as degraded) in the reservoir.
 35. According to the NBA the major beneficiaries of irrigation and power from SSP would be the already developed districts of Baroda and Ahmedabad, which consist of rich cash crop farmers and industrial interests. Further, NBA claims that irrigation, power and drinking water benefits are grossly exaggerated by the project authorities; there would be significant shortfall due to wrong initial estimates, the project design and inadequate financial resource allocation [NBA, 1992: 14].
 36. From an earlier estimated project cost of Rs 4240 crores undertaken by the Tata Economic Consultancy Services in 1983 at 1981-82 prices, the project cost had gone up to Rs 21518 crores in 1995 at 1991-92 prices as per the estimate of the Sardar Patel Institute of Economic and Social Research. NBA activists have argued that the Gujarat government can neither mobilise the required resources on a year to year basis, nor spend the mobilised amount in a timely manner. Also given the lion's share of SSP in the annual budget of Gujarat, it has resulted in the crowding out of resources for other small projects which may be more beneficial to the drought affected region in Gujarat.
 37. For a more detailed review of the critique of SSP see NBA [1992].
 38. The convention was attended by eminent academics, women's groups, trade unionists, NGOs and legal experts.
 39. For an excellent analysis of the *Shetkari Sangathana*, see Dhanagare [1995].
 40. Mooted by Baba Amte at a meeting of activists at Hemalkasa in April that year, the possibility of a rally was followed up at the NBA meeting in Bombay in May and then at a meeting of representatives of over 60 organisations at Itarsi in August 1989.
 41. Anticipating the events at Harsud, the Gujarat Legislative Assembly passed a unanimous resolution in support of the SSP, three days before the rally.
 42. The Gujarat government had organised a pro-dam rally in Chhota-Udaipur in Gujarat on 29 December to demonstrate support for the project. This rally marched to the Gujarat side of the border and was used to prevent the anti-dam march from entering Gujarat.
 43. The name given to the camp on the M.P. side of the border, where the people stayed for a month.
 44. Bombay, Delhi, Bhopal and Baroda witnessed rallies and *dharnas* in support of the *satyagraha*.
 45. In the months of March and April there were reports of police excess and harassment at Manibeli. Different 'fact finding teams' arrived at different conclusions. While the team for the Peoples Union for Democratic Rights reported violations of human rights, a team from the Tata Institute of Social Sciences (the official monitoring and evaluation agency for R&R appointed by the Maharashtra government) reported no such violation.
 46. See the reports on the relocation component of the SSP by Thayer Scudder for the Bank and his letter to Paul Airman, Executive Director to the World Bank dated 11 April 1990 in which he mentions that 'the Bank disbursements to SSP should stop until the Government of Gujarat corrects - within a specified period of time - the various deficiencies relating to its own relocatees and to M.P. and Maharashtra relocatees. Should the required action not occur the World Bank should withdraw from the project'.
 47. The activists were Medha Patkar of the NDS, Girish Patel of the *Lok Adhikar Samiti* in Gujarat and Vijay Paranjpye, an economist who had undertaken a 'holistic' cost-benefit analysis of the SSP and the NSP. The testimony drew sharp reactions from various quarters and even sparked a debate within the NBA as to the validity and correctness of appealing to a foreign state on a matter which is internal to India. However it resulted in several Congressmen writing to the World Bank urging it to reconsider its support for the project. The letter concluded with the following words: 'The continued World Bank involvement in the SSP sends a clear signal to borrower countries that the environmental and social conditions in the loan agreements are not enforced and bona fide established. In the light of the overwhelming evidence of the unsoundness of this project and its broader implications of the Bank, we believe it would be a

