Contributing Paper

Dams, Displacement, Policy and Law in India

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THEMATIC REVIEW: SOCIAL ASPECTS
Dams, Displacement, Policy and Law in India

This paper seeks primarily to establish some benchmarks for policy and law for displacement and rehabilitation in India. It will do this by looking briefly at the actual experience of displacement due to big dams in India in 50 years, the resistance to big dams, and also by examining some of the major issues in the discourse about displacement and development in India.

PART I

THE EXPERIENCE OF DISPLACEMENT AND BIG DAMS IN INDIA

Two decades after his uprootment from the land of his ancestors, Nanhe Ram still speaks little. Looking much older than his sixty years, he sits for long hours outside his dilapidated hut in the resettlement village of Aitma. He has no land, no cattle, no sons; it is his ageing wife who labours all day in the forests or fields of the big farmers of the village, to keep the fire burning in their kitchen.

There is anguish but little recrimination, as he talks haltingly of the past. The first time they heard about the large dam that would submerge his village, he recalls, was when daily wages were 12 annas (which would probably be in the mid-1950s). Their village, like the entire region, was entirely unconnected to the outside world, and until then they had rarely encountered government officials. When men on bicycles wearing trousers and shirts would ride into their villages to speak of the dam, all the tribal residents of the village would run away in fear into the forests.

He did not know then that a gigantic thermal power complex was being planned in the neighbourhood of his village, at Korba, for which the two rivers of his ancestral habitat, the Hasdeo and Bango, were to be dammed. Fifty-nine tribal villages like his were to be submerged, 20 completely and the rest partially, along with 102 square kilometres of dense sal forest, to create a vast new reservoir of 213 square kilometres. No one consulted with or even informed the 2721 families of these 59 villages, who had been condemned to be internal refugees to the cause of ‘national development’, about the project and how it would alter their lives so profoundly and irrevocably. Some 2318 of these families, or an overwhelming 85 per cent, were tribals or dalits, who like Nanhe Ram were the least equipped by experience, temperament or culture to negotiate their new lives amidst the ruins of their overturned existence.

The survey work continued for six or seven years, and it was in 1961 that the first phase of the project, for the construction of the barrage and major canal was sanctioned. Nanhe recalls the fear and excitement when a small plane flew in as part of the on-going survey work. However, it was only a decade and a half later, in 1987, that the first settlement, Nanhe’s village Aitma, was actually submerged. In the intervening years, construction continued apace, but no one from the government planned or as much as spoke with them about how they were to reconstruct their ravaged future.

In 1977, a few months before their actual submergence, the farmers of Aitma were packed into a truck and driven to the divisional headquarters of Bilaspur, located in the heart of the Chhatisgarh region of Madhya Pradesh. Nanhe recalls that they arrived at the imposing office building housing the District Office in the late afternoon, and were bundled into a courtyard. An official addressed them, informing them that their village would be drowned by the dam reservoir only months later during the next monsoon, and that the government was therefore paying them the first instalment of their compensation.

For Nanhe, this was a niggardly five hundred and forty rupees. When their truck returned them into their village, it was morning. They found that the local revenue officer, the tehsildar was waiting for
them, to recover from their
compensation Nanhe’s land revenue dues. Nanhe lost to him three hundred rupees, and the remaining two hundred and forty also disappeared before long merely in day-to-day survival.

During the meeting at the District Office, someone had timidly asked— But where are we to go when our village drowns in the next monsoon? The official had replied tersely— How do I know? Why don’t you go to your relatives’ homes?

But some weeks later, a band of activists held a series of meetings in their village. How can they ask you to go to the homes of your relatives? — they thundered. Did your relatives build this dam?

They organised demonstrations and rallies, in which many young tribals of the village also participated. Nanhe was bewildered and terrified, and he held himself aloof. Eventually, the government conceded that they would be given house sites in a resettlement colony located in the forest uplands.

In the few months that remained, Nanhe made plans in his own way for the future. Where and how they would live, he did not know. He was worried first about his cow, whom they all loved. He knew that he would not be able to take care of her in the resettlement village, at a time when even keeping his wife and two daughters alive would be very hard. He also could not think of selling her, because she was like a member of the family. So he gave her to an Ahir cowherd, and promised to pay him a hundred and fifty rupees each year so that he would look after her. Nanhe continued despite all his subsequent tribulations to save and send money for the upkeep of the cow for ten years, until the cow died.

Just a day before the monsoon, the trucks arrived. They were given only a few hours to bundle their belongings into the trucks. They were then driven to the resettlement village, in which house plots of 0.05 acres of land each had been hurriedly cleared for them in the forest. The rains broke early, and Nanhe and his family spent the entire monsoon huddled with their few belongings under a mahua tree. In the dry spells, Nanhe struggled with building a small hut, while his wife scoured the forests for food.

The remaining instalments of compensation were paid only 15 years later, in 1992. Nanhe received a cheque of two thousand rupees, which he used to repay loans to the moneylender. It was around then that for the first time, under pressure from activists, the government initiated a few livelihood programmes. Although the government has since spent some twenty million rupees in the resettlement region in recent years to belatedly provide livelihoods to the displaced families, there has been little success. Fishing in the new reservoir is dominated by outside contractors. Four million rupees were spent on a poultry farm, which ran for a few months, with 12 beneficiaries who were given 100 birds each. The birds suddenly died of some illness, and the farm closed down. Amber charkhas or spinning looms were installed, but raw material supply and marketing were erratic. The looms provided wages in fits and starts, and that too of only one rupee a day.

The resettlement villages are at the periphery of the large artificial reservoir, connected by earth roads that get submerged after the rains each year. In these inaccessible, remote, artificial settlements, not only are jobs hard to come by but life is very hard in other ways as well. Schools, health centres, credit cooperatives and ration shops rarely function. If someone is seriously ill during the rainy months, the only way to reach a hospital is a perilous journey of three hours aboard a small leaking dinghy.
Not surprisingly, of the 208 families that had been resettled in Aitma, only 60 remain. The rest have migrated, either as encroachers in the forests or into the city slums, in desperate search of means for bare survival.

Nanhe is among the few who remain, because he had neither the strength nor the hope to struggle to start life anew one more time. He sits quietly outside his hut for most of the day. But sometimes when he speaks, he says softly to anyone who is willing to hear—

When I am on a boat in the middle of the reservoir, and I know that hundreds of feet below me, directly below me, at that very point, lie my village and my home and my fields, all of which are lost forever, it is then that my chest rips apart, and I cannot bear the pain….

[A record of Nanhe’s story as told to the paper writer in resettlement village Aitma in 1997]¹

In this part of the paper, we will observe how 50 years of planned development in India have entailed large-scale forced evictions of vulnerable populations, without the countervailing presence of policies to assist them to rebuild their lives. Most of the negative aspects of displacement, such as lack of information, failure to prepare in advance a comprehensive plan for rehabilitation, the undervaluation of compensation and its payment in cash, failure to restore lost assets or livelihoods, traumatic and delayed relocation, problems at relocation sites, multiple displacement, and neglect of the special vulnerabilities of the most disadvantaged groups are in fact the direct result of state policy.

Prior to 1947, water resource development works in India comprised mostly of diversion weirs or small earth dams not exceeding 15 to 20 metres in height, mainly in the form of small tanks and bunds with localised networks of canals. In fact there were only 30 dams that were 30 metres or more in height before the onset of Independence. (Central Board of Irrigation and Power 1979). However, many of these systems involved extensive and sophisticated modes of water harvesting, sometimes with massive canal systems, and involving creative application of indigenous technologies.

With the adoption of policies for planned development after freedom in India, a major priority for policy-makers was the harnessing of the country’s water resources for irrigation and power. Support to earlier technologies, based on diversion or run-of-the-river schemes, gradually diminished in favour of large dams. The visibility, scale and sweep of mega-dams made them potent emblems of the reconstruction and regeneration of the battered economies of long-suppressed post-colonial nations.

Large storage works such as the Bhakra, the Hirakud, the Tungabhadra and the Damodar Valley Dams were amongst the earliest projects undertaken in the post-Independence period in the country. Construction of high dams for hydropower generation was also taken up, especially in peninsular India, and this included schemes such as the Machkund, Pykara and the Kundah hydro-electric projects.

The national plans also attempted to incorporate wherever possible a multi-purpose orientation to dam projects, including hydro-power, flood control and navigation, in addition to irrigation. Some 3,300 big dams have been constructed in India in the last 50 years. Budget provisions for major irrigation projects outstrip most other sectors, including health and education, in the annual plans of many state governments. These are also far in excess of financial allocations for establishing or strengthening decentralised irrigation schemes.

¹ From Mander 1999a
Although enthusiasm for mega-dam projects amongst policy-makers remains largely undimmed, a formidable body of independent empirical research into many of these large dams has established how their social, human and environmental costs have been ignored or grossly understated in the planning of these projects, and the expected benefits exaggerated. The actual output of irrigation and power of these projects has fallen short, sometimes spectacularly, of the level on the basis of which investment on the project was initially justified.
Of the very many neglected costs of the big dams, some of the most grave are the social and human consequences of displacement. In this paper, we will restrict ourselves to an analysis of these human and social impacts of displacement, and especially to those that result directly or indirectly from the omissions or commissions of policy.

It was clear from the start that mega-projects would require the displacement or forced uprooting of substantial populations, particularly for hydraulic projects which entail large-scale submergence for reservoirs. However, national leaders and policy-makers typically viewed these as legitimate and inevitable costs of development, acceptable in the larger national interest. Nehru, India’s first Prime Minister, while laying the foundation-stone for India’s first major river valley project, the Hirakud Dam in Orissa in 1948, said to the tens of thousand facing the grim prospect of displacement: ‘If you have to suffer, you should do so in the interest of the country’ [quoted in Roy 1999]. The same sentiments were echoed 36 years later by Prime Minister Indira Gandhi in a letter to one of India’s most respected social workers, Baba Amte. She wrote:

I am most unhappy that development projects displace tribal people from their habitat, especially as project authorities do not always take care to properly rehabilitate the affected population. But sometimes there is no alternative and we have to go ahead in the larger interest… [quoted in Kothari, 1996:1476]

There is painful irony, and possible design, in the fact that there are no reliable official statistics of the numbers of people displaced by large projects since Independence. Many researchers place their estimates between 10 and 25 million. In an influential 1989 study, Fernandes, Das and Rao provide an estimate of some 21 million displaced persons (see also Fernandes 1991). Scholar-administrator and currently Secretary of India’s Planning Commission, Dr. N. C. Saxena, places his estimate of persons displaced by big projects since 1947 at nearly double this figure — 50 million.

This is also the figure quoted by celebrity writer Arundhati Roy in a recent essay ‘The Greater Common Good: The Human Cost of Big Dams’. It is worth quoting her persuasive reasoning:

According to a detailed study of 54 Large Dams done by the Indian Institute of Public Administration, the average number of people displaced by a Large Dam is 44,182. Admittedly 54 Dams out of 3,300 is not a big enough sample. But… it’s all we have… let’s err on the side of abundant caution and take an average of just 10,000 people per Large Dam. 33 million… That’s what it works out to…. What about those that have been displaced by the thousands of other Development Projects?… Fifty million people…I feel like someone who’s just stumbled on a mass grave. [Roy 1999:7]

Going beyond the numbers and based on the large body of painstaking research into the experience of displacement in India, and confirmed by the direct observation of the Sardar Sarovar and Hasdeo Bango projects by the writer of this paper, in this part of the paper we will attempt to identify some of the recurring and predominant trends in the experience of displacement and rehabilitation as a result of big dams in India.

i) Failure to be consulted and informed

From the inception of planning of most projects, through various stages of displacement and resettlement, it is to be expected that those likely to be negatively affected by the projects would be consulted and kept informed in such a way as to enable them to best rebuild their ravaged lives.
This, however, is very far from being the case. There is typically bewilderment and confusion among resettlers in virtually every large project about even the precise contours of submergence — which villages or segments of villages would be submerged, and when. The indefensible experience of the Bargi Project on the Narmada has been recorded, in which 70,000 villagers from 101 villages were informed that they would be displaced. But when, without prior warning, the reservoir was filled, 162 villages were submerged displacing 114,000 people [Roy 1999; Desai 1993].

Again, typically oustees are rarely consulted or even informed about the phasing and content of their rehabilitation package, their entitlements and their choices. This is partly because of bureaucratic lassitude and insensitivity, but as a MARG (Multiple Action Research Group, a respected activist research group) team finds, misinformation may not always be by oversight.

In all the villages visited so far by the MARG team, the level of information that the oustees had regarding the dam, submergence and subsequent displacement due to them, was lamentably low. By and large the oustees had received little or no information from official sources i.e. the authorities formally required to communicate relevant information. As other officials seldom or never visited these villages, it was from the survey teams who had either come to take down details of their family, landed property etc. or lay stone markers, or during the site visits, that the villagers had gathered stray information about their subsequent submergence or resultant displacement. In the absence of any proper information the oustees had guessed from looking at the stone markers, the extent of loss of land.

The forest department, on its part, was adopting an equally callous attitude. None of the forest villages was officially informed by the forest department about their possible submergence and displacement. The villagers had gathered information from passing officials, neighbouring villages and surveys teams belonging to the irrigation department, who had come to survey the land and to lay stone markers showing reservoir levels. Sometimes it was some junior official of the forest department or the forest guard, who passed on the information, not as a matter of duty, but in the course of conversation or when asked by the villagers.

Lack of information is in itself a very serious matter, but even more unforgivable is the incomplete and defective information being provided to the people. For example, some of the oustees have been told that they will get compensatory land only if they go to Gujarat, and that too a maximum of 5 acres [i.e., 2 ha] irrespective of the area of land lost, whereas under the Award, they are entitled to get a minimum of 5 acres as compensation either in Gujarat or in Madhya Pradesh. Some oustees from the villages of Kukshi tehsil have been told that cash compensation will be paid to them in instalments, though the Award specifies that it is to be given in a lump-sum. [Ganguly Thukral 1989:52–53, 56–57]

**ii) Absence of Advance and Comprehensive Planning for Rehabilitation**

In the absence of a statutory rehabilitation law or even a national policy, there is no legal imperative for state governments or project authorities to integrate comprehensive rehabilitation planning into the planning of a project. Indeed, it has been found that even the existence of state and project-specific policies is not sufficient to ensure this. The so-called pari passu or incremental approach of allowing land acquisition and project construction activities to proceed parallel to displacement and rehabilitation, has led in practice to ad hoc, piecemeal and minimalistic rehabilitation. More often than not, project authorities are interested mainly in the relocation rather than the rehabilitation of project
affected persons, in their physical transference from the submergence zone rather than their long-term welfare.
In fact, as Mankodi (1984) points out ‘generally rehabilitation policies are made up by State Governments, most often as knee-jerk reactions to the manifestations of disaffection of populations on land which is acquired for “public purposes” ’ [quoted in Chakraborty 1986:30]. Chakraborty adds ‘precedents set the tone, court orders and agitations stimulate government response which is more akin to crisis management’. Further,

Reports in the case of the Utkai dam confirm that the rehabilitation policy consisted of about 20 different resolutions made by various departments of the Gujarat state government over a period of five years. The Andhra Pradesh government in the early 1960s had a project-specific rehabilitation policy. In the case of the Nagarjunaasagar Project in 1960, the state government declared its willingness to take the responsibility for the full rehabilitation of the dislocated. However, by 1965 this concern for full rehabilitation had been considerably eroded. In the case of Pochampad in 1965 and Srisailam in 1977, the Andhra Pradesh government did away with the practice of an elaborate rehabilitation policy. Instead it was replaced by departmental memos and orders to suit the need of the hour. Obviously governance by executive fiat gives the executive greater room to manoeuvre. However, for the potential oustees it raises uncertainty and stress which could have been avoided if government at the outset had set clear guidelines covering various aspects of resettlement. [Chakraborty 1986:30]

In the context of the Bargi Project, the then Divisional Commissioner of Jabalpur Division is reported to have said:

What really appears about the project is the situation of the proverbial cart having been placed before the horse. Any such project requires meticulous planning and careful implementation including complete and accurate information of all important variables to be dealt with — socio-cultural, environmental, economic and the rest of them. A plan for the resettlement of the persons to be displaced should be ready before the work starts on the project. In the instant case the dam is more or less complete and is expected to attain full reservoir level this year. But the plan for resettlement is being thought of now — a clear example of placing the cart before the horse. Rehabilitation of a people uprooted from their lands and homes is a delicate matter and requires a good deal of understanding and dedication. The socio-cultural patterns of the oustees, the level of economy, their cultural ethos and psychological make-up and all such other aspects need to be studied and understood before any scheme for their resettlement could be thought of. [quoted in Desai 1993:9–10]

He also notes that rehabilitation is grossly under-financed, especially when compared to the total cost of the project—the total rehabilitation budget is a niggardly Rs.1.7 million, when the cost of the project is about Rs.4120 million [Desai 1993], a proportion that works out to an astounding 0.04 per cent.