- gross misuse of public funds to consider an increased replenishment for an institution which has demonstrated its disregard for human rights and environmental concerns' (memorandum, US Congress sub-committee to the World Bank, 2 Nov. 1990).
48. The letter was signed by members belonging to different political parties: Social Democrats, Conservatives, Centre Party, Democratic League, Swedish People's Party, Rural Party, Christian League, Greens and Liberals (letter to Barber B. Conable, President World Bank, 31 May 1990).
 49. This was achieved by the active lobbying of Japanese NGOs, notably Friends of the Earth Japan.
 50. The NBA has been extremely careful to create an image of local-reliance in terms of funding as it has been constantly accused by those forces supporting the project of having foreign sources of funding. In several of her speeches Medha Patkar has made a point of refuting allegations of relying on foreign funding. As the issue is considered extremely sensitive, the NBA has made public its distancing itself from foreign funding. For instance, the Goldman Prize money awarded to Medha Patkar was not brought into the country but was to be used for an 'international campaign against destructive, anti-people projects in India' [*Narmada, 1992: 25 Sept.*]. It is, however, common knowledge that the NBA regularly receives solidarity money from foreign funded NGOs. Recently, as part of the National Alliance for Peoples Movement, the NBA has welcomed foreign funding with the expected caveat that such funding should not have any conditionalities attached (proceedings, NAPM meeting, Kasravat 4 March 1996). Local industrialists in Bombay have also become a major source of funding for the NAPM.
 51. Although the NBA expressed total dissatisfaction with the terms of references of the IRM which was limited to suggesting mitigative measures for environmental impact and improvement for R&R, 'the Mission members assured the Andolan that the former President of the World Bank had sent them a letter in which he agreed that the terms of reference could be expanded. The members also said that they would not hesitate to say whatever logically came into their findings. Following this it was decided to extend the Andolan's cooperation to the Mission' [*Narmada, 1992: 14*, emphasis in original].
 52. The terms of reference of the Panel required members to reside in villages in the submergence zone of the Sardar Sarovar Dam and to be present at demonstrations and protests. They were however expected to restrict their activities to observation, writing, interviews and photography [*NIHRP, 1992*]. The panel prepared two reports in 1992 and 1993.
 53. By 1992 the World Bank had provided more than US\$50 billion for the construction of more than 500 large dams in 92 countries. The projects thus funded have displaced an estimated 10 million people world-wide.
 54. Under constant pressure multilateral donor agencies such as the World Bank and OECD have periodically reformulated and revised their operational guidelines on various aspects such as displacement, resettlement and environment [*OECD, 1991; World Bank, 1990; 1994*].
 55. It is interesting to note that the 18th Congress of the International Committee on Large Dams (ICOLD) held in 1994 in Durban strongly voiced the necessity for more large dams in developing countries to provide energy, water for domestic and industrial use, irrigation to improve agricultural productivity and flood control measures. In his inaugural address to the Congress, President Mandela said that 'no modern developing economy would be possible without large dams. There is opposition to the building of large dams, some valid. But in South Africa, we have no choice if we have to develop industry and feed our people' [*Dansie, 1994: 14*].
 56. The recently formed World Commission on Dams set up in February 1998 to review major dams in the world with adequate stake-holder participation is a direct outcome of the build up of international pressure on dam-building regimes.
 57. Extracts from the detailed text are suggestive of the international opinion on the project and the movement: 'The movement has succeeded in generating a debate across the subcontinent which has encapsulated the conflict between two opposing styles of development: one massively destructive of people and the environment in quest for large scale industrialisation; the other consisting of replaceable small-scale activities harmoniously integrated with both local communities and nature ... The Narmada projects are the epitome of unsustainable development. NBA, under the inspiring leadership of Patkar and Amte, has ignited a historic debate of world-wide relevance especially in this year leading up to the Earth Summit. The victory of the NBA over the Narmada dams, Sardar Sarovar and Narmada Sagar would be a great symbolic victory

- for sustainability and a reprieve from homelessness and refugee status for several hundred thousand people' (press release, background information on recipients, RLA, 1991).
58. The issues discussed pertained to resettlement, environment, hydrology, drinking water supply to Saurashtra and Kutch, irrigation efficiency, distributive justice, benefits and costs, alternatives, information, human rights violations and project review.
 59. The state responded by declaring Manibeli and adjacent villages a prohibited area. In the face of a state-wide crackdown on NBA activists, the Samarpit Dal went underground with a public resolve to drown on 6 August 1993.
 60. The FMG was headed by Jayant Patil, Member (irrigation) of the Planning Commission.
 61. The M.P. Chief Minister raised the matter of height reduction with the Prime Minister of India, requesting his intervention by calling a Chief Ministers' meeting for this purpose. The Gujarat government responded to these developments by ordering the closure two days later of the sluice gates, marking the beginning of the permanent submergence of the valley.
 62. The Bhopal Action was an indefinite fast by Medha Patkar and three representatives from the submerging villages.
 63. The committee submitted its report in August 1995, recommending that the *adivasi gram sabha*, the body representing the individuals in a tribal village or hamlet, should have wide-ranging powers over the natural resources used by the *adivasis*. This included powers to safeguard rights relating to land, water, forest, minor forest produce; enforcement of customary rights over grazing and biomass collection; management, regulation and use of common property resources and maintenance of community assets.
 64. The petition was filed 'on behalf of the tribal and other oustees of the SSP ... other directly and indirectly affected persons from this project ... [and] on behalf of the people of India in general whose money is going to be spent in excess of Rs 40,000 crores' (Writ Petition [Civil] No. 319 of 1994, Supreme Court of India: NBA vs Union of India and Others).
 65. The legal framework governing the SSP consists of the Narmada Water Disputes Tribunal Award of 1979, government legislation, such as the Land Acquisition Act, Environment Protection Act and the Forest Conservation Act, policies and resolutions as well as guidelines and decisions of various government and parastatal agencies such as the National Commission on Scheduled Castes and Scheduled Tribes, Central Water Commission, Ministry of Environment and Forests, Narmada Control Authority and its sub-groups on Resettlement and Environment.
 66. Civil application No.522, 1994 before the Gujarat High Court.
 67. Civil Application of September 1993 before the Civil Judge, Sr. Division, Nandurbar: Pukharaj Bora vs. State of Maharashtra.
 68. Writ petition of June 1991 before the Delhi High Court: Kisan Mehta and Arvind Adarkar vs. State of Maharashtra, NCA, SSNNL, State of Gujarat and the Union of India.
 69. The FMG report, unlike the Morse Committee report, did not question the SSP but highlighted several problem areas. This argument has been developed in my thesis by comparing the reports of the two review groups and their politics.
 70. The new government of M.P. in an affidavit-in-reply filed in the Supreme Court, had asked for a reduction in the dam height from FRL 136m to FRL 132m. In August 1996, on the intervention of the Prime Minister of India, the three riparian states agreed that the dam height should be 132m after which hydrological data shall be collected for five years before raising the height to 136m. The NBA condemned this agreement and vowed to intensify the movement (*The Hindu*, 19 Aug. 1996). However, M.P. government authorities later clarified that no such agreement was arrived at and that the dam height could be reduced to 88m.
 71. The NBA's efforts in the Supreme Court petition have not been without cost. It involved time, resources and the filing of affidavits and affidavits-in-rejoinder. The hearings were regularly adjourned and the state governments filed affidavits which the NBA considered 'distorted and not factual' [*Narmada Samachar* 1996, Feb.]. Furthermore, the Supreme Court expressed displeasure at the fact that the NBA had filed a petition in the National Human Rights Commission, while the matter was still before the apex court. Taking strong exception to the duplication of adjudication, the three member bench observed: 'The petitioners are ... enamoured to see their names [in the media] every day ... The initial enthusiasm and the genuine feeling are no more there' (*The Telegraph*, 6 May 1995).

72. The rallying call of the NAPM is '*Jhute Vikas Se Mila Hey Vinash, Visthapan, Visamta Aur Gulami, Hamey Chahiye Swadeshi, Swavlambhan, Dharmnirapekhsta aur Azadi*'. Translated this means 'The so-called development process has given us destruction, displacement, destitution and dependency; we want self-reliance, secularism and independence'. Further, in the context of opposition to the forces of globalisation, the NAPM's call for self-reliance is articulated in the following slogan – *Hamara Beej, Hamara Bhumi, Hamara Khad, Hamara Pani!* (Our seeds, our land, our fertilisers, our water).
73. Declaration of the NAPM at the Sewagram meeting held on 16 March 1995. The NBA is a signatory to the declaration.
74. During the time of writing, a massive police operation took place on the *Adivasi Mukti Sangathana* (Adivasi Liberation Organisation) which had achieved enormous success in mobilisation in the Sindhwa region on issues of forests, forest lands and liquor trade. There were reports of activists being underground with arrest warrants issued in their names. It may be of interest to note that a similar form of police repression was experienced by the *Chattisgarh Mukti Morcha* (Chattisgarh Liberation Front) in eastern MP, that culminated in the murder of its leader, Shankar Guha Niyogi.
75. See Dharamadhikari [1993].
76. In advancing this argument Giddens [1990: 131] refers to the works of Jouhar [1984] and Dowie and Lefrere [1980].
77. Two aspects warrant a note. First, claims and counter-claims have emerged dialogically over a period of time. In many instances, project authorities seem to have positively responded to critical assessments, as for example by revising the compensation package, preparing resettlement master-plans and commissioning assessment studies. Second, in the zealous pursuit of advancing claims and counter-claims, both sides have made statements that support rival claims. For example, when project authorities opine that the height of SSP should be higher if NSP is not built it clearly supports the NBA argument that NSP will affect SSP. On the contrary the NBA argument that without the NSP, the SSP will fall short in performance can be used to support the quick construction of NSP.
78. In the last category are people who have returned because of sub-standard conditions in the resettlement sites. Others have leased out the land received as compensation in the resettlement sites to local farmers. Given that submergence in large parts of the valley is yet to occur, families who have received land as compensation divide time and household labour between their original land in the submergence zone and the compensatory land in the resettlement site.
79. Resentment among some of the local *adivasi* activists has been brewing on the role allocated to them in the movement. In an open letter to 'outside activists', Shankar Tadwala articulates this resentment: 'to say yes to everything that is said, to participate in activities, fill water in tubs, sweep the floor, cook food, wash utensils, carry news about NBA activities to villages, wash other peoples clothes; are these the main task for *adivasi* activists? Is this the *adivasi* leadership?' [*Tadwala: undated*].