In fact, as we shall observe, it is only in recent years that, chiefly under the impact of people’s movements, project authorities, state governments and international funding agencies have accepted responsibility for rehabilitation—one that extends beyond the payment of monetary compensation for expropriated individual assets and the provision of house sites.

This neglect of rehabilitation assumes the gravest aspect when seen in relation to older projects, particularly those that commenced or were concluded in the first three decades after Independence. The influential Citizens’ Fifth Report (1999) published by the Centre for Science and Environment documents, for instance, the plight of about 12,000 Biranchi families in the Rengali dam area of Orissa, displaced in 1973, who continue to have no land for cultivation, no drinking water and no health care. Oustees from the first major river valley project in free India, Hirakud, in the absence of
any rehabilitation plan, occupied whatever open lands they could locate. These lands are still not legally theirs, and they are harassed to vacate these lands by forest officials. [CSE 1999]
Similarly Parasuraman documents vividly the fiasco of the Upper Krishna Irrigation Project:

The government of Karnataka, which had no official R&R [resettlement and rehabilitation] policy, resettled people with only the absolute minimum of provisions. Displacement affected all social and economic groups. Those who were left with some land and invested the compensation money in land purchase, agricultural improvement, and irrigation, and made the most of their position as PAPs, were able to recover or even improve upon the standards of living they had enjoyed prior to displacement. This group accounted for about one-fourth of all households, and included primarily the high caste Lingayats and a few Kurburs. The Dalits and other low-caste groups who were originally landless or owned very little land, suffered more. They could not buy land due to a lack of resources and were eventually pushed into the category of migrant labourers and construction workers. Displacement aggravated poverty in this group. [Parasuraman 1999:177]

Almost every major project in India carries in its trail the same sorry tale of official neglect and abdication of responsibility for rehabilitation.

(iii) Undervaluation of Compensation

The only significant reparation for displaced persons guaranteed by law is the payment of monetary compensation for compulsorily acquired individual assets, mainly land or houses. However, the manner in which the law is framed and interpreted ensures that the displaced land-owner or house-owner is always the loser. Lokayan in 1982 documented the trauma undergone by the 21,094 families in the 100 villages submerged by the Srisailam project in Andhra Pradesh. The report states:

The government has conceived and executed the Srisailam project... without taking into consideration the human problem seriously... The disbursement of compensation (in cash) did not encourage plans for resettlement. In the disbursement of compensation there appears to have been widespread corruption. Large and rich farmers managed to receive compensation, for both house sites and land lost, at reasonably competitive terms; people with low economic and social status did not get fair compensation for the property lost. The people were neither educated nor taken into confidence regarding the various issues involved in computing compensation, evacuation and rehabilitation. Except for a few educated people, the overwhelming majority (95 per cent in the sample) were not conversant with the relevant provisions of the Land Acquisition Act. The Government made no effort to educate the people in this regard. This led to ‘legal cheating’ of the people. State power, including police power was used in a most brutal manner to evict the villagers. The Government had no rehabilitation programme worth its name. [quoted in Paranjpye 1990:182–183]

Some of the major problems leading to the undervaluation of compensation are as follows:

- The practice is to pay compensation for lost fixed assets like agricultural land at the prevailing market rate, calculated as an average of registered sales prices of land of similar quality and location in the preceding three or five years. However, it is an open secret that most land transactions in India are grossly undervalued to evade registration fees. Therefore, the oustee receives a rate which is much below the market rate, and the solatium of 30 per cent (or even 100 per cent as is being proposed in a new draft Land Acquisition Act (LAA) Bill under consideration with the Government of India) is far from enough to bridge the gap between the market and the registered prices. In Scheduled Areas (areas with high tribal concentration listed in the Constitution for special state protection), the problem is compounded by the fact that the law restricts sale of land by tribals to non-tribals to prevent tribal land alienation. This otherwise
progressive measure has the unintended outcome of further depressing the market price of land and quantum of compensation to the tribal land oustees.

- Land and houses are paid for at the alleged market value rather than ‘replacement value’. To consider only one typical example, the Fact-finding Committee on the Srisailam Project (1986) found that the replacement value of one acre of dry land was around Rs 5000, and for one acre of wet land Rs 13,800. The compensation actually paid (including solatium) was only Rs 932 and Rs 2,332 respectively. In this way, the amount paid as compensation was five times less than the amount that would be required by the oustees to purchase agricultural land of equivalent quantity and quality.

The Fact-finding Committee found a similar discrepancy in the amount of money paid as compensation for houses. In their survey, the villagers set the value of a stone house at Rs 11,564 and a hut at Rs 2,500. However, the Government paid an average of Rs 5,561 for stone houses. For huts, the government paid an average of Rs. 645—that is, one-third of the value estimated by the villagers [Fact-finding Committee on the Srisailam Project 1986:258].

Typically land prices shoot up sharply around any large project because of enhanced demand for land and in anticipation for irrigation, likewise houses are depreciated in value for age. In this way, oustees are not compensated for their land or houses at rates which would enable them to buy land or construct houses elsewhere similar to those that are lost. In projects like the SSP, the Gujarat government is providing land to oustees purchased at open market prices, and this has been found to be much higher than the rates at which compensation was paid.

- Compensation is only for persons in possession of undisputed legal title. In any average Indian village, the tyranny and corruption of the patwari or village accountant charged with the responsibility of maintaining land records ensures that land records are neither accurate nor updated, and this complicates the chances a land-owner will be able to prove title and secure compensation.

- Tenants, sharecroppers, wage-labourers, artisans and encroachers are usually not considered eligible for compensation because they do not have legal title to agricultural land, whereas they are paradoxically the most vulnerable and in need of support.

- Community assets like grazing grounds and forests, which again may be critical for the livelihood of the poorest, are not compensated for under the LAA.

- The value of the land is calculated as on the date of the gazette notification and interest is liable to be paid only from the date of taking possession up to the date of payment of full compensation. The LAA thus does not take into consideration the escalation of the market value between the time of notification and the date of actual possession.\(^2\)

- The limited provisions in the LAA to challenge the rate of compensation are, in practice, inaccessible to the indigent and illiterate oustees, because they may not be aware of the legal nuances or else cannot afford the expensive remedy of courts. Even those that are able to access courts fritter away a substantial proportion of the gains that they achieve in legal costs. The Srisailam Fact-Finding Committee noted in this regard:

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\(^2\) For an excellent and accessible review of the LAA 1894 (and subsequent amendments) see MARG (1997), The Land Acquisition Act and You."
Only those landowners who were familiar with the legal details of the Land Acquisition Act — and who had connections in the city — took their cases to court. Others who were unaware of the Act lost their opportunity to appeal because they accepted the initial compensation payment without protest.
Those who went to court had to spend considerable sums of money on lawyers’ fees and other expenses. In some cases, a percentage of the money awarded in compensation was taken by the lawyers — many of whom charged far more than their usual fees. Significantly, the courts ruled in favour of all those who appealed — ordering increases in compensation ranging from 12 to 254 per cent. However, in most cases, the appellants benefited little owing to the high legal costs involved.

[Fact-finding Committee on the Srisailam Project 1986:258]

- Payments are delayed, uncertain and the oustees are vulnerable to graft in the disbursement of compensation.

iv) Inability to handle cash compensation

Even more lethal for rural oustees is the provision that whatever compensation is fixed, is paid as a rule in cash rather than kind. Especially tribal people, but to a lesser degree most rural people, have little experience in handling cash. Many studies have recorded how cash compensation is depleted by oustees in short periods, by fraud, for repayment of old debts, in liquor and conspicuous consumption. The roar of Hero Honda motorcycles, raising a trail of dust in village roads, is ubiquitous wherever compensation has been disbursed. A lifetime of livelihood security or shelter is squandered in months, sometimes weeks, condemning displaced persons to assured and irrevocable destitution.

v) Failure to acquire alternate cultivable lands

The problems listed earlier, of the absence of a comprehensive rehabilitation plan, of undervaluation of compensation and the inability to negotiate a money economy, combine as serious barriers for displaced land owners to secure alternate cultivable lands. Chakraborty (1986:34) cites the instance of Srisailam, where the average land-holding size of the oustees declined between 53 per cent and 63 per cent for all categories. This is indicative of the economic marginalisation of the oustees. [This is one of the impoverishment risks discussed by Cernea (1999). See Part II for details]

The only recourse for the dispossessed cultivator caught in what Cernea describes as the ‘spiral of impoverishment’ is typically one of two alternatives. The erstwhile land-owner either migrates to the slums of the cities in search of work, or fans out to neighbouring wastelands or forest tracts and clears them for cultivation. Whether it is the Bargi or Srisailam, Hasdeo Bango or Ukai, the result is the same: tenuous survival on sub-marginal lands and the perennial insecurity of expropriation by the local revenue or forest bureaucracy.

vi) Traumatic forced and delayed relocation

Involuntary relocation is always extremely painful, but a sensitive project bureaucracy can do much to relieve its trauma. In practice however, it has been observed that the driving objective of project authorities has not been to prepare and assist the families to relocate and to make a gradual and less painful transition to their new habitats. Instead frequently the only objective is to vacate the submergence zone of what are perceived to be its human encumbrances, with the brute force of the state if necessary.  

3 The experience of the Srisailam project oustees, as reported by the Fact-finding Committee (1986) makes painful reading but is no exception to what has occurred elsewhere.

3 How deep-rooted this attitude is, even at the highest levels, is illustrated by what Morarji Desai had to say to the Pong Dam oustees in 1961: ‘We will request you to move from your houses after the dam comes up. If you move it will be good. Otherwise we shall release the waters and drown you all’ [Roy 1999:6]
The evacuation of the villages was carried out with brutal insensitivity towards the feelings of the villagers who, not unnaturally, were bewildered and distressed at being forced out of their homes. The villagers were not properly informed about the details of the evacuation: some did not even know where to go once they had been ordered to move. Many villagers did not take government announcements about the evacuation seriously. “The government is always announcing things which it never carries out,” they told us. Some refused to believe that their villages would be submerged—or thought that, at worst, their lands would only be flooded when the Tungabhadra and Krishna rivers were in spate. Still others delayed moving either because they had no money to do so or because they had failed to find alternative housing and employment. The evacuation programme was so rushed that few villagers had enough time to move all their belongings to the resettlement sites. Worse still, when the villagers reached the new sites, they found them lacking in basic amenities—including proper housing.

During the last week of March 1981, the government announced—for the first time—that all villagers had to leave their homes. Two months later, convinced that the villagers would not move whilst their houses and huts were still standing, the authorities launched ‘Operation Demolition’. Under heavy police guard, officers and staff from the Departments of Revenue and Irrigation and Power, accompanied by hired labourers from the towns, set about demolishing those villages which were to be flooded. Some 20,000 houses and huts were destroyed—leaving 100,000 people (21,000 families) homeless. The houses were either knocked down or dismantled by removing door frames, window frames and roofs. Demolition work on the huts was carried out with much vigour and zeal. Utensils and other belongings were thrown out on to the streets, cattle were let loose and entire families were unceremoniously driven out of their homes. The operation was carried out without any regard for the villagers, who were already in a state of shock. An old woman in Rolampad village reported that her ankle and the bone of her right hand were broken when she was dragged by the police from her hut. Not surprisingly, the villagers are still bitterly resentful of the behaviour of the authorities.

[Fact-finding Committee on the Srisailam Project 1986:258,259]

Often this forced relocation occurs without even settlement of compensation claims. In the case of the Hirakud Dam, to take an early instance, it is reported that only one-third of compensation claims had been disbursed and 11,341 arbitration cases were pending, when in March 1956 people were displaced without compensation, rendering them homeless as well as resourceless [Pattanaik, Das and Mishra 1987:56].

vii) Problems at Resettlement Sites

Resettlement sites are often inhospitable in a number of ways and their locations are selected without reference to availability of livelihood opportunities, or the preferences of displaced persons themselves.

For instance, contrary to official claims with regard to SSP oustees in Madhya Pradesh, in almost all the villages visited by a MARG research team, irrespective of the tehsil they belonged to, villagers reported that they had not been consulted about where they would like to be relocated; only where the surveyors were slightly more conscientious, they had asked the oustees if they would like to go to Gujarat. A number of villages remained unsurveyed. [Gangul Thukral 1989]. In Bargi, five ‘model villages’ were established at considerable cost, but because no cultivable land was made available and there were no livelihood prospects in the vicinity, . People migrated in droves, reducing the model
villages almost to ghost towns. Starvation deaths were alleged in the ‘model’ village of Gorakhpur [Roy 1999].

There is little attempt to recreate the lost milieu of the submerged villages, and many oustees feel lost in the semi-urban design and PWD-style construction of the new settlements, and pine for the forests and vast open spaces of the village. Sometimes even temporary shelters are unavailable, and since forced eviction often takes place only with the filling of the reservoirs, the first few months in the new site are spent in the monsoon rains under the open sky.

House-sites are often much smaller than those in which the oustees lived in the village, and temporary structures where they exist are made of tin or other inappropriate material and design. There is also the problem of learning modes of survival in an entirely alien surrounding, from ‘being self-sufficient and free, to being impoverished and yoked to the whims of a world you know nothing, nothing about’. [Roy 1999:21]. The writer goes on to describes poignantly the situation in a resettlement site Vadaj near Baroda for oustees of the Sardar Sarovar Project:

The man who was talking to me rocked his sick baby in his arms, clumps of flies gathered on its sleeping eyelids. Children collected around us, taking care not to burn their bare skin on the scorching tin walls of the shed they call a home. The man’s mind was far away from the troubles of his sick baby. He was making me a list of the fruit he used to pick in the forest. He counted forty-eight kinds. He told me that he didn’t think he or his children would ever be able to afford to eat any fruit again. Not unless he stole it. I asked him what was wrong with his baby. He said it would be better for the baby to die than to have to live like this. I asked what the baby’s mother thought about that. She didn’t reply. She just stared.