REFERENCES

- Action Committee for National Rally Against Destructive Development, 1989, 'We Want Development, Not Destruction: To Harsud! To Narmada!', Badwani, 28 Sept.
- ARCH-Vahini, 1988a, 'The 14th May 1988 Vadagam Convention: Before and After', mimeo, Mangrol: ARCH-Vahini.
- ARCH-Vahini, 1988b, 'Sardar Sarovar Oustees, Which Way To Go: Activists' Dilemma', mimeo, Mangrol: ARCH-Vahini.
- ARCH-Vahini, 1991, 'Rehabilitation and Resettlement in Sardar Sarovar Project: Are the Critics Right', paper presented at seminar on Major Issues on Sardar Sarovar Project, Vallabh Vidyanagar: Agro-economic Research Centre, 7-8 March.
- Baviskar, Amita, 1995, *In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley*, New Delhi: Oxford University Press.
- Beck, U., 1992, *Risk Society: Towards a New Modernity*, London, Thousand Oaks, CA and New Delhi: Sage Publications.

- Beck, U., 1995, *Ecological Politics in an Age of Risk*, London and Portland, OR: Frank Cass.
- Brass, Tom (ed.), 1995, *New Farmers' Movements in India*, London and Portland, OR: Frank Cass.
- Buttel, Frederick and Peter Taylor, 1994, 'Environmental Sociology and Global Environmental Change: A Critical Assessment', in Michael Redclift and Ted Benton (eds.), *Social Theory and the Global Environment*, London and New York: Routledge, pp.228-55.
- Castells, M., 1983, *The City and the Grassroots: A Cross-cultural Theory of Urban Social Movements*, Berkeley, CA: University of California Press.
- Castells, M., 1997, 'The Power of Identity', *The Information Age: Economy, Society and Culture*, Vol.II, Oxford: Blackwell.
- Cerneia, M., 1990, 'Poverty Risks from Population Displacement in Water Resources Development', Development Discussion Paper No.355, Harvard Institute for International Development, Harvard University.
- Cerneia, M., 1995, 'Understanding and Preventing Impoverishment from Displacement: Reflections on the State of Knowledge', *Journal of Refugee Studies*, Vol.8, No.3, pp.245-64.
- Cerneia, M., 1996, 'Impoverishment Risks and Livelihood Reconstruction: A Model for Resettling Displaced Populations', draft mimeo, Environment Department, Washington, DC: World Bank.
- Cohen, J.L., 1985, 'Strategy and Identity: New Theoretical Paradigms and Contemporary Social Movements', *Social Research*, Vol.52, pp.663-716.
- CSE, 1982, *India: The State of Environment 1982: A Citizens' Report*, New Delhi: Centre for Science and Environment.
- Dansie, Janet, 1994, 'Don't Deny Us Our Dams!' ICOLD Congress, Durban, International Water, Power and Dam Construction, Dec., pp.14-15.
- Dhagamwar, Vasudha, 1997, 'The NGO Movements in the Narmada Valley: Some Reflections', in Jean Drèze, Meera Samson and Satyajit Singh (eds.), *The Dam and the Nation*, New Delhi: Oxford University Press.
- Dhanagare, D.N., 1995, 'The Class Character and Politics of the Farmers' Movement during the 1980s', in Brass (ed.), [1995: 72-94].
- Dharamadhikari, S., 1993, 'Hydropower from Sardar Sarovar: Need, Justification and Viability', *Economic and Political Weekly*, Vol.28, No.48, pp.2584-88.
- Diani, M. and Ron Eyerman (eds.), 1992, *Studying Collective Action*, London: Sage.
- Dowie, Jack and Paul Lefrere, 1980, *Risk and Chance*, Milton Keynes: Open University Press.
- Dwivedi, Ranjit, 1997, 'Why Some People Resist and Others do not: Local Perceptions and Actions over Displacement Risks on the Sardar Sarovar', Working Paper No.265, The Hague: Institute of Social Studies.
- Dwivedi, Ranjit, forthcoming, 'Displacement, Risks and Resistance: Local Perceptions and Actions over Displacement Risks on the Sardar Sarovar', *Development and Change*, Vol.30, No.1.
- Eder, K., 1995, 'Does Social Class Matter in the Study of Social Movements: A Theory of Middle-class Radicalism', in L. Maheu (ed.), *Social Movements and Social Classes: The Future of Collective Action*, London: Sage Studies in International Sociology, pp.21-54.
- EDF, 1988, Statement of Lori Udal on behalf of EDF and Friends of the Earth, Sub-committee on Foreign Operations, Committee on Appropriations, US Senate, Environmental Defence Fund, June 1988.
- EP, 1992, Resolution on the Narmada Dam (India), No.B3-1012/92, European Parliament.
- Escobar, Arturo, 1992, 'Reflections on "Development": Grassroots Approaches and Alternative Politics in the Third World', *Futures*, June, pp.411-36.
- Evers, T., 1985, 'Identity: The Hidden Side of Movement in Latin America', in D. Slater (ed.), *New Social Movements and the State in Latin America*, Amsterdam: CEDLA, pp.43-71.
- Eyerman, Ron and Andrew Jamison, 1991, *Social Movements: A Cognitive Approach*, Cambridge: Polity Press.
- Fisher, William F. (ed.), 1995, *Towards Sustainable Development? Struggling over India's Narmada Water*, Armonk, NY and London: M.E. Sharpe.
- Fiske, J., 1989, *Reading the Popular*, Boston, MA: Unwin Hyman.
- FMG, 1994, *Report of the Five Member Group on Sardar Sarovar Project*, Vols.1 and 2, New Delhi.
- FMG, 1995, *Report of the Five Member Group on Sardar Sarovar Project*, Supplementary Report, New Delhi.
- Gadgil, Madhav and Ramachandra Guha, 1995, *Ecology and Equity: The Use and Abuse of Nature in Contemporary India*, London and New York: Routledge.

- Giddens, Anthony, 1990, *The Consequences of Modernity*, Cambridge: Polity Press.
- Gill, M. S., 1995, 'Resettlement and Rehabilitation in Maharashtra for Sardar Sarovar Narmada Project', in Fisher [1995: 231-64].
- GOI, 1995, 'Master Plan for Resettlement and Rehabilitation (R&R): Sardar Sarovar (Narmada) Project', Narmada Control Authority, Indore: Government of India.
- GOMP, 1975, Revised Project Report on the Harinjal Dam, Bhopal: Government of Madhya Pradesh.
- Guha, Ramachandra, 1988, 'Ideological Trends in Indian Environmentalism', *Economic and Political Weekly*, Vol.23, No.49, pp.2578-81.
- Guha, Ramachandra, 1989, *The Unquiet Woods: Ecological Changes and Peasant Resistance in the Himalaya*, New Delhi: Oxford University Press.
- Habermas, J., 1981, 'New Social Movements', *Telos*, Vol.49, pp.33-7.
- Hirschman, Albert, O., 1967, *Development Projects Observed*, Washington, DC: The Brookings Institution.
- IRM, 1992, Sardar Sarovar: Report of the Independent Review, Bradford Morse (Chairman), Ottawa: Resource Future International Inc.
- Jouhar, A.J. (ed.), 1984, *Risk in Society*, London: Libbey.
- Kalpavriksh and The Hindu College Nature Club, 1986, 'The Narmada Valley Project: Development or Destruction', in E. Goldsmith and N. Hildyard (eds.), *The Social and Environmental Effects of Large Dams*, Vol.2, Case Studies, Camelford: Wadebridge Ecological Centre.
- Kothari, Rajni, 1984, 'Party and State in Our Times: The Rise of Non-party Political Formations', *Alternatives*, Vol.9 (Spring), pp.541-64.
- Kothari, Rajni, 1990, *State Against Democracy: In Search of Human Governance*, London: Aspect Publications.
- Kothari, S., 1995, 'Damming the Narmada and the Politics of Environment', in Fisher [1995: 421-44].
- Krimsky, S.D. and D. Golding (eds.), 1992, *Social Theories of Risk*, Westport, CT: Praeger.
- Laclau, E., 1985, 'New Social Movements and the Plurality of the Social', in Slater [1985: 27-42].
- Laclau, E. and C. Mouffe, 1985, *Hegemony and the Socialist Strategy: Towards a Radical Democratic Politics*, London: New Left Books.
- Lindberg, S., 1995, 'New Farmers Movement in India as Structural Response and Collective Identity Formation: The Cases of Shetkari Sangathana and BKU', in Brass [1995: 95-125].
- MARG, 1986, *Sardar Sarovar Oustees in Madhya Pradesh: What Do They Know?*, Vol.1, Tehsil-Alirajpur, district Jhabua, New Delhi: Multiple Action Research Group.
- MARG, 1987-88, *Sardar Sarovar Oustees in Madhya Pradesh: What do they know?*, Vols.2-5, districts Khargone and Dhar, New Delhi: Multiple Action Research Group.
- Melucci, A., 1989, *Nomads of the Present: Social Movements and Individual Needs in Contemporary Society*, London: Radius.
- Melucci, A., 1992, 'Frontier Land: Collective Action Between Action and Systems', in Diani and Eyerman [1992: 238-58].
- NAPM, 1995, 'Strengthening Struggle against Globalisation and Displacement', Declaration of the National Alliance for Peoples' Movements.
- NAPM, 1996, 'For Just and Sustainable Development', Campaign Leaflet, New Delhi: National Alliance for Peoples' Movements.
- Narmada Samachar, 1993-96, Action Alert and Update (various issues), Badwani: Narmada Bachao Andolan.
- Narmada, 1989-93, Narmada: A Campaign Newsletter (Nos.1-13), New Delhi: Narmada Bachao Andolan.
- NBA, 1992, Towards Sustainable and Just Development: The Peoples' Struggle in the Narmada Valley, Narmada Bachao Andolan, Oct.
- NBA, 1995, *Writ Petition (civil) No. 319 of 1994*, Supreme Court of India: NBA vs Union of India and Others.
- NDS, undated, 'Sardar Sarovar on the Narmada. Why Do We Oppose?', Narmada Dharanagrasta Samiti.
- NIHRP, 1992, 'Interim Report', 7 Oct., prepared by Chris A. Wold, Narmada International Human Rights Panel.