[Roy 1999:20–21]

In Hasdeo Bango and Bargi, even years after the relocation, basic facilities are not established in the resettlement sites. The locations themselves are sometimes small islands, perch on top of hilltops, surrounded by kilometres of reservoir waters. For many settlements at Hasdeo Bango, small perilous wooden boats are still the only uncertain modes of transportation. Earth roads are submerged six months in a year.

The Indian People’s Tribunal on Bargi deputed a retired judge of the Bombay High Court, Justice S.M. Daud, to enquire into the situation of oustees of the Bargi Dam. He reports:

The new homesteads situated at higher levels were in some cases reduced to the status of islands. One person… Lalaram, spoke of being forced to live with his family within two to three terrifying metres of swift flowing water. According to him fear was a constant companion for he never knew when the flowing water would submerge his home and carry away not only his meagre belongings but also members of his family. Lalaram had been given only 4.5 acres of land and had to feed nine mouths. Under the circumstances he was surprised, amused and upset at the question as to whether or not his starving children were receiving any education. In fact, he stated bitterly, children from several other homes who were studying in the high school also had to be withdrawn.

[Desai 1993:13–14]

Although the Hasdeo reservoir was built to support a network of super thermal power projects in Korba, the majority of the settlements of displaced families remain in darkness, with no prospect of electrification even decades ahead.
Similarly, health and education facilities are 'provided' merely by the creation of buildings for sub-health centres or schools. Health workers or teachers are not positioned, health centres are not provided with the requisite equipment and infrastructure, and in the end buildings crumble and begin to resemble ghost town structures.

In the Bargi resettlement colonies, several school-going children have been forced to use boats, or walk muddy paths, or give up going to school entirely [Dogra 1993].
Communities of oustees are often fragmented and randomly atomised, tearing asunder kinship and social networks and traditional support systems. The Gujarat government in settling displaced families of Sardar Sarovar has depended mainly on voluntary sale of agricultural land. Therefore, closely knit tribal communities have been dispersed into tens of villages in the unfamiliar Baroda region. Official reports confirm that displaced families from 19 affected villages in Gujarat have been resettled in over 150 locations, driven by open-market availability of agricultural land.

With the destruction of community and social bonds, the displaced are mired in anomic and a profound sense of loneliness and helplessness. The inflow of money creates greater pressure on family bonds. The outcomes are psychological pathologies and alcoholism, common among displaced populations. As one despairing oustee remarked to the Independent Review led by Morse: ‘Our society is not here. We are like dead people. What is the purpose of living like dead people?’ [Morse and Berger 1992]

It has been documented that this greatly enhanced psychological and psycho-social stress caused by involuntary resettlement heightens morbidity and morality.

There are other health risks as well. Sunil K. Roy (1987) in his paper on the Tehri Dam quotes Dr. Ramalingaswami, an expert on public health:

Water impoundments will increase favourable vector sites at times of the year when they were previously scanty. Water is essential for the development of mosquitoes. They transit a number of tropical diseases. A majority holds that ‘real economic returns from water resource development projects may be seriously compromised by enhanced disease transmission of vector-borne diseases. The states of Punjab and Haryana have now become endemic for malaria on account of these factors, as also the Raichur district of Karnataka state after Tungabhadra damming and canal network development’.

[Roy 1987: 68]

viii) Multiple Displacement

Arguably the most culpable aspect of state-induced impoverishment of displaced populations is the phenomenon of multiple displacement. It has been documented, for instance, that as a direct result of the lack of co-ordination between the multiplicity of irrigation, thermal power and coal-mining agencies in Singrauli, most oustees have been displaced at least twice, and some three or four times in a matter of two or three decades and ‘with each displacement the villagers were progressively pauperised’ [Lokayan and Environmental Defence Fund 1987 quoted in Ganguly Thukral 1989].

The utter casualness with which oustees are sometimes subjected to multiple displacement is described in the Bargi Tribunal report:

The plots allocated to the oustees for construction of new homes were chosen in cavalier fashion by the authorities. This becomes apparent when one learns of the fact that their carefully re-established homes — such as they were — fell victim to submergence once more without the slightest hint of a warning from the engineers and planners of the dam. Traumatised once, the loss of their security for the second time was unimaginable. For this second displacement no compensation was paid, compounding several times over the original injustice of forcing them to occupy plots barely one-tenth the size of their original holdings. The villagers had no choice but to put up the money to rehouse themselves as they had no alternate shelter, or place to stock provisions and stores safe from the vagaries of weather.

[Desai 1993:13]
To impose the trauma of forced relocation on any population once is grave enough. To do it again and again merely because of casualness or slipshod advance planning or lack of coordination by engineers and project officials reflects bureaucratic insensitivity and callousness at its nadir.

ix) Failure to provide alternative livelihoods

In the wake of the reluctance to adopt and operationalise a land-for-land policy, the challenge for project authorities and state governments under pressure to rehabilitate the oustees has been to find sustainable non-land based livelihoods.

Even in non-crisis rural situations, most states have failed to foster successful self-employment strategies under programmes like the discredited IRDP. The chances of success amidst the multiple disabilities and `spirals of impoverishment' that involuntary resettlement imposes are even more remote.

The writer of this paper has witnessed how in the Hasdeo Bango Project of Madhya Pradesh, for instance, some four million rupees were spent on a poultry farm, for 12 beneficiaries who were given 100 birds each. It ran for a few months till the birds suddenly died of some illness, and the farm has since been closed, the buildings gradually reduced to ruins.

One major exception to the general rule of difficulty in finding suitable avenues for economic diversification of oustees into non-land based activities, is fisheries. Each of these projects creates large reservoirs, and the impounding of such large quantities of water creates tremendous potential for new livelihoods from freshwater fisheries. The experience in Hasdeo Bango, however, was that in the absence of scientific management, fish yield declined rapidly. The state government for many years did not recognise the reservoir as a valuable source for livelihood for the oustees and instead fishing rights were auctioned in the open market. Fishing contractors in cohorts with officials of the fisheries department, used brute force to block oustees from fishing in the reservoir, and the officials confiscated their boats and nets.

The experience in Bargi was similar, but with the facilitation of Medha Patkar of the Narmada Bachao Andolan and Dr. B.D. Sharma of the Bharat Jan Andolan, a people’s organisation ‘Bargi Bandh Visthapith Evem Prabhavti Sangh’ was formed. They organised civil disobedience by mass fishing and blockage of fishing auctions. Finally, the state government gave exclusive rights for fishing and sale to federations of cooperative fishing societies in Bargi in 1994 and subsequently the Hasdeo Bango and Tawa in 1997.

x) Problems of host communities

A frequently neglected, but extremely serious problem, is the unwillingness of host populations to accept resettled oustees in their midst. The problem is that rarely do there exist large unoccupied areas available for resettlement of oustees (and such as exist are unsuitable or degraded lands). Where they are settled amidst existing settlements, there is inevitably competition for scarce resources and jobs. There may also be social and cultural incompatibility. In most cases, the displaced people are at a disadvantage in these conflicts : because they are outsiders, because of their economic fragility and frequent social vulnerability. If such conflicts are not mitigated, the result can be distress sales by
resettled oustees, resulting *de facto* in one more forced resettlement on even more disadvantaged terms.\footnote{For an interesting discussion of the dynamics of resettlement, both economic and social (i.e. interaction with host communities) see Sah 1997.}
xi) Special vulnerabilities

The various problems associated with displacement are compounded several times over for oustees who are also otherwise specially vulnerable, variously by class, caste, gender or age.

We have already noted that at least 40 per cent, and in several projects a much higher proportion, of displaced persons are tribals (see Table 1)

<table>
<thead>
<tr>
<th>Name of Project*</th>
<th>State</th>
<th>Population facing displacement</th>
<th>Tribal people as percentage of displaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karjan</td>
<td>Gujarat</td>
<td>11,600</td>
<td>100</td>
</tr>
<tr>
<td>Sardar Sarovar</td>
<td>Gujarat</td>
<td>200,000</td>
<td>57.6</td>
</tr>
<tr>
<td>Maheshwar</td>
<td>M.P.</td>
<td>20,000</td>
<td>60</td>
</tr>
<tr>
<td>Bodhghat</td>
<td>M.P.</td>
<td>12,700</td>
<td>73.91</td>
</tr>
<tr>
<td>Icha</td>
<td>Bihar</td>
<td>30,800</td>
<td>80</td>
</tr>
<tr>
<td>Chandil</td>
<td>Bihar</td>
<td>37,600</td>
<td>87.92</td>
</tr>
<tr>
<td>Koel Karo</td>
<td>Bihar</td>
<td>66,000</td>
<td>88</td>
</tr>
<tr>
<td>Mahi Bajaj Sagar</td>
<td>Rajasthan</td>
<td>38,400</td>
<td>76.28</td>
</tr>
<tr>
<td>Polavaram</td>
<td>A.P.</td>
<td>150,000</td>
<td>52.90</td>
</tr>
<tr>
<td>Mathton &amp; Panchet</td>
<td>Bihar</td>
<td>93,874</td>
<td>56.46</td>
</tr>
<tr>
<td>Upper Indravati</td>
<td>Orissa</td>
<td>18,500</td>
<td>89.20</td>
</tr>
<tr>
<td>Pong</td>
<td>H.P.</td>
<td>80,000</td>
<td>56.25</td>
</tr>
<tr>
<td>Inchampalli</td>
<td>A.P. – Maharashtra</td>
<td>38,100</td>
<td>76.28</td>
</tr>
<tr>
<td>Tultuli</td>
<td>Maharashtra</td>
<td>13,600</td>
<td>51.61</td>
</tr>
<tr>
<td>Daman Ganga</td>
<td>Gujarat</td>
<td>8,700</td>
<td>48.70</td>
</tr>
<tr>
<td>Bhakra</td>
<td>H.P.</td>
<td>36,000</td>
<td>34.76</td>
</tr>
<tr>
<td>Masan Reservoir</td>
<td>Bihar</td>
<td>3,700</td>
<td>31.00</td>
</tr>
<tr>
<td>Ukai Reservoir</td>
<td>Gujarat</td>
<td>52,000</td>
<td>18.92</td>
</tr>
</tbody>
</table>

Source: Satyajit Singh, Taming the Waters, OUP, 1997, and Government figures.

Note: Projects are either under construction or have been planned.

Tribal people share the problems of other rural people but they are even more dependent on forests and common property resources, their documented legal rights on cultivable lands are even more tenuous, their ability to handle cash transactions in a market economy even more shaky, their skills for diversified livelihood not based on forests or land are even more rudimentary, and their ability to negotiate with state officials and courts even more weaker.

It is not surprising that fewer tribal oustees are able to access whatever facilities for rehabilitation are provided by project authorities compared to non-tribals. As Fernandes point out `studies have shown that in Maharashtra only 15.18 per cent of the 10,147 tribal families eligible were granted land, compared to 31.4 per cent of the non-tribals (Fernandez 1990: 36). The data from Orissa (Mahapatra 1992) and other states (Fernandes 1993) confirm this picture of fewer tribals than non-tribals being resettled or getting the benefits of the project' [Fernandes 1995:15–16].

The vast majority of tribal people displaced by big projects are thus pushed inexorably into a vortex of increasing assetlessness, unemployment, debt-bondage and hunger. Chakraborty (1986) reports a precipitous 40 per cent fall in the income of Srisailam respondents, the large majority of whom were
tribals, as compared to the pre-relocation period. Further ‘the respondents’ debt burden was found to have increased manifold in the post-relocation period; a sizeable part of cash compensation was reportedly used towards redeeming debts which further constrained investment into production assets and aspects required for agriculture’ [Chakraborty 1986:38].

Some studies have effectively documented also how women and children are disproportionately burdened by displacement. The payment of compensation in cash directly disempowers women, because typically women are much less able, within the family, to influence decisions related to how the money is to be spent. Parasuraman (1999) documents the special vulnerabilities of women to displacement:

The case studies have one outcome in common. That is, any loss of access to traditional sources of livelihood — land, forest, sea, river, pasture, cattle or salt pan land — marginalizes women on the labour market. It is only when land and other sources are replaced that women at least partially regain their economic status.

Women not only suffered in terms of health and nutrition, they also lost the capacity to provide a secure future for their children. By resorting to seasonal migration they have unwittingly denied their children access to school, health care, child welfare, and other welfare services.

[Parasuraman 1999:226]

Mridula Singh (1992) documents how resettlement and rehabilitation policies are mostly blind to the rights of women.

The biggest shortcoming of all these policies [the rehabilitation policies of the State Government of Gujarat, Maharashtra, Madhya Pradesh and Uttar Pradesh with regard to the SSP and Tehri Projects] is that women are not recognised as a separate entity unit. A widow, unmarried adult daughter and a deserted woman will be considered as dependents. According to the definition of a family laid down in the policies, a widow is to be treated as a dependent to the head of the family. A widow’s right ceases to exist in the allotted land as the alternative land is allotted to the head of the family, i.e., her son. Only in 1990, did the Gujarat government decide to recognise women who were widowed after 1980. They will now be considered as separate units and will be entitled to separate packages. The other states have nothing to say on this issue.

Adult unmarried women are still not being given the same status as adult sons. A family with only an adult daughter will therefore receive only one package. The policy for the oustees from Maharashtra clearly states that an adult woman will not be entitled to any land. The Madhya Pradesh policy is silent on this front. Instances in which the adult daughter has lost her father and is dependent on her brothers just might be abandoned if none of her brothers is willing to support her.

The Uttar Pradesh policy is even more gender biased. If a couple holds property separately, they will be considered one unit and will receive one package. In this situation, a woman will have to forego her right to the package as it will be given to the head of the family: the man.

A deserted woman has not even been referred to in any of the state policies. Only through the court can she file for claim in the monetary compensation received by her husband. She will not be entitled to a separate package. A deserted woman with three children, who was to be displaced by the Tehri project, did move the court under the Amendment Act 1984, for claims in the compensation money received by her husband. There must be other deserted women in both these project-affected areas who have gone unnoticed.

[Singh 1992:15–16]

Another extremely vulnerable group of oustees is oustees without land, including landless agricultural workers. We have already observed that the only legal reparation to displaced persons recognised by
Indian statutes today is compensation for loss of assets that are compulsorily acquired by the state for what the state designates as a 'public purpose'. However a landless family dependent on the acquired land for their livelihood, may be most severely pauperised by the displacement because it loses its only source of economic survival. However, the law and most rehabilitation policies still do not recognise this profound vulnerability.

At the margins of any society are people like the destitutes, beggars, the uncared for aged, women victims of violence and abandonment, the disabled, leprosy patients, the mentally ill, and children deprived of adult care. In normal circumstances, rural society has traditional means of social security and support for some — but not all — of these groups. These support systems collapse in times of crisis, and people who are anyway condemned to the margins of society are likely to be the first to fall by the wayside.
PART II

OPPOSITION TO BIG DAMS: LESSONS FOR POLICY

You tell us to take land in Gujarat. You tell us to take compensation. For losing our lands, our fields, for the trees along our fields... But how are you going to compensate us for our forest? ... How will you compensate us for our river—for her fish, her water, for the vegetables that grow along her banks, for the joy of living beside her? What is the price of this?... Our gods, and the support of our kin what price do you put on that? Our adivasi life—what price do you put on that?