- OECD, 1991, 'Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects', Paris: OECD.
- Offe, C., 1985, 'New Social Movements: Challenging the Boundaries of Institutional Politics', *Social Research*, Vol.52, No.4, pp.817-68.
- Oliver-Smith, A., 1991, 'Involuntary Resettlement, Resistance and Political Empowerment', *Journal of Refugee Studies*, Vol.4, No.2, pp.132-49.
- Omvedt, Gail, 1993, *Reinventing Revolution: New Social Movements and the Socialist Tradition in India*, Armonk, NY: M.E. Sharpe.
- Parajuli, P., 1991, 'Power and Knowledge in Development Discourse: New Social Movements and the State in India', *International Social Science Journal*, Feb., pp.173-90.
- Paranjpye, V., 1990, *The Narmada Valley Project: A Holistic Evaluation of the Sardar Sarovar and Indira (Narmada) Sagar Dams*, New Delhi: INTACH.
- Parasuraman, S., 1993, 'The Anti-Narmada Project Movement in India: Can the Resettlement and Rehabilitation Policy Gains be Translated into a National Policy?', Working Paper Series No.161, The Hague: Institute of Social Studies.
- Ram, R.N., 1993, *Muddy Waters: A Critical Assessment of the Benefits of the Sardar Sarovar Project*, New Delhi: Kalpavriksha.
- Rangan, H., 1993, 'Romancing the Environment: Popular Environmental Action in the Garhwal Himalayas', in J. Friedmann and H. Rangan (eds.), *In Defence of Livelihood: Comparative Studies on Environmental Action*, West Hartford: UNRISD and Kumarian Press, pp.155-81.
- Rangan, H., 1996, 'From Chipko to Uttaranchal: Development, Environment and Social Protest in the Gharwal Himalayas, India', in Richard Peet and Michael Watts (eds.), *Liberation Ecologies: Environment, Development, Social Movements*, London and New York: Routledge, pp.205-26.
- Redclift, Michael and Graham Woodgate (eds.), 1993, *The Sociology of the Environment*, Vol.III, Aldershot and Brookfield: Edward Elgar.
- RLA, 1991, '1991 Right Livelihood Award Sends Strong Message to 1992 Earth Summit', Press Release, Stockholm: Right Livelihood Award Stiftelsen, 2 Oct.
- Salman, T., 1990, 'Between Orthodoxy and Euphoria: Research Strategies on Social Movements: A Comparative Perspective', in A. Williem, G. Burgwal and T. Salman (eds.), *Structures of Power, Movements of Resistance: An Introduction to the Theories of Urban Social Movements in Latin America*, Amsterdam: CEDLA, pp.99-162.
- Seth, D. L., 1983, 'Grassroots Stirring and the Future of Politics', *Alternatives*, Vol.9 (Spring), pp.1-24.
- Sethi, Harsh, 1993a, 'Survival and Democracy: Ecological Struggles in India', in P. Wignaraja (ed.), *New Social Movements in the South: Empowering the People*, London: Zed, pp.122-48.
- Sethi, Harsh, 1993b, 'Action Groups in the New Politics', in P.Wignaraja (ed.), *New Social Movements in the South: Empowering the People*, London: Zed, pp.230-55.
- Shiva, Vandana and J. Bandhopadhyay, 1989, 'Political Economy of Ecology Movements', *IFDA Dossier*, No.71, pp.37-60.
- Shiva, Vandana, 1988, *Staying Alive: Women, Ecology and Development*, London: Zed Books.
- Shiva, Vandana, 1991, *Ecology and the Politics of Survival*, New Delhi: United Nations University and Sage.
- Singh, S. K., 1997, *Taming the River: Political Economy of Large Dams in India*, New Delhi: Oxford University Press.
- Tadwala, Shankar, undated, 'Adivasi Asmita Se Jude Kucch Prasna', *Disha Sambad* (newsletter).
- Tarrow, S., 1994, 'National Politics and Collective Action: Recent Theory and Research in Western Europe and the USA', *Annual Review of Sociology*, Vol.14, pp.421-40.
- Touraine, A., 1981, *The Voice and the Eye: An Analysis of Social Movements*, Cambridge: Cambridge University Press.
- Touraine, A., 1985, 'An Introduction to the Study of Social Movements' *Social Research*, Vol.52, No.4, pp.749-88.
- Weber, T., 1987, *Hugging the Trees: Story of the Chipko Movement*, New Delhi: Viking Press.
- Wignaraja, P. (ed.), 1993, *New Social Movements in the South: Empowering the People*, London: Zed.
- Wood, J. R., 1993, 'India's Narmada River Dams: Sardar Sarovar Under Siege', *Asian Survey*, Vol.33, pp.968-84.
- World Bank, 1994, *Resettlement and Development: The Bank-wide Review of Projects Involving Involuntary Resettlement 1986-1993*, Washington, DC: World Bank, Environment Department.

APPENDIX
CONTOUR OF RISK POLITICS IN THE ANTI-SSP CAMPAIGN

Project Components: Some Facts and Figures	Uncertainties & Risks: Some Dimensions	Project Authorities: Claims and Assertions	NBA: Counter-claims and Assertions
<i>1. River Basin Investments</i>			
<ul style="list-style-type: none"> *Planned construction of 30 major, 135 medium and 3000 small projects on Narmada. *SSP is the terminal dam, the fifth large dam and the first mega intervention. *Its performance linked to the dams upstream particularly the NSP whose construction has barely begun and may not start in a long time. 	<ul style="list-style-type: none"> *What overall impact will the projects have on the Narmada valley? *When will NSP be completed and how will its non-completion affect the SSP? 	<ul style="list-style-type: none"> *Narmada is the largest untapped perennial water resource in the country. *SSP is integral to Narmada Basin Planning. *The risks to its benefits from the non-construction of NSP are minimal. *It doesn't affect performances of upcoming projects upstream. 	<ul style="list-style-type: none"> *Narmada is the holiest river and bears ancient cultural heritage and monuments. *No integrated river valley planning. *SSP benefits without the NSP will drastically fall. *Small projects could have been constructed first for immediate benefits. *Upstream dams should logically

2. Hydrology

<ul style="list-style-type: none"> *Contention between riparian states over annual utilisable flows and methods of calculation. *Political agreement between state chief ministers resulted in accepting 28 million acre feet [MAF] 	<ul style="list-style-type: none"> *How much annual utilisable water is there in the Narmada? *How to estimate the utilisable flow of water? 	<ul style="list-style-type: none"> *Annual utilisable flow is 28 MAF. *The figure is based on sound methodology and has been supported by central government and international experts . *Hydrological flow has been legally settled as 28 MAF by the NWDTI, the adjudicating tribunal. 	<ul style="list-style-type: none"> *Annual utilisable flow is 23 MAF. *Inconsistent and faulty applications of hydrological methods. *M.P government, a report of the Central Water Commission, the IRM review and two members in the FMG support this figure.
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3. Economic Appraisal and Financial Aspects

- *Five economic cost-benefit analyses conducted by project authorities [including the World Bank and consultants] show favourable rate of return but vary [between 12% to 17%].
- *Project cash-strapped after World Bank withdrawal.
- *How sound is the economic appraisal?
 - *Does it take into account alternatives?
 - *What is the total financial cost required for the completion of the project and resources to be mobilised?
- *Persistent cost-benefit analysis done by Gujarat government, World Bank and independent consultants show favourable rate of return.
 - *Central government committees have recommended that for purpose of social objectives of drought-proofing even lower rate of return [7 to 9 %] is acceptable.
- *The economic appraisals do not incorporate costs such as drinking water supply, internal power consumption, catchment area treatment.
 - *They overestimate crops yields.
 - *They do not carefully assess costs and benefits of alternatives.
 - *While the government is cash strapped, the cost overruns in the project will be enormous.