.... We have lived in the forest for generations. The forest is our moneylender and banker. In hard times we go to the forest. We build our houses from its wood. From its rushes and splints we weave screens. From the forests we make baskets and cots, ploughs and hoes, and many other useful things... We get various kinds of grasses; and when the grasses become dry in summer, we still get leaves... If there is a famine we survive by eating roots and tubers. When we fall sick, our medicine men bring us back to health by giving us leaves, roots, bark from the forest. We collect and sell gum, tendu leaves, bahera, chironji and mahua. The forest is like our mother; we have grown up in its lap. We know how to live by suckling at her breast. We know the name of each and every tree, shrub and herb; we know their uses. If we were made to live in a land without forests, then all this knowledge that we have cherished for generations will be useless and slowly we will forget it all.

... The river too is our sustenance. The Narmada has many kinds of fish in her belly. Fish is our stand-by when we have unexpected guests. The river brings us silt from upstream which is deposited on the banks so that we can grow maize and jowar in the winter, as well as many kinds of melons. Our children play on the river’s banks, swim and bathe there. Our cattle drink there throughout the year, for the river never dries up. In the belly of the river, we live contented lives. We have lived here for many generations; do we have a right to the mighty river and to our forests or don’t we?

... After the forests and the river, how can we live in the plains or in cities? You city people live in separate houses. You ignore each other’s joys and sadness.

We live with our clan, our relatives, our kin. All of us pool together our labour and build a house in a single day, weed our fields, and do any small task as it comes along. Who will come to lend a hand and make our work lighter in Gujarat?

...The land in Gujarat is not acceptable to us. Your compensation is not acceptable to us. We were born from the belly of the Narmada, and we are not afraid to die in her lap... In the summer before the monsoons, our village will be filled with water and we will drown.

We will drown but we will not move.

[Excerpts from a letter from Bava Mahalia of Jalsindhi village in Jhabua district to the Madhya Pradesh Chief Minister in 1994 ]

In this part of the paper, after briefly recounting the history of resistance to big dams in India, we will attempt to examine some of the major issues in the opposition to big dams related specifically to displacement, in order to derive lessons for policy. Opponents of big dams have challenged the model of development of which big dams are both a symbol and an integral component. They have

5 Quoted in Roy 1999
questioned the assumption that development necessarily entails displacement, and that decisions regarding displacement are essentially technical or managerial in nature. Instead they have affirmed the fundamentally political content of such decisions. Challenging the eminent domain of the state and its unfettered right to acquire private and community lands without consent, they seek to enforce upon state and project authorities a recognition of their central responsibility for just, humane, comprehensive and developmental rehabilitation so that those who are displaced and their offspring become not only sustainably better-off, but in fact become direct project beneficiaries.

**Resistance to Big Dams in India: A Brief History**

No survey of big dams in India would be complete without reference to the resistance put up by local people to such projects. In many projects, particularly the earlier ones, this resistance was sporadic, localised and disorganised, reflecting the spontaneous dissatisfaction and anger of those who were to be displaced. Increasingly in recent decades, such resistance has been more organised, sustained and has succeeded in building powerful alliances. In cumulative terms these struggles have had profound influence on the entire discourse of dams, displacement and development. An effective summary of the perspective of people’s movements on the issues of displacement, resettlement and development is given in a paper by activist Ravi Hemadri in Annexure1.

Even before Independence, there were instances of anti-dam struggles such as the one led by Senapati Bapat in opposition to the Mulshi hydroelectric project in the Western Ghats. The first large river valley project in India, Hirakud, resulted in widespread protests in 1946 after the initial notification. In one of the few instances of mainstream political parties playing a central role in active resistance to big dams, socialist leader Ram Manohar Lohia led a struggle against the Rihand project in 1963-64. However, such early protests could not be sustained, partly because of their failure to attract larger alliances, under the overwhelming influence of the nationalist rhetoric of nation-building that accompanied the construction of large dams in India.

The success of the mobilisation against the Silent Valley project, resulting in the decision to shelve the project in 1983, led to a new phase in the history of resistance to big dams in India. In this project, environmental consequences rather than displacement were the central focus. However, alliances between environmentalists, scientists and tribal rights activists succeeded in securing the withdrawal of not only the Silent Valley, but also the Bhopalpatnam, Inchampalli and Bodhghat projects proposed over the Godavari and Indrawati rivers. Other notable early struggles against big dams were local movements opposed to the Suvarnarekha, Koel Karo and Srisailam projects [CSE 1999].

The most celebrated protest movement against big dams so far has centered around the mega Sardar Sarovar Project on the river Narmada. This project, designed to irrigate 2 million hectares of agricultural land, is expected to displace as many as two hundred thousand people, the majority tribal, through reservoir submergence and canals. A number of protest groups gathered under the charismatic leadership of activist Medha Patkar and in 1988, local resistance organisations federated into a common platform known as the Narmada Bachao Andolan (Save the Narmada Movement). Resistance strategies borrowed from Gandhian satyagraha included non-cooperation and civil disobedience, refusal to cooperate with project authorities, blocking of all project-related work, and refusal to leave their villages. The movement derived strength and credibility also from extensive studies on social and environmental impacts of big dams.

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6 For an account of this opposition, see S.K. Pattanaik, B. Das and A. Mishra 1987.
7 See Dreze, Samson and Singh (eds.) (1997) ‘The Dam and the Nation’ for a wide-ranging look at the genesis of the project and the debate around it
8 For a thorough account of the struggle, see Parasuraman (1997) and Patel (1997) in the aforementioned volume.
One of India's most revered social workers, Baba Amte, left his work of 40 years among leprosy patients at Anandvan to join the struggle in 1989. His declared intention was to 'dam the flood of tears in the Narmada'. Activists and intellectuals from India and other parts of the world expressed active solidarity with the struggle. The World Bank, which was funding the project, in 1991 set up an independent review of the project led by Bradford Morse, which concluded that 'resettlement and rehabilitation of all those displaced by the project is not possible under the prevailing circumstances'. In 1993, the World Bank withdrew from the project and the Union Government for the first time sat on the negotiation table with the NBA. In 1995, the Supreme Court stayed the height of the dam until issues related to the resettlement of oustees were sorted out. In a major setback in 1999, the Court in an interim order has permitted construction on the dam wall to start again.

Although the best known, the NBA's is not the only struggle against big dams in India. Protest movements, for instance, have led to the withdrawal of the Rathong Chu project in Sikkim in 1997 and the Bedthi project in 1998. Determined protests have led to review of the rehabilitation package for Tehri, and the stalling of work on the Koel Karo project. Construction work in Bisalpur and Mansi-Wakal projects continues amidst organised protests, and work has commenced under police protection in the newest project over the Narmada at Maheshwar [CSE 1999].

A significant development has been the recent revival of struggles by people displaced by dams completed years ago, such as on the Bargi (completed 1990), Koyna (1964), Tawa (1975) and Mahi-Kadana (1978)[CSE 1999]. We have already noted the success in securing fishing rights for cooperative societies of oustees in the dam reservoirs at Bargi and Tawa.

It is important to assess the influence of these resistance movements, especially as it goes well beyond their local impact on specific projects and populations. The greater success of these movements has been the fact that they have given political voice to groups that were hitherto almost completely excluded from mainstream political processes. We have already observed that development and displacement are essentially political processes, reflecting the relative power of various groups involved. We have also noted that the appalling inequity of several of the decisions relating to these processes has been possible because of the political exclusion and resulting powerlessness of large populations.

It is this muffled silence of the populations dispossessed by big projects that protest movements have most significantly succeeded in breaking. They have succeeded in restoring their political voice and in ensuring their political significance in mainstream political processes. They have begun to challenge the mainstream discourse on development, and the assumptions about who must win and who must lose.

By ensuring that these voices are heard, these movements have succeeded in compelling governments, both central and state, and powerful funding agencies like the World Bank, to rethink their policies on displacement and rehabilitation. However, the political voice of those excluded in the past is still by no means as powerful as it should be—and as is warranted by their numbers and their need. But it would be safe to hypothesise that the strength of these movements will continue to contribute to the empowerment of these vulnerable groups, and the gradual—sometimes grudging—influence over state development policies in their favour.

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9 Roy (1999) provides a good account of the emotive content of this victory.
10 For a somewhat more critical look at the efforts of voluntary organizations see Mankodi (1989) in Fernandes, Walter and Enakshi Ganguly Thukral (eds.) 'Development, Displace(ment and Rehabilitation'. See also Dhaghamwar (!997) in 'The Dam and the Nation'.

This is a working paper of the World Commission on Dams. The report herein was prepared for the Commission as part of its information gathering activity. The views, conclusion, and recommendations are not intended to represent the views of the Commission.
In the remaining part of this section, we will examine some of the most powerful arguments that have been raised against big dams from the viewpoint of displaced people and their implications for policy.
Big Dams and the Model of Development

Opponents of big dams have argued that big dams are part of a development strategy that intrinsically impoverishes and disempowers the poor. The debate and struggles around big dams in India since independence in fact have been inextricably intertwined with largely irreconcilable ideological battlelines about the nature and impacts of state-induced development. A perspective on the ideology underlying big dams and the discourse of displacement is put forward in the paper by Vijay Kumar in Annexure 2.

In the years immediately after Independence, the overarching ideology of nation-building favoured a development model of accelerated economic growth through the agency of a mixed economy, combining centralised planning and command investment with capitalist free enterprise. Equity concerns were pushed to the backburner, and it was believed that growth would itself take care of poverty and unemployment, hunger and inequality.

Mega-projects like big dams, towering steel and power plants, mines and ports, symbolised breaking the colonial chains of underdevelopment. Dam-building was considered synonymous with nation-building and the ascendance of humanity over nature. When Nehru, India’s first Prime Minister, described big dams as the secular temples of modern India, while inaugurating the Nagarjunasagar Dam in Andhra Pradesh, his optimism and reverence resonated in vocal sections of the population.

However from the start this model of development was challenged by ideological sceptics, which also included followers of Gandhi. Although their voices were in the beginning muted amidst the nationalist rhetoric and charisma of mega-projects, this alternative view questioned a model of development that equated development merely with increased production of goods and services. It demanded that the human, social, equity and environmental impacts of such ‘development’ interventions be carefully assessed. It was based on the conviction that much more important than merely how much was produced were questions about what was produced, how was it produced, at what costs and for whom.

Apart from the displacement implications of big dams, opponents of big dams have identified several other grave adverse social consequences for disadvantaged people which are inherent in a development strategy predicated on large-scale technological intervention. For instance, Smitu Kothari points out that

The dominant patterns of economic development continue to depend quite heavily on the intensive and extensive utilisation of natural resources. For communities who depend on these resources as the primary source of their livelihood, the extractive processes play havoc usually setting into motion a dynamic that forces them onto increasingly fragile lands. Despite growing evidence from all over the country, a host of environmental problems remain unacknowledged. For instance this concentration of large numbers of people on increasingly fragile ecosystems most often lead to further unsustainability of resources. All this leads to increasing economic marginalisation and cultural insecurity which compel most of the displaced to seek desperate means of survival cultivating increasingly fragile lands, migration, bondage, contract crime, even prostitution.

Manab Chakraborty documents how large dams and introduction of irrigation accentuate existing social inequalities:
—irrigation improvement creates appropriate conditions for agricultural intensification through the use of HYVs [High Yielding Varieties] and other modern inputs
— the large farmer is often in a better position to use the new opportunities. The difference between large and small farmer rapidly increases.
— because of higher productivity, the landlords find it profitable to cultivate directly with the help of hired farm labour and / or machinery
— tenancy rentals are further raised or dispensed with. Tenants turn into landless labourers. The net outcome is strengthening of economic power of the rich peasantry.
[Chakraborty 1986:14]

Whether irrigation is in fact a force that tends to deepen inequalities is a much-debated proposition among economists particularly in the context of the Green Revolution. Some economists have argued that structural biases in access to irrigation water and drainage undermine the much-vaunted scale-neutrality of HYV technologies [for instance, see Sivaraman 1973]. Empirical evidence from the Tawa and Hirakud bears out this picture. In Hirakud’s command area, some 64 per cent of the holdings are less than hectare but these receive only 24 per cent of irrigation benefits. Holdings above 4 hectares, some 13 per cent of the total, get 47 per cent of irrigation benefits. In Tawa, the 15 per cent of command area covered by holdings of more than 10 hectares gets half the irrigation [Dogra 1992].

Hirsch (1987) points that the politics of large dams goes beyond centralising water-management, to promoting the centralised state at the expense of local and non-state interests11.

Apart from centralising water management, large dams are important political instruments in a number of other ways. The accessibility of previously isolated areas afforded by roads made necessary for construction of the dam, and to a lesser extent by the reservoir, gives State authorities for construction of the dam, and to a lesser extent by the reservoir, enhanced control over peripheral populations. Resettlement of scattered populations gives a high degree of control by the State resettlement authorities over every aspect of the lives of those affected. The agriculture served by new irrigation schemes follows the Green Revolution mode, and as such relies on centralized technology, inputs and knowledge systems.
[Hirsch 1987:14]

The Inevitability and Technical Neutrality of Displacement

The opponents to big dams in India have also challenged the dominant orthodoxy that development, especially state-induced development, by necessity entails the human costs of displacement or involuntary resettlement. This view is enunciated repeatedly in a variety of ways, but we will quote here the example of SC Verma (then Chairperson of the Narmada Valley Development Agency, now a Member of Parliament):

No trauma could be more painful for a family than to get uprooted from a place where it has lived for generations and to move to a place where it may be a total stranger. And nothing could be more irksome than being asked to switch over to an avocation which the family has not practised before. Yet the uprooting has to be done. Because the land occupied by the family is required for a development project which holds promise of progress and prosperity for the country and the people in general. The family getting displaced thus makes a sacrifice for the sake of the community. It

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11 A lively and insightful discussion on the relation between irrigation systems and political power, particularly in pre-colonial India and the very important issue of alternatives to the 'big dam' model of irrigation and development, see ‘Dying Wisdom’ (CSE 1997).
undergoes hardship and distress and faces an uncertain future so that others may live in happiness and be economically better off.
[quoted in Alvares and Billorey 1988:18]

A fundamental presumption underlying the belief in the inevitability of displacement is that the location of any large irrigation project, with the consequent distribution of benefits and displacement costs, is a purely technical outcome of factors relating to topography and the hydrological potential of the range of possible locations. However, we have already noted the fact that displacement has affected tribal people far more than other sections of the population.12

The disproportionately high burden of displacement that is carried on the shoulders of the socially and economically most vulnerable sections of rural Indian society, suggests that development and displacement are in fact not merely technical, politically neutral decisions, but instead reflect the power of economically, socially and politically strong groups and regions to impose sacrifices on the weak. As Kothari (1996) puts it:

The issue of displacement and resettlement has to be viewed within the broader question of distribution of power. Despite constitutional mandates and an emphasis on favouring the underprivileged, in an overwhelming number of cases, national and regional (and increasingly global) interests — the primary beneficiaries of the developmental process — transgress on or violate the interests of politically and economically weaker groups and individuals… This question is therefore essentially linked to democratising the planning process itself and integrally involving the historically underprivileged and disempowered in decisions that so crucially affect their lives, livelihoods and lifestyles.
[Kothari 1996:1476]

With the debunking of theories positing the technical neutrality of decision-making regarding development and displacement, and the recognition of the essentially political character of such decision-making, our initial question viz., whether displacement is an inevitable consequence of induced development, remains.

Cernea (1996) recognises that ‘certain national or regional interests cut across the interests of smaller groups and … individuals. The former interests usually prevail, especially when confronting poor and politically weak population segments.’[Cernea 1996:191] However, he feels that:

Development can never be completely free of such contradictions and conflicts, and population displacement imposed by more broadly based interests is only one case in point. Recognizing that some degree of displacement cannot be avoided during development does not mean, however, that induced development should accept it as a God-given tragedy worthy of little more than a compassionate shrug of the shoulders.
[Cernea 1996:191]

The implications for policy of such a view is that displacement should be minimised, but where it is unavoidable, the trauma of its impact must be mitigated. This position is also challenged by opponents

12 As the Twenty-ninth Report of the Commissioner of Scheduled Castes and Tribes (1987) establishes, whereas tribal people constitute 7.5 per cent of the population in India, more than 40 per cent of those displaced by big dams are tribals. If the socially discriminated scheduled castes are also included, the figure would be around 60 per cent. Other estimates for the proportion of tribals displaced, such as Fernandes (‘Power and Powerlessness : Development Projects and Displacement of Tribals’ Social Act 41, 1991) place the figure even higher at 59 per cent. The Central Water Commission’s 1990 Register of Large Dams estimates that 60 per cent of large dams are located in tribal regions, which would inevitably imply even higher proportions of displaced tribals.
of big dams on the ground that even if some displacement, in the limited sense of change in land-use, is indeed inevitable with development, it still does not follow that involuntary displacement is also always inevitable. The latter presumption hinges on concepts relating to the ’eminent domain’ of the state and ’public purpose’. We shall examine these issues in the next sub-section.

Eminent Domain and ’Public Purpose’

A third important issue in the debate around big dams in India is the question of whether the state should retain the power to compulsorily acquire private land for development projects without the consent of the owner or owners of such land.13

The only prevailing law relating to involuntary displacement with an all-India coverage remains the colonial Land Acquisition Act of 1894 (LAA). Other such laws, but without direct relevance to big dams, include the Coal Bearing Areas (Acquisition and Development) Act 1957, the Forest Act 1927 and the Army Manoeuvres and Practice Act 1938.

The most important principle underlying the LAA and related acts is the doctrine of eminent domain, according to which the state enjoys ultimate power over all land within its territory. It follows that the state has the right to invoke this right for the ’public good’, and the consequent compulsory acquisition of land cannot be legally challenged or resisted by any person or community.

What constitutes ’public purpose’ is deliberately left open in the law, and the power to determine its definition rests essentially with the state. It is significant that subsequent amendments to the LAA, and the new draft of the Land Acquisition (Amendment) Bill 1998, currently under consideration by the Government of India, do not undermine either the eminent domain of the state nor the unassailable power of the state to determine what constitutes in any specific instance a ’public purpose’.

The power of eminent domain conflicts most obviously with Constitutional imperatives contained in Part XVI of the Constitution of India, designed to protect Scheduled Tribes. Most state legislatures have passed elaborate statutes to protect tribal land owners from alienation of their lands, but paradoxically no protection is extended to tribals for loss of lands to the single most important source of their expropriation, namely the state itself.

On the contrary, Usha Ramanathan (1995) describes the absurdity of the conversion of a protective provision into a disability, witnessed in a decision of the Andhra Pradesh High Court. (Special Thasildar vs.Posayya etc. 1994).

Concerned with a case of enhanced compensation where land had been acquired from tribals in the process of constructing an earthen dam for Jalleru and Yerrakaluva reservoirs, the court used invented a logic for lowering the compensation. It sought to apply one of the standards used in the computation of compensation which requires consideration of what a willing purchaser will pay a willing seller.

’It must be borne in mind that the lands are situated in an agency area where the alienation of the lands is prohibited to any outsider except to a Scheduled Tribe by virtue of A.P. Scheduled Area Land Transfer Regulation, 1959’, the Court said.’ Therefore what is the capacity of a Scheduled Tribe willing to purchase the property will have to be taken into consideration and not with reference to the capacity or willingness of a plainsman. Scheduled Tribes may not have the capacity and may not be

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willing to pay so much of amount for purchasing the lands and there is no demand for the land from the tribal'.

[Ramanathan 1995:45]

In general, courts in India have endorsed the doctrine of eminent domain. For instance, the Supreme Court in a ruling in 1994 (quoted by Usha Ramanathan) held:

The power to acquire private property for public use is an attribute of sovereignty and is essential to the existence of a government. The power of eminent domain was recognised on the principle that the sovereign state can always acquire the property of a citizen for public good, without the owner's consent... The right to acquire an interest in land compulsorily has assumed increasing importance as a result of requirement of such land more and more everyday, for different public purposes and to implement the promises made by the framers of the Constitution to the people of India. [Ram Chand v. Union of India (1994)].

[Ramanathan 1995:53-54]

However, such unbridled power of the state, both to unilaterally determine what constitutes the 'public good' and to compulsorily appropriate private and community lands for such alleged 'good' has been challenged by people's movements as intolerably undemocratic and inegalitarian. They argue that it is incongruous that a colonial law, designed to promote colonial interests, has been retained in what is claimed to be a democratic welfare state.

One body of opinion calls for the complete elimination of the power of the State for compulsory acquisition. However, the belief that all displacement should be consensual also is not without its problems, because it can be used to justify the full play of unbridled market forces and the retreat of the state, even in its responsibility for equity-promoting interventions. The state must continue to be held responsible and accountable, for instance, for land reforms, health, education, shelter and livelihood security of the poor, and each of these can on occasion require the compulsory acquisition of land.

One answer that has been suggested is that for commercial and profit-making activities, consensual displacement based on free negotiation with those in occupation and dependent for their livelihoods on the land in question, should become the rule. However, such negotiations between economically powerful corporations and relatively powerless and unorganised small land-owners allowing the free play of the market also has obvious attendant dangers. Moreover those without legal rights on land would not be involved in the negotiations at all. Therefore, although compulsory acquisition may be debarred in such cases, but state regulation to ensure the equity of the negotiations would continue.

'Public purpose' must be defined without ambiguity and in a limited sense. The burden of proof must be on the state to establish the public good involved in any proposed acquisition, and this must be judicable.

A draft Land Acquisition, Rehabilitation and Resettlement Bill, 1999 prepared after a series of consultations with people's movements, academics and NGOs is a step in this direction. It proposes that 'public purpose' should include such purposes by which the Government intends to bring into effect the Directive Principles of State Policy of the Constitution of India. The Directive Principles of State Policy are an unimpeachable listing, as part of the Constitution, of responsibilities of the state,

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chiefly related to social equity. Further, the draft proposes that land acquired for individuals or companies producing or offering goods or services for profit shall not be considered a public purpose. However, it is silent about the need for the state to regulate such negotiations to ensure equity. Therefore the purpose of the suggested amendment is that when acquisition is sought to be resorted to by state, the burden of proof must be on the state to prove that it is for a purpose related to social equity.

The Responsibility of the State for Successful Rehabilitation

The next issue in the debate is the nature and extent of state responsibility for the rehabilitation of the displaced. The state in India has been reluctant to admit responsibility beyond the payment of compensation as determined by law. It is significant that whereas the statute books arm the state with what many perceive to be draconian powers of compulsory land acquisition, there is still no national law — not even a national policy — for ensuring that rehabilitation is an enforceable right of persons affected. The preferred way has been instead to allow the concerned state governments and funding institutions to work out policies specific to each project.

It is chiefly under the impact of people’s movements, supported by painstaking empirical social science research, that the state has in recent times acknowledged that its responsibility for rehabilitation extends beyond the payment of market value for compulsorily acquired assets. However, the state in India has continued to resist the laying down of the nature of its precise responsibilities for rehabilitation in the form of even a comprehensive policy statement, let alone legislating the right to rehabilitation as a legally enforceable right. The infirmity of political will underlines the importance not merely of a policy, but of legal and institutional mechanisms for its enforcement.

For their part, most state governments either do not have comprehensive rehabilitation policies or legislation, or where these do exist in whatever form, the governments themselves are observed to have directly or tacitly blocked their implementation. The state governments of Madhya Pradesh and Maharashtra, for instance, have passed laudable laws that provide for acquisition of land in the command area of big dams for rehabilitation of oustees, but these are only enabling provisions and the state governments have chosen not to exercise these powers for any project. The Karnataka legislature adopted a bill on resettlement, but the state government has blocked its implementation by failing to fulfil the formality of putting it up to the State Governor for his formal assent. Most state governments rely not on law or universal policies, but instead on ad hoc administrative instructions, in conformity with the bureaucratic preference for what is described as a ‘case-by-case approach’.

Among people’s movements and in the academic literature, however there is wide consensus about the responsibilities of the state. There are many theoretical models that seek to define the precise contours of the responsibility of the state, and what constitutes ‘just rehabilitation’. The two most influential theoretical models (which have not been developed specifically in the context of India but are widely applicable) are those of Scudder and Cernea.

Scudder states that the goal of dam-induced resettlement should be that both the resettled and host populations become project beneficiaries. This means that ‘the income and living standards of the large majority must improve to the extent that such improvement is obvious both to themselves and to external evaluators’ [Scudder 1997:47].

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16 A comprehensive introduction to and review of rehabilitation policy and law in India is to be found in Walter Fernandes and Vijay Paranjpye (eds.) (1997) ‘Rehabilitation Policy and Law in India : A Right to Livelihood’.

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To achieve this objective, he suggests reliance on his four-stage model. ‘Briefly, the four stages are characterised by planning; efforts by the resettlers to cope and to adapt following removal; economic development and community formation within resettlement areas; and handing over and incorporation’. According to him, the responsibility for successful resettlement is not a one-shot affair—‘at minimum, it should be implemented as a two-generation process’ [Scudder 1997:48].

Cernea (1998) proposes a ‘risks and reconstruction’ model of rehabilitation. He believes that ‘targeted measures — economic, technical, legal and cultural — must be undertaken to orient from the outset the planning of resettlement towards the reconstruction of livelihood, so as to prevent impoverishment’.

When the state takes up a project entailing displacement, ‘the people who will be displaced are subjected to huge risks, typically without their knowledge, participation or consent’ [Cernea 1998:43–44]. He identifies the risks as follows: ‘landlessness; joblessness; homelessness; marginalization; increased morbidity and mortality; food insecurity; loss of access to common property and services; and community disarticulation’ [Cernea 1998:47].

His hypothesis is that the state can reverse the risks by the following reconstructive actions:

- from landlessness to land-based resettlement;
- from joblessness to re-employment;
- from food insecurity to safe nutrition;
- from homelessness to house reconstruction;
- from increased morbidity to better health care;
- from social disarticulation, marginalization and deprivation of common assets, to community reconstruction and social inclusion.

Against this background, Cernea defines clearly the role of the state for rehabilitation:

The state assumes a responsibility when it forces people to relocate and it has a responsibility for not leaving them impoverished. For the state, the recovery of resettlers’ livelihoods is first a matter of political will and financial resources. Resource allocation is a political matter, not just an economic one. My simple argument holds that, because government agencies employ the weight of the state and the force of the law to impose expropriation and displacement, it is incumbent upon the same government to also enable those displaced to get back on their feet and benefit from the development for the sake of which they are displaced.

What these models require are precise policy guidelines and legal and institutional mechanisms required to secure the goals of just rehabilitation such as sustainable livelihoods and an equitable sharing of project benefits.

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PART III

DISPLACEMENT AND REHABILITATION: SUGGESTED DIRECTIONS FOR POLICY

The Bargi dam forced us to flee our lands. We received a little compensation, like alms to a Brahmin. In search for work, taking each other’s help, we came to Jabalpur city. For some days, we worked with brick and mortar, then I pushed a hand-cart, and we worked as wage labourers. We knew how to cycle, and learnt to pull a rickshaw. In this way we learnt to eke out a living...

As the waters filled our village, we had to flee. We stubbornly braved the waters until the end. But when our children began to drown, and the waters entered our houses, then we had to run away. Understand this, it was the waters that forced us in the end to move away from our homes...

In our own land we were king. In this city of strangers, we are dogs. We can never find happiness here. We will die speaking of our woes, but none will listen. Anyone here gives me a shove, says—push this handcart, and I will give you two rupees. What does he know or care where we are from, what we were, what did we do? Today we are people of the streets, of no value, Sahib, no respect...

[Viran, an oustees of the Bargi Project, now a slum-dweller in the city of Jabalpur Speaking in the documentary film Kaise Jeebo Re (How do I Live, My friend)]

The preceding parts of this paper attempted to summarise the major issues in the debate and struggles around big dams in India and the principal problems experienced by displaced people as the direct result of state policies for displacement and rehabilitation. In this part we will attempt to analyse and suggest, in the context of the Indian experience, some possible policy directions for dealing with displacement and rehabilitation.

We will argue that it is not enough to speak of a policy for resettlement and rehabilitation. There must be a comprehensive policy on displacement and rehabilitation, of which the cornerstone must be a commitment to avoid or minimise displacement. For this, ‘public purpose’ and official claims that less displacing alternatives are not available must be justiciable, a regime of transparency and right to information must be in place and human and social costs must be genuinely incorporated in assessing the benefit-cost ratio of any project.

We will attempt to establish benchmarks for a just and humane policy for compensation, resettlement, and rehabilitation, in cases where displacement occurs. The goal of such policy must be to facilitate affected populations to directly and sustainably benefit from the project. Such a rehabilitation package must be negotiated with affected populations to constitute a legally enforceable right. Detailed planning for rehabilitation must be integrated into project planning, and phasing must be tailored to the interest of the oustees rather than construction schedules. Populations whether affected directly or indirectly must be eligible and compensation must enable replacement of lost livelihoods, shelter and assets. Land-for-land must be the cornerstone of the rehabilitation policy, based on compulsory acquisition from larger holdings in the command area. Important non-land based assistance could include exclusive fishing rights in the new reservoir. Physical relocation, where unavoidable, must be in resettled communities at sites and habitats selected by the resettlers with
the consent of host communities, and basic facilities must be assured in advance. The policy must contain special measures for most vulnerable groups and people.

In separate sections relating to displacement, compensation, relation and rehabilitation, we will examine alternatives and propose what we regard as the most satisfactory arrangements. We will look not only at principles of policy and packages, but even more importantly at processes and mechanisms of enforceability, because experiences such as with the utterly inadequate implementation of the relatively progressive package of the Gujarat government for SSP oustees underline the gap between promise and delivery and the need for effective delivery mechanisms.

In attempting to suggest directions for policy regarding displacement and rehabilitation in India, we will examine among others the Draft National Policy, Packages and Guidelines for Resettlement and Rehabilitation, 1998 (NRR 1998). Various draft policies have been under preparation by the Government of India since the mid-1980s, but none ultimately saw the light of day. The latest draft NRR 1998 was prepared and widely debated by the Government of India, including with people’s movements, though it is reportedly still stalled at the level of the cabinet. The draft NRR 1998 is still used in this paper as a benchmark, because it constitutes the most comprehensive official draft policy so far, and its preparation involved wide consultations including with people’s movements and social scientists. But it is important to bear in mind that it has not received official sanction so far, and the prospect of this happening in the near future remains uncertain, even remote.

Since the World Bank has funded a significant proportion of mega-dams in India, and therefore has considerable influence on official policy, we shall also look closely at relevant clauses of the 1998 World Bank policy. There are a number of drafts prepared by people’s organisations and social scientists. Based on these, and our own assessment of the problem with various policies, proposed and implemented, we shall make recommendations for policy and law.

DISPLACEMENT

We have observed at some length how the construction of large dams raises fundamental questions of equity, fairness, justice and equality before law, in the matter of distribution of benefits and burdens. The deprivation suffered by displaced people raises vital issues of constitutional norms and human rights, including the right to survival, and the basic right to live with dignity. The plight of uprooted tribals, systematically pauperised in their search for work and livelihood so that ‘the nation’ may thrive and progress is particularly ironical in the light of special constitutional guarantees to protect Scheduled Tribes. We have also observed that decision-making about ‘development’ is not exclusively, or even primarily, technical or managerial in nature, but essentially political, reflecting power to impose costs on some groups and to benefit others.

Seen in this light, it becomes clear that the objectives of any just and equitable law and policy dealing with the colossal social and human impacts of big dams, cannot be limited only to minimising the trauma of displacement, and ensuring the just resettlement of the victims of displacement. It must incorporate the objective to end, or severely curtail, displacement itself, to no longer accept state-induced involuntary resettlement as an inevitable cost of all development projects. It must enable people to effectively challenge as equal partners, a form of development which takes for granted the inevitability of displacement.

The NRR 1998 considered by the Government of India, states as its initial objectives:

To minimise displacement and to prevent state-induced impoverishment of people on account of compulsory acquisition of land for the State, semi-government or private interests, leading to loss of
livelihood and shelter, and to search for non-displacing or least displacing alternatives to people displacing projects.
[NRR 1998:125]

Likewise, the first overall objective of the World Bank’s policy on involuntary resettlement is stated to be that ‘involuntary resettlement should be avoided, where feasible, or minimised, exploring all viable alternative project designs’. It lays down that in financing projects, the Bank should satisfy itself that

the borrower has explored all viable alternative project designs to avoid the need for involuntary resettlement and, when it cannot be avoided, to minimise the scale and impacts of resettlement (for example, it is pointed out that realignment of roads or reduction in dam height may reduce resettlement needs).

It is possible to state this principle even more categorically, that forced relocation must be avoided, except in very exceptional circumstances. In such cases, all necessary measures must be taken to minimise the scale and impact of displacement.

However, the problem is not so much the statement of principle, however enunciated. The principle itself, from the viewpoint of developmental equity, is no doubt a massive step forward from the position that has actually informed decision-making regarding development investment so far, both by the Government of India and the Bank. The principle is in conformity also with the resolution in the Programme of Action adopted by the World Summit for Social Development in Copenhagen in 1995, which advocated ‘wherever possible, development schemes that do not displace local populations[must be preferred], and [emphasis must be placed on] designing an appropriate policy and legal framework to compensate the displaced for their losses, to help them to re-establish their livelihoods and to promote their recovery from social and cultural disruption’ [quoted in Oxfam 1997:19].

The problem is with the legal policy and institutional mechanisms to enforce the principle. In the absence of reliable enforcement mechanisms, it is likely that the avoidance of displacement would remain a pious statement of intent, whereas project authorities, governments and funding agencies would continue in practice to make development related decisions for investment in projects entailing large-scale displacement of populations.

The challenge before law and policy makers to establish such mechanisms is probably the most difficult in the whole gamut of policy challenges regarding big dams. We do not claim to have all the answers, but some suggestions are given below:

**Justiciability of ‘public purpose’**

The only ‘public purpose’ that should be recognised by the law should be a purpose that has a clear and direct linkage to promoting the objectives enshrined in the Directive Principles of State Policy of the Indian Constitution, and should exclude any activity which related to the creation of profit18. It must be incumbent upon government to justify the public purpose of the proposed project, by publishing for public dissemination, the following information:

- How far does it lead to the optimum utilisation of existing resources, keeping in mind the priority needs of the common people, especially the disadvantaged and dependent sections?

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18 See also discussion in part II

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- How does it alter the existing distribution, use, access and control over the natural resources in question? In whose favour and in accordance with what principles of equity and distributive justice, and at whose costs, is such a change made? In other words, who are the beneficiaries and who are the victims of the development project?
- What is the total impact of the project upon life, society and the ecosystems within which these survive.


It should be legally permissible for not only persons to be affected by the project, but also any other person or group, to challenge this claim of 'public purpose' of the project. This would be in conformity with the principle established in the context of public interest litigation in India, that in issues involving concerns of social justice one does not need to establish that one is directly affected to have recourse to legal remedies.

**Establishing that this is the ‘least-displacing’ alternative**

It is also incumbent upon the government before the launching of the project to justify that in the light of various technical and locational options, this is the least displacing alternative available. This claim should also be justiciable.

For example, small reductions in height of a large dam may dramatically reduce displacement, with a proportionately much smaller fall in benefits. But going much further, maybe a network of small and micro-minor division schemes and earthen bunds, within a overall paradigm of integrated watershed development, may result in far less displacement and a far more equitable sharing of benefits by small farmers engaged in dryland agriculture\(^{19}\).

The literature now recognises the pervasiveness of ‘engineering biases’ that block the exploration of technically and economically viable alternatives to reduce displacement. Apart from involving the people in the debate, the obligation on the state to justify its choices in the light of other technical and locational choices available, may itself be expected to reduce the ‘engineering’ biases’ that push for greater displacement.

**Right to information**

The right of populations that may be affected by any proposed project, and all other concerned citizens or groups, to challenge claims regarding the necessity of displacement and public purpose of any project, is dependent critically on the right to information. As Ramanathan (1995) says:

> It is imperative that the population likely to be affected by the acquisition be involved in the process from the time that decisions are sought to be made about where a project is to be located. They should be given full information;
> - To help them participate in decisions about whether the stated purpose is a public purpose;
> - To explore options which may be less displacing;
> - To work out the costs it involves for them;
> - To find out how they may gain from the process of change that the acquisition will bring

[Ramanathan 1999:20–21]

\(^{19}\) This theme, viz. the need for integrated watershed development keeping in view socio-cultural and ecological considerations, has been echoed frequently particularly in the debate around the Tehri dam (see for instance, Dogra 1992). For other attempts to project alternatives to dams seem Shrivastava (1995) in H.M. Mathur (ed.) ‘The Resettlement of Project-Affected People’.

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There does exist in India burgeoning support for the movement for a statutory people’s right to information as an essential part of the fundamental rights of life, speech and expression. In the context of big dams, it would entail full access to all technical aspects of the project, including:

- the assessment of all costs and expected benefits; the assessment of the range of technical and locational options;
- reasons for selecting one alternative from the constellation of options;
- full details of communities and areas to be affected and the precise nature of impacts.

The right to information must extend to ‘all aspects of the project, including the detailed project report, financial plan, economic/financial viability studies, social impact-assessment and other studies, social cost-benefit analysis, environmental impact assessment, environment rehabilitation plans’ [NRR 1998], detailed resettlement and rehabilitation plans, and conditionalities of loan sanction for the project, where applicable.

It is not enough that all this information be available in public libraries, including in the district headquarters of all affected areas. An endeavour must also be made to demystify and translate it into non-technical local terminology, to actively distribute and explain it to the affected populations. Each project must provide for an information centre at the project site itself. Project and state authorities must be legally bound to consult with potentially affected people about all viable alternatives to avoid or minimise displacement.

**Right to be consulted**

Apart from the right to information of the individual, is the right of affected populations to be actively consulted in the event of any proposed land acquisition. As the NRR 1998 states:

It must be a compulsory obligation on the part of the project planning and implementation authorities to involve and consult the representatives of the affected communities, including women and members of disadvantaged groups, in all phases of planning, execution and monitoring of the RR (resettlement and rehabilitation) Plan. The entire decision making process regarding RR Plans must be completely transparent. The comprehensive plan for resettlement must be made public. It must be brought to the notice of the people likely to be affected through channels like the local language media, local exhibition, meetings, etc. It is important that the government and the project authority are under an obligation to take the information to the doorstep of the affected population so as to enable even non-literate persons in the most distant area to acquire full knowledge of the plan for their resettlement. It should be mandatory and enforceable that the project-affected people must be given the right to participate at this very stage so that they can bring their full weight to bear on the design and content of the plan.


Consultation with the Gram Sabha or the entire assembly of adult residents of a village is now a statutory imperative for all areas predominantly inhabited by tribal people, (known as Schedule V areas). This same legal requirement should be extended to Gram Sabhas in non-tribal areas.

All Gram Sabhas in which even one person is affected by a proposed project should be required to be consulted before acquisition proceedings are initiated, by the procedure prescribed as follows.

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20 Given the present ways of officialdom, it is likely that these requirements will remain mired in half-heartedness. The contribution of people’s groups and NGOs in this sphere cannot be underestimated and would, in fact, be useful to institutionalize.
Along with a request to commence acquisition proceedings under the LAA, the acquiring authority would have to prepare and submit to the District Collector, the following information:

- Full details of land proposed to be acquired along with khasra numbers and other details;
- Full details of land expected to be affected by the project but which is not being acquired;
- Purpose for which acquisition is proposed with full details including the specific use to which each segment of land is expected to be put to;
- Reasons why the quantity of land proposed to be acquired is necessary and justified in relation to the purpose of the project;
- Details of all options considered and reasons why the proposed acquisition is the least displacing alternative available
- Full details including plot numbers of land-for-land and resettlement sites, capacity building and employment and phasing of the rehabilitation plan in consonance with the national rehabilitation policy;
- Full details of social impacts including on host community in area of resettlement;
- Full time-table with details on phasing of resettlement and rehabilitation; and
- Full details of the expected environmental impacts—both short and long-term especially its impact on public health and on the forests, water, air and mineral resources.

The Collector, with the co-operation of the acquiring authority, will ensure that the information indicated in the previous paragraph is communicated in a manner fully accessible to affected individuals and the Gram Sabha, using a variety of methods such as: (a) publication in two local newspapers in the local language; (b) beat of drum; (c) pasting on the notice board of the Gram Panchayat; and (d) individual notices to all affected persons. The Collector would also be encouraged to elicit the help and cooperation of from the elected representatives, especially of the district, block and village Panchayats, and local NGOs in communicating this information.

Affected individuals and Gram Sabhas must be given at least 60 days after the date of such publication to submit their queries, requests for further information and objections. On a date duly publicised in advance, a Gram Sabha meeting must be organised in each affected Gram Sabha. All written requests for clarifications and further information must necessarily be met prior to this meeting. The Collector or a senior official deputed by the Collector and the acquiring authority would both necessarily attend this meeting. In the Gram Sabha meeting, the Collector and requiring authority would again present and elaborate on the information referred to above. All objections obtained in advance, as well as verbally during the consultation, must be dealt with one-by-one. The members of the Gram Sabha must be given the opportunity to explain the reasons for their objections and the requiring authority would be free to respond. In case of a consensus, this would be duly recorded. However, in case of a disagreement, the Collector would record a synopsis presenting the arguments of both sides and her or his decision in a Speaking Order. This Order would be appealable as with any other orders of the Collector.

After the maximum period for appeal against any such order of the Collector has lapsed and if no such appeal has been lodged, the Collector would be free to initiate land acquisition proceedings. However, in case of an appeal being filed, the Collector would await the decision of the appeal.

Even if urgency clauses for acquisition are invoked, it would continue to be mandatory that the consultation procedure defined above be followed.

[Mander 1999:28–29]

Social Cost-Benefit Analysis

Another institutional mechanism to limit displacement is to ensure that in the planning of any project the social and human costs are more accurately assessed and internalised in the cost-benefit analysis of the project. In practice, project engineers and administrators tend to exaggerate greatly the expected benefits of any project, whereas social and human social costs are severely downsized or
ignored. The many levels at which this distortion occurs is documented in Annexure 3 by Ashima Sood.

Part of the reason why displacement costs were never fully accounted for was that, except for land acquisition outlays they were in fact pure externalities under the LAA. In recent years however recognition of the principle that social costs should be fully internalised while assessing projects has begun to appear in government or Bank policy documents. How this principle may be operationalised is also discussed in Annexure 3.

COMPENSATION, RESETTLEMENT AND REHABILITATION

In the literature, there is considerable confusion, and some fuzziness, in the use of the terms ‘compensation’, ‘reparation’, ‘resettlement’ and ‘rehabilitation’. These are sometimes used interchangeably, but often different social scientists and policy documents use the terms with variations in emphasis and meaning. This confusion is serious not merely because of lack of academic precision, but because speaking of compensation interchangeably with rehabilitation can be used in effect to devalue the scope of rehabilitation.

In this paper, we shall understand ‘compensation’ as packages in cash or kind, for persons directly or indirectly adversely affected by developmental projects, as reparation for their acknowledged losses, not only of assets but also of livelihoods, common resources, shelter and habitat. We shall understand ‘resettlement’ as the packages and processes provided in new resettlement sites in addition to compensation, for those who are physically dislocated from their original habitations as a result of any developmental project. Finally, ‘rehabilitation’ may be seen as packages and processes provided in addition to those for compensation and resettlement, in order to ensure that persons affected by projects and their offspring are sustainably better off as a result of the project. The three concepts may be understood in terms of a series of concentric circles, in the sense that rehabilitation is inclusive of packages and processes for compensation and resettlement, but contains more.
The Goal of Rehabilitation

The NRR 1998 states as its goal the endeavour ‘to minimise the trauma of displacement on account of compulsory acquisition of land’, and to establish statutory minimum standards for packages and benefits to ensure that displaced persons are better off as the result of the project. The Bank policy states that ‘where displacement is unavoidable, resettlement programs should be conceived and executed as development programs, providing sufficient investment resources to give the persons displaced by the project the opportunity to share in project benefits’. It also mandates that the affected people should be ‘offered opportunities to participate in planning and implementing resettlement programs’; and that ‘displaced persons should be assisted in their efforts to improve their former production levels, income earning capacity and living standards, or at least to restore the production levels, income earning capacity and living standards they would have achieved in the without-project case’ (World Bank 1998:1).

The advantage of this formulation is that rehabilitation is not merely reduced to a set of palliative measures for welfare and relief; it is an integral component of the development project ensuring that all affected persons actually benefit, and are not pauperised by it. As pointed out in a thoughtful and constructive critique of Bank policy by Oxfam [Oxfam 1997] the formulation should be further strengthened to state that displaced persons should directly benefit from the project, in ways to which they consent. This stress on the paramount importance of the right of displaced persons to secure direct benefits of their choice from dam projects, is important, among other things, to safeguard their entitlement of land-for-land, to which we shall return later.
Legal and institutional mechanisms

Once again, the problem is not so much with the goals of developmental rehabilitation that we have enunciated, as with the legal and institutional mechanisms for the enforcement of these goals and their attendant packages. In other words, for a policy to bite, it must have teeth. In India, as we have noted, the only national law regarding displacement is the Land Acquisition Act of 1894 (LAA), which places no legal obligation on either the project authorities or the state, beyond a limited conception of adequate ‘compensation’. The goal of developmental rehabilitation, and the range of rehabilitation packages that we will outline below, could easily be reduced to pious intentions, except where to the extent that displaced persons are organised. The dismal story of the implementation of the Gujarat SSP package (See, for example Paranjpye 1990 and Parasuraman 1999) which, in terms of stated intent is considered more progressive than any other rehabilitation policy for big dams in India, shows the vast gap between precept and practice in implementation of rehabilitation packages for big dams. Given the power of ‘engineering biases’, the only real imperative exercising project authorities in most cases is only to remove human encumbrances from submergence and construction zones, and to blunt the edge of their resistance.

Clearly, developmental rehabilitation has any chance of becoming a reality only if it is backed by effective sanctions, of law and institutions. Firstly, the narrow definition of ‘compensation’ in the Land Acquisition Act needs to be expanded to incorporate elements of developmental rehabilitation, as enunciated in this paper. Further this definition must be in the nature of a legal and enforceable obligation on project authorities towards those negatively affected by the project in various ways, including host populations.

The content of the rehabilitation package must be negotiated with all categories of the affected populations, not only in the village community or Gram Sabha but also separately with collectives of each vulnerable category like the landless, artisans, women, tribals and dalits. They must be informed about their options and rights pertaining to resettlement; and consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives. The right to information and consultation, would apply also with regard to various stages of planning and implementation of the rehabilitation package, and participatory mechanisms for monitoring and evaluation. In fact, it is essential that both displaced and host populations participate in the design, planning, implementation, and monitoring and evaluation packages.

The package negotiated with affected individuals and Gram Sabhas must legally conform at least to the minimum standards prescribed in this paper, although project authorities, governments and lending agencies would be encouraged to exceed what is assured. Before land acquisition proceedings are initiated, it should be a legal requirement that a tripartite agreement in entered into between each of the affected heads of family and each Gram Sabha on the one hand, and the project authorities and state government on the other. It should be in the nature of a legally enforceable contract, which states clearly what, and in what time frame, the affected family and Gram Sabha are entitled to. Project authorities find it easier to deal with atomised families rather than communities, but insistence upon consultation, consent and agreement with Gram Sabhas and collectives of vulnerable groups, instead of just heads of families, is essential to preserve and build upon community support structures during resettlement and also to encourage political organisation for redressal of grievances.

The Government of India has established a fairly strong and independent mechanism to assess the environmental feasibility of all large projects, and no project can be commenced without an environmental clearance. It is long overdue that a parallel process be put into position for the
‘rehabilitation clearance’ of such large projects. This will ensure that detailed rehabilitation planning is integrated into the overall planning of the project, and that affected populations are extensively informed and consulted. The feasibility of the rehabilitation package should also be studied in advance before construction. This is all the more necessary to avoid cases like the SSP, with regard to which the Independent Commission headed by Morse concluded in 1992, almost a decade after construction commenced, that rehabilitation of the large affected populations was not possible, a conclusion also supported by independent social science research (Parasuraman 1999).21

Phasing of Rehabilitation

Not only must detailed rehabilitation plans be prepared before the project is assessed, but its implementation should be planned according to careful schedules, driven not by construction requirements but the needs and best interests of the affected and host populations.

In practice, in the phasing of rehabilitation and resettlement for irrigation projects in India, the pari passu or incremental approach has typically been followed, in that people have been resettled according to construction and submergence schedules. The government defended the incremental approach by stating that

in large irrigation projects, R&R process that continues over a long period of time has to be carried out in steps and not in one go. Lands under submergence cannot be kept frozen for the purpose of acquisition over years, to the detriment of the displaced. The entire process is a time stream of actions and has to be judged from how far the scheduled R&R targets are in keeping with the main physical works of the projects and how best they have been met with [Chitale 1992 quoted in Parasuraman, 1999:229–230]

The NRR 1998 seeks to distance itself from this approach by stating as follows:

The displacement of project affected persons (PAPs) must be handled through a phased programme with minimum hardship, and their resettlement must be treated as a part of the project itself. No developmental project can be justified if a section of society is pauperised by it, even less if these people to start with were socially and economically weak. If people are uprooted, alienated, and turned into destitutes, helpless and wandering in search of livelihood, then whatever principles of justice one may invoke or apply, the project must be seen to have failed. As such, the welfare and development of project affected persons is a precondition, an inseparable part of the project itself, not merely an unwanted appendage to be executed unwillingly. [NRR 1998:127]

The World Bank policy does not distance itself as clearly from what is today in the literature a largely discredited ‘incremental’ approach.

In projects where priorities are driven primarily by construction, actual practice is directed at vacating the submergence basin, rather than assisting displaced persons to be become project beneficiaries. The incremental approach becomes an excuse for ad hocism, a fig leaf for the lack of any genuine rehabilitation planning. As Oxfam (1997) points out

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21 The whole question of the implementability of the proposed rehabilitation packages implicit in a rehabilitation clearance introduces on element of realism into project appraisal. An interesting institutional twist to this debate is added by Dreze’s concept of voluntary bargaining (Dreze 1994)
in its review of the SSP, the Morse Report states that ‘the demands of engineering [seem to] carry far more weight in the Bank than the needs of the people to be affected or of the environment.’ The SSP did not prepare a relocation timetable at the outset which meant that seventy per cent of the affected population were supposed to move in one year - the last year of the project.  

[Oxfam 1997:19]

We have already noted the enormous and avoidable trauma of relocation timed close to submergence and how, in practice, relocation is forced to occur only months, sometimes weeks or days before actual submergence in most cases.

The policy of rehabilitation must contain safeguards for detailed advance planning for rehabilitation. Mere statement of principles, however lofty should not be acceptable without full details of the measures proposed to operationalise the principles. For instance, a policy like that of the Gujarat government for the SSP provides for a minimum of 2 hectares of irrigated land for various categories of displaced persons. What it does not contain, which is one main reason why it has not been operationalised is details of what its full requirement of land would be, where this land is located, and how it would be obtained, according to which time-schedule etc. Only such a detailed advance plan would enable the affected populations, state governments, funding institutions, and the people at large, to assess whether rehabilitation as suggested is feasible and acceptable. However, it was only after construction had reached an advanced stage did it become clear that the Gujarat government intended to acquire land for settlement only by ‘voluntary sales’, so that oustees from even the 19 affected villages of Gujarat had to be dispersed into 150 settlements. This was contrary to the principle of enabling communities to be resettled without being fractured. What is even more grave, the availability of land in the state of Gujarat for oustees from other states, including for the landless and adult members for each household as provided for in the policy, is highly unlikely if land is to be obtained only from voluntary sales.

Not only must detailed rehabilitation plans be prepared before the project is assessed, but implementation should also be planned according to careful schedules, driven not by construction requirements but the needs and best interests of the affected and host populations.

Eligibility for Compensation and Rehabilitation

The prevailing law in India (the Land Acquisition Act 1894) recognises only those with legal rights on land to be eligible for compensation. The Bank definition is wider, as follows:

Displaced persons in the following two groups are entitled to compensation for loss of land or other assets taken for project purposes:

- those who have formal legal rights to land or other assets (including customary and traditional rights recognized under the laws of the country); and
- those who do not have formal legal rights to land or other assets at the time of commencement of the census, or at the time of delineation and effective public disclosure of the area affected by the project, whichever is earlier, but have a claim to such legal rights – provided that such claims become recognized under the laws of the country through a process identified in the resettlement plan. Such rights could be derived from adverse possession, from continued possession of public lands without government action for eviction (that is, with the implicit leave of the government), or from customary and traditional law and usage etc. The absence of legal title to land or other assets is not, in itself, a bar to compensation for lost assets or other resettlement assistance.
- Displaced persons in these two groups are also entitled to in the Bank policy for compensation for loss of other assets, in particular, structures and crops, and other resettlement assistance.
A third group of displaced persons—those who are occupying land in violation of the laws of the country and who do not fall within the category described in (b) above—is not entitled to compensation for loss of land under this policy. However, they are entitled to resettlement assistance in lieu of compensation for land, as necessary to achieve the objectives set out in this policy, if they occupy the land prior to the date of the commencement of the census or prior to the delineation and public dissemination of information on the project area, whichever is earlier. All such displaced persons are entitled to compensation for loss of assets other than land, in particular, structures and crops.


A much wider and generally satisfactory definition of ‘project affected persons’ is in the NRR, 1998:

The definition of ‘project’ includes every activity, public, semi-public or private, which results in acquisition of land or displacement or disturbs the habitat and way of life of people. All persons whose source of livelihood, place of residence or other property is affected notwithstanding the legal status enjoyed by them in relation to the concerned location of the resource base for their livelihood and subsistence, shall be deemed to be project affected persons (PAPs). In particular they shall include:

- Persons interested in agricultural land as owners, subtenants, occupants with or without legal status.
- Persons dependent on public resources, such as cultivators of river-bed lands, fisher folk, cattle rearers, collectors of minor forest produce, occupants of forest, revenue, community, or common lands in the directly affected areas, newly established sanctuaries and such like, farmers and fisherfolk down stream of major reservoirs.
- Persons whose economy is dependent on the community and the people who face dislocation and displacement such as agricultural labourers, artisans, petty traders and groups providing a variety of services such a barbers, midwives, scavengers and the like.
- Persons living in habitations which are acquired or rendered non-viable and who may be having their houses or huts in the abadi or outside on private, common, community, revenue or forest lands, some houses, hamlets even communities may be rendered non-viable, say by getting encircled by water on all sides.


However, Scudder (1997) in addition suggests that host populations should be included in the improved social services and economic development opportunities intended for the resettlers. While such an approach will increase the financial costs of resettlement in the short run, in the long run it will enhance the possibility of multiplier effects as well as reduce the intensity of conflict. Unfortunately, such incorporation of the host population with resettlement programs is rare. [Scudder 1997:43]

Adverse downstream affects need also to be assessed, and included in any comprehensive rehabilitation plan.

In practice, most project authorities and government agencies tend to underestimate, sometimes precipitously, the numbers of persons displaced, directly and indirectly, by any project. This means that many victims of the project are not even acknowledged, let alone assisted, that the cost-benefit analysis of the project is deliberately skewed, and that the project design does not contain adequate provisions for the compensation and rehabilitation of all the persons who are displaced.

This also underlines the critical need for comprehensive, and independent, initial benchmark studies to establish the numbers and categories of those displaced. These benchmark studies should also
document the pre-project living standards of the various categories of displaced persons, so that the success of the guiding premise that affected populations should be better off as a result of the project, can be monitored and assessed. As the NRR 1998 suggests:

[The] benchmark survey should be carried out by a team, on which representatives of the displaced persons and NGOs should be compulsorily represented, and completed before the publication of notification under LAA for land acquisition, to collect the following information about each family.

- Human resource base of each family.
- Economic status of each individual member of the family.
- Ownership of property – movable and immovable.
- Deprivation of property including lands, structures, trees, houses either occupied or owned with tenancy rights or even as encroachers or those de-facto in possession.
- Deprivation of means of livelihood due to stagnation of developmental activities soon after the project, loss of property, loss of access to clientele, loss of jobs due to physical re-location, loss of gainful employment, loss of access to income generating resources.
- Deprivation of community life, community properties and resource base, community amenities and services, socio-cultural value.
- Loss of habitats and lands, degradation of land and water resources, environmental degradation, adverse impact on health etc. as an after effect of the project.

The purpose of this survey is to identify types of impact and accordingly categorise displaced persons, develop entitlements and prepare resettlement plan for each family. [NRR 1998:173–174]

**Principles for Assessment and Payment of Compensation**

We have already observed that the only statutory obligation in India for reparation for the impacts of displacement, is the payment of compensation to one category of displaced persons, namely individuals who lose legal rights over land and fixed assets. We have also noted that payments at recorded market value results in gross undervaluation, and that delays, leakages, overall land scarcity, escalating land prices, and the inexperience of the rural poor in handling cash transactions, result in the squandering of cash compensation. Only a small proportion of usually better off oustees are able to use the compensation to acquire land of equivalent scale and productivity. For houses and other immovable assets including wells and trees, payment at depreciated value rarely enables oustees to use the compensation to reconstruct houses and other lost assets of the type in which they were before displacement.

If the guiding principle of rehabilitation is that displaced persons should become better off than they were in the past, one proviso that needs to be firmly embedded in the law is that compensation must be paid not at market but at replacement value. There should be transparent and judiciable mechanisms to calculate the replacement value, and the date for calculation should not be the date of original notification, but instead the date on which the compensation was actually disbursed.

The second guiding principle for assessment and payment of compensation should be that it is not only the loss of assets but also, far more significantly, the loss of livelihoods that must be compensated. In this way, the loss of hundreds of acres of agricultural land by a family of absentee landlords would entail little obligation for rehabilitation beyond the payment of cash compensation. On the other hand, the loss of livelihood of extremely vulnerable landless workers, tenants and small encroachers, of ferry oarspersons displaced by the building of a bridge across a river, of tribal hunters and gatherers displaced by submergence of forests, of livestock-rearers displaced by submergence of traditional grazing lands, must entail a comprehensive responsibility to replace and rebuild sustainably the lost livelihood base.
This principle has far-reaching implications for landless agricultural workers and others dependent on agriculture but without land rights. That these most vulnerable groups are better off after relocation, cannot be ensured if they are expected to find work among resettled land-owners. The production base of the resettled farmers would be fragile, and there would be competition for farm employment with farm workers of the host community. If it is loss of livelihood and not loss of assets that is to be replaced, this can be secured by providing the landless minimum viable units of cultivable land.

A third guiding principle is that any displaced person must be fully compensated before displacement from land, house or livelihood is executed. In practical terms, it has been the experience that project authorities are far more willing to assist and negotiate with displaced persons before they are displaced, than after they have physically vacated the required land. The rehabilitation plan must provide for full disbursement of compensation at least one year prior to any physical dislocation.

A fourth guiding principle is that except for absentee landlords and income-tax payers, unless it is the informed choice of the oustee, compensation for loss of livelihood should be paid for not in cash, but in the form of alternate land. Even where cash is demanded, the female head of household must give her consent to the decision, and payment must be made in the joint name of the female and male members of the household. It may be stressed that this right to land compensation would apply also to those vulnerable groups dependent on agricultural lands who did not originally own lands – food-gatherers, landless labourers, sharecroppers, tenants, artisans, nomads etc. The implications of this principle of land-for-land will be examined more fully in the next section.

**Land-for-Land**

If the objectives of rehabilitation of persons displaced as a result of large dams are to ensure that they are not only better off, but are direct project beneficiaries, then at the heart of such a strategy must be a policy of replacing agricultural land and agriculture-based livelihoods with alternate agricultural land of viable size and productivity and with appropriate complements of credit and input assistance.

The World Bank Policy outlines a few circumstances in which the cash compensation option may be appropriate:

- where the land taken for the project is a small fraction of the affected asset and the residual is economically viable; where livelihoods are not land-based; and active markets for land, housing and labor exist, displaced people regularly use such markets, and their is sufficient supply of land and housing. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets.


In the Indian rural context, such situations where active markets for land exist, and displaced persons regularly use them, would be rare. The Bank recommends land-based resettlement options in all other situations. According to the Bank, these options may include resettlement on public land, or on private land acquired or purchased for resettlement. Whenever replacement land is offered, resettlers are provided with sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site. If sufficient land is not available, options built around opportunities for employment or self-employment should be provided in addition to cash compensation.

It is significant that compulsory acquisition from larger holdings in the command area is not even mentioned as a possible source of land for reparation to the oustees. Moreover, the problem with only recommending such a policy as desirable, without making it mandatory, is that because it is politically the most difficult to implement, project authorities and state governments would tend to continue to opt for the easy cash compensation option. A policy of land-for-land can become a reality only if it is mandatory.

The draft NRR 1998 is far more categorical:

Allotment of agricultural land shall be mandatory for all tribal agricultural families displaced… Similarly, it would be mandatory to provide irrigated agricultural land, if land of the displaced family has been acquired for the purpose of any public irrigation project [NRR 1998:148].

The argument most commonly put forward against the practical utility of the ‘land-for-land’ policy is that in India, agricultural land is scarce and the rural population is burgeoning. Land-hunger of the poor remains unfulfilled even in normal circumstances. It is argued that enough agricultural land is just not available with thousands of land oustees—not only land-owners, but even those dependent for their livelihoods on land—to be compensated.

This argument holds good if project authorities intend to rely only on open-market sales for land, as the Gujarat government has done in its half-hearted implementation of the SSP package. Very little land would be available in the open market, and certainly nowhere near the quantities required for rehabilitation of oustees of big dams.

However, land is available for rehabilitation of oustees in any irrigation project, if government has the imagination and the will to acquire it for this purpose. This is land in the newly created command area of the project. As the NRR 1998 envisages it could be made a statutory obligation for the state to ‘acquire up to 50 per cent of land in excess of 2 standard hectares of each land holder benefiting from the new command…. One standard hectare means one hectare of irrigated agricultural land capable of yielding two crops in a year…. Consolidation of holdings would have to be undertaken, in such a way as to ensure that displaced persons from a village are allotted land in close proximity’ [NRR 1998:148].

Such consolidation is anyway recommended on technical grounds for optimal harnessing of the irrigation potential of any large dam. Further ‘in case the displaced agriculturist chooses to be allotted land outside the command area, this option must be respected subject to availability, and the cost of land development and irrigation of irrigable land allotted under the scheme [would] be borne by the requiring authority’ [NRR 1998:149].

It is interesting that this option was considered as early as in 1902, ‘by Sir M. Visvesvaraya [who] put forward the principle that those whose lands were being submerged for irrigation projects should be resettled in the command of the same irrigation projects. When, as a junior engineer, he drew up the plans for the Nira Canal system in Maharashtra, he had worked out detailed exchange of holdings in the command which would not only accomodate the oustees in the irrigated region, but would also lead to equitable apportionment of waters amongst the command area farmers. This scheme served the principles of natural justice but for obvious political reasons was never implemented’ [Paranjpye 1990].

In fact, land ceiling laws throughout the country require imposition of highly reduced ceiling limits to the amount of land that can be held by any landholder, after the land is irrigated by public funds. However, like other land reforms, this law is observed almost universally in the breach. There are also
enabling provisions for state governments to acquire land according to a prescribed formula, from the command for rehabilitation of oustees from irrigation projects in a special law enacted for this purpose by the Madhya Pradesh government, and in the Maharashtra policy. But it is significant that this provision has never actually been used to resettle dam oustees.

The merit of acquiring a fraction of land from larger land-owners in the command area, to enable the rehabilitation of persons who have lost their entire land and livelihoods to make the project feasible, from the point of view of equity is obvious. But the resolute neglect both principles of equity and the law, flow from the same reasons that inequitable development decisions are made in the first place. The political power of the beneficiaries of the project in the command ensures that they are not called upon to sacrifice of even a fraction of their assets.

The only way that governments and command area beneficiaries can be forced to accede to sharing project benefits of the command with displaced persons, is by establishing the first legal right of the oustees over the benefits of the command. We have already spoken of project rehabilitation clearances being introduced as a statutory requirement. Land-for-land for project oustees must also be made a statutory requirement for any rehabilitation plan for dams. And if as we have argued such land can be made available only by compulsory acquisition of land from bigger land-owners in the command area, the choice before governments and intended project beneficiaries would be clear. Either they accept the sharing of command area benefits with the oustees, or else the project is declared not feasible from the standpoint of rehabilitation.

As a subsidiary measure, the exclusive rights of displaced persons over draw-down land, or land that is freed from reservoir submergence for some months every year, must also be established. The NRR 1998 makes the following provision for draw-down land, and which is worthy of emulation.

In most irrigation projects, significant quantities of rich agricultural land become available as dam waters recede annually, for rabi and summer crop cultivation. At present, in most projects, such land is auctioned annually, with no special preference for PAFs. It must instead be given on a special permanent patta to interested PAFs of the village. PAFs who were dependent on agriculture prior to displacement, with or without title, and who have lost their entire livelihood on land, would be eligible. Allotment would be permanent and heritable, subject to fulfillment of patta conditions, to enable investment by the PAF for land improvement. The project would be responsible for ensuring the irrigation of the draw-down land by diesel pumps, within 2 years of the first submergence.

[Ref NRR 1998:150]

Non-land Based Activities

Land-based rehabilitation is guaranteed to meet with a high degree of success because land remains the fundamental productive resource in the Indian countryside, the fulcrum of economic and social security, and already-existent cultivation skills need only to be adapted for cultivation in irrigated areas. The success of development bureaucracies with livelihood promotion in non-land based sectors has been much less common, because of the difficulties in establishing linkages with markets and raw materials.

Nonetheless, the scope for complementary non land-based livelihoods should also be explored along with land-based strategies. One such livelihood opportunity that is always created as a by-product of any large dam project is fresh-water fishing in the large reservoir.

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22 See for instance Smitu Kothari (1995) for further points pertaining to the issue of land-for-land.
We have observed in the context of India that though exclusive rights to fishing from the reservoir were obtained after prolonged struggle in Bargi and Tawa, in most other artificial reservoirs outside commercial interests secure through auction legal rights for fishing and are known to protect these rights against displaced persons often through use of force. The Bargi and Tawa experience, subsequently also adopted in Hasdeo Bango, in which fishing rights are reserved exclusively for federations of fishing cooperatives of displaced persons should be made mandatory. State government agencies could assist in the scientific management of the reservoir, such as stocking the reservoir annually with fingerlings, and with credit and training. The state government could fix a royalty for the cooperatives, to go not to the state exchequer but instead into a development fund for these societies. The displaced persons cooperatives may themselves decide what proportion of these funds to use to improve inputs and facilities for fishing and the fishing stock of the reservoir, and what proportion to use for developing general infrastructure and services such as in education and health.

However, success in making displaced persons project beneficiaries through fisheries depends not only on granting fishing rights to their cooperatives. Activist state support is needed to prepare and equip the displaced persons, most of whom have been cultivators with no experience of fishing. They need to be intensively trained and assisted with inputs like boats and nets. The experience of Hasdeo Bango (discussed in Part I) shows that official neglect can lead to a precipitous decline in reservoir potential. The fledgling fishing cooperatives of displaced persons may also need protection from the external commercial fishing contractors’ mafia, as was illustrated in the epic struggle of displaced persons in Bargi. Finally, inexperienced cooperatives may need to be assisted to access large external markets for fish, which may on occasion be located hundreds, even thousands of kilometres away.

**Assistance in relocation**

A large proportion of oustees in most dam projects need to be physically relocated, because their homes fall within the zone of submergence. Relocation may also be required because of complete or substantial destruction of their resource base, or because their homes even if not submerged become inaccessible by being surrounded by reservoir waters i.e. tapu land.

For oustees requiring physical relocation, Bank policy lays down that in new resettlement sites or host communities, infrastructure and public services [be] provided as necessary to improve or maintain accessibility and levels of service. Alternative or similar resources are also to be provided to compensate for the loss of access to community resources (such as fishing areas, fuel or fodder) Patterns of community organisation appropriate to the new circumstances should be based on choices made by the affected communities. To the extent possible, the existing social and cultural institutions of resettlers and any host communities [be] preserved and resettlers’ preferences with respect to relocating in pre-existing communities and groups [be] honoured. [World Bank 1998:5]

It is important for project authorities to recognise that the trauma of uprootment from one’s home and habitat is enormous, even more so for rural and tribal communities, and that in financial terms it is impossible to compensate oustees for this pain and loss. Therefore, locational decisions must place special stress in avoiding displacement of habitats, and whenever such displacement occurs, it should be handled with sensitivity in such a way as to minimise the trauma.23

It should not be legally permissible to shift resettlers to a new location to which they have not consented. This means that alternative options must be discussed in open Gram Sabha meetings of affected populations, and the oustees or their representatives assisted in visiting possible alternate

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23 Again the Gujarat SSP experience (Parasuraman 1999) serves as an exemplifier of how relocation sites must not be thrust onto unwilling resettlers.
sites. Care must be taken especially to ensure proximity and access to their new planned livelihood base, and that the new habitat is environmentally and culturally as similar to that which is being lost. Also that community and kinship bonds are recognised, and communities are not fragmented during relocation.

To avoid subsequent conflicts, host communities must also be taken into confidence before any site is selected. Their resistance may be overcome if they can be seen to benefit from the improved social services, infrastructure and livelihood opportunities that would be created as the result of resettlement.

If the resettlement site is rural, it is important that the size of the house-sites and its layout should conform to the average norms in the original village. It has been observed by town and country planners that rural people in India do not live in houses, but around them, and therefore planning of the new resettlement should provide for adequate private and community spaces. We have already noted the imperative that houses be paid for at replacement value, because only then would the resettler be able to reconstruct a house of a scale and design comparable to the one that is lost.

The NRR, 1998 lists adequately the basic facilities to be provided in new in new resettlement colonies at the cost of the requisitioning authority. These are:

- Within the resettled villages, roads, passages and easement rights for all the resettled families should be adequately arranged and proper drainage as well as sanitation plan are executed before physical resettlement;
- One or more assured sources of safe drinking water for each 50 families settled in a pocket has to be ensured, capable of yielding enough water to meet the demand @ at least sixty litre per capita per day (lpcd).
- Necessary plantation of inhabited areas should be taken up under social forestry or agro-forestry schemes;
- Educational facilities are to be so provided in isolated localities as is required for proper education of the children;
- Community hall should be set up;
- A reasonable number of fair price shops should be set up;
- Panchayat Ghars, as appropriate, should be established in each newly settled village;
- Efforts should be taken to set up one Primary Agricultural Co-operative Society with facility for selling of essential consumer articles in every resettled village;
- Village level Post Offices, as appropriate, with facilities for opening saving accounts should be set up;
- Health centres, as appropriate, should be established;
- Appropriate seed-cum-fertiliser stores should be set up;
- Efforts should to be taken to provide basic irrigation facilities to the agricultural land allocated to the resettled families;
- Institutional arrangements for training under the TRYSEM, easy access to financial institutions for availing of financial assistance from the IRDP or any other Governmental schemes or bankable schemes;
- Homestead land, dwelling house and agricultural land should be made available to the resettled families as per their entitlement as provided for similar categories of affected families;
- Panchayati Raj Institutions ( PRIs) should be immediately brought under operation in the newly settled villages/ colonies above;
- Anganwadi house should be constructed near to each of the primary school set up in the newly settled areas;

24 This assistance in visiting alternate sites can also turn into a farce as documented by the MARG research team (1992) that visited Barwani Tehsil as it faced the prospect of submergence under the SSP.
- Appropriate security arrangements should be provided for the settlement, if needed.
- All new villages established or a cluster of new hamlets constructed for resettlement of displaced families should be provided with electricity connection, provided, however, that such rural electrification programme has reached the nearby traditional villages;
- All new villages established for resettlement of the displaced persons shall be provided with suitable transport facility which may include all weather road and public transport facilities through local bus services with the nearby growth centres / urban localities;
- It should be ensured that banking facilities are available to the resettled population of the newly established villages within a reasonable distance;
- A site has to be developed as public cremation ground for the Hindus;
- Suitable lands should be provided for common burial grounds separately for Muslim and Christian Communities, if the settlement contains such communities;
- Separate land should be earmarked for traditional tribal institutions;
- The forest dweller families should be provided with their traditional rights on minor forest produce and common property resources, if available close to the new place of settlement and, in case any such family can continue their access or entry to such forest or common property in the area close to the place of eviction, they may continue to enjoy their earlier rights to the aforesaid sources of livelihood;
- The beneficiaries of resettled areas irrespective of caste, creed, religion or economic status, should be allowed to construct for themselves all other facilities essential for community life by taking suitable projects for which finances are available from governmental schemes. In addition, members of a resettled family should be encouraged to undertake suitable self-employment schemes for which finances are available under Governmental and / or any bankable scheme.


The importance of functioning health facilities is heightened by the empirically observed enhancement in morbidity and mortality in the aftermath of displacement. Declining standards of nutrition are also observed in new resettlement colonies and require a network of nutritional centres for children and pregnant women. It may be stressed that the mere creation of buildings for health and nutrition centres and schools as often happens is not enough, and the state government must ensure that personnel are deployed and the institutions duly equipped.

Since these would often be relatively remote settlements, one institutional mechanism to ensure that personnel perform and are accountable is to constitute panchayats or decentralised elected village local bodies, and to place the entire social sector personnel and institutions under their direct control and supervision. The positioning of fully empowered elected local bodies as early as possible in the new resettlement colonies would be in general the most sustainable institutional mechanism to ensure that services are created and maintained and common resources conserved.

The new resettlement colony must be readied, certified by an independent authority as having in position and functioning the prescribed minimum facilities, and the oustees must be paid in full the replacement cost of their houses, at least one year before physical relocation is required from the point of view of the construction schedule. This intervening time may be used by the oustees to make a gradual transition, for a while retaining a base in both the old and new locations. Assistance in terms of free transportation, and supplying cheap building materials on site, and temporary transit shelters of local design in the new village, must be provided for resettlers to build their new homes and start life anew.\(^{25}\)

\(^{25}\)A useful and comprehensive discussion on relocation is given in ADB’s ‘Handbook on Resettlement: A Guide to Good Practice’
Finally, to prevent human rights abuses in forced relocation, the use of force by governments or project authorities to shift populations from any location, must *without exception* be abjured by law.

**Special measures to protect most vulnerable groups**

We have observed that persons and groups disadvantaged by social origin, class, caste, gender or age, are especially vulnerable to the rigours of forced resettlement, and any plan for developmental rehabilitation must contain strong social security measures for their protection.

We have also noted in the Indian context that the largest majority of displaced persons from big dams have been tribal people, with their concomitant multiple vulnerabilities. It is reiterated that payments of compensation in cash, even more strongly than for other rural folk, should be strictly abjured for tribal oustees and land-for-land entitlement be ensured. It is possible especially in mega-projects that the command area may be located at too far a distance geographically and culturally to be acceptable to tribal oustees. This choice must be respected, but it should not be permitted to absolve the government and project authorities of the responsibility to provide them with the same quantity and quality of cultivable land closer to their original habitat. The project authorities would be required in these circumstances to provide facilities for irrigation, such as from groundwater, lift or diversion schemes, to the tribal resettlers at the cost of the project.

Apart from land, tribal people are particularly dependent on forests for their livelihood and their resettlement must as far as possible be in a similar habitat. Their traditional rights on minor forest produce and common property resources at the new place of settlement must be secured, as also, if access is possible, to their original habitat. In exceptional circumstances if it is not possible to relocate tribals near forests, project authorities should be required to implement a food-for-work guarantee public works programme for a minimum period of 10 years during the non-agricultural season.

Where forests accessible to resettled villages are degraded and depleted, resettled tribals should be constituted into Joint Forest Management Societies, charged with the protection and regeneration of their forests.

In tribal communities, fuel and fodder needs are met from the forest—howsoever degraded—accessible to communities at a distance even of 50 or 100 kilometres at times. How these needs would be fulfilled at new sites, including provision of grazing land, community forest land etc. must be thought of and planned for in advance. The striving must be to enable the displaced people and communities to recreate in the new place all that they have lost, and more.

The resettlement sites for displaced tribal families should be selected with great care and in consultation with the traditional/elected leaders or representatives