4. Displacement and Resettlement

- *Inter-state discrepancies in resettlement policies.
 - *Initial assumption [in 1979] of 7000 project affected families. [PAFS] revised to 4,000 PAFs [in 1995].
 - *Current estimate over 120,000 PAFs.
 - *245 villages in three states with major submergence in M.P.
 - *Total land submergence [including private land, forest land and government wasteland] estimated at 34800 hectares.
- *How many villages and how many people to be affected?
 - *Who are these people and in what ways are they being affected?
 - *What will be the total area coming under submergence?
 - *Where are they to be resettled, what compensations do they get and does the compensation offset impoverishment risks?
- *Few villages will be totally affected. Most are partially affected involving submergence of household and not land.
 - *More people will go to Gujarat as the command area lies there and the Gujarat government has a better entitlement package
 - *Resettlement component in SSP is one of the most progressive in the country. Provisions for adult sons and daughters, landless agricultural labourers and their adult sons and those in other occupations.
 - *People want resettlement as it offers them better opportunities.
 - *Identification of problems in resettlement sites with NGOs.
 - *Canal affected people and project infrastructure are being compensated.
- *Total impact still unknown
 - *Estimated 400,000 PAFs will be affected.
 - *Land submergence will be much more than estimated.
 - *Apart from land loss, other livelihood losses [including common property resources] are not being properly compensated.
 - *Apart from reservoir affected people, those affected by canal, project infrastructure, downstream impact and environmental protection measures are not being properly compensated.
 - *Conditions in resettlement sites are abysmal except for some 'model' sites. Due to this people are returning to their original villages.
 - *Sustainable resettlement of all affected people is not possible as amount of required land is not available.

5. Environment

*Difference of opinion between MoEF, M.P government and Gujarat government over assessment of treatment areas and estimation and sharing of costs.
*MoEF has on many occasions expressed dissatisfaction over assessment studies and mitigative measures.

*What will be the nature of impact in command area [water logging and salinisation], downstream [fisheries, displacement and salinisation] upstream [forests submergence], siltation and catchment], flora and fauna, seismicity and public health?
*How does the project impact the culture and society of the people?

*Environmental Impact Assessment is an upcoming field. No systematic environmental guidelines even in developed countries.
*Compared to other projects sustainability aspects such as water management [allocation and distribution, including water-logging, salinity], flora and fauna aspects are advanced.
*Basic rights of adivasis involving right to development and land-based resettlement has been based on anthropological inputs.

*Assessment and Action Plans of environmental impact are inadequate. In some areas, studies have not been conducted, those conducted have not been made public, peer reviewed or are substandard.
*High siltation rate will affect sustainability of the SSP.
*Selection of species for afforestation fulfil commercial and not local people's needs.
*Seismic impact has not been properly assessed.
*People's cultural links to the valley will be affected in particular the culture of the adivasis.

6. Industrial and Drinking Water Benefits

*SSP only to carry water to off-take points.
*A different government agency is in charge of making necessary investments for supply of infrastructure and water treatment.
*All villages in Kutch and Saurashtra are covered in drinking water supply [revised figures].

*Can the necessary investments be mobilised for drinking water supply?
*When will drinking water reach people and what is being done to cater to people's needs in the interim?
*Can industrial needs be contained?

*Drinking water supply is integral to the project objective of drought-proofing.
*Project authorities have increased the number of villages and towns in Saurashtra and Kutch to be supplied with water.

*The addition of drinking water benefits is an after-thought.
*No detailed plans, financial cost estimation and time schedules are available with the project authorities.
*While villages have been increased, drinking water allocation for Kutch and Saurashtra remains the same and is insufficient.
*Priority is industrial supply. Industrial estates coming up in the command expecting regular water supply.

7. Irrigation Benefits

- *Proposed project command covers 1.7 million hectares spread across 12 districts in Gujarat. [Also two in Rajasthan].
- *SSP covers about 20% of total cultivable area in Gujarat.
- *Will head-enders monopolise use?
- *Will water reach tail-enders and when?
- *To what extent will cropping patterns be affected because of water intensive cash crops?
- *Has water requirement in the command been properly estimated?
- *70% of the command is drought prone.
- *Irrigation benefits are protective, innovative and certain.
- *Cropping patterns have been differently planned for various agro-climatic zones in the command.
- *Less than half the command area is suitable for irrigation .
- *Irrigation efficiency assumed at 60% is impossible [given past experiences].
- *Water will not reach Kutich, Saurashtra and north Gujarat lying in the project tail.
- *Head-end of the command is already developed.

8. Hydro-power Benefits

- *SSP linked to the western power grid in India.
- *Installed capacity - 1400 MW.
- *Basic function as a peaking station.
- *Entailed height increase of the dam from 130 metres to 136 metres.
- *Japan government cancelled turbine supply.
- *How much hydro-power will the project generate over the years?
- *Is it necessary considering its costs?
- *What impact will the Japanese withdrawal have on the project component?
- *Hydro-power is economically cheap and environmentally clean.
- *Supply-shortage in western grid is the highest in the country.
- *Hydro-power contribution [compared to thermal] is negligible in western grid.
- *Power generation figures advertised are installed capacity whereas actual generation is less.
- *Without NSP power generation will be reduced by 30%.
- *The power component of the dam disproportionately increases displacement.
- *The project itself will consume disproportionate power compared to benefits.

Sources: NBA [1995]; GOI [1995]; FMG [1994; 1995]; IRM [1992]; Paranjpye [1990].

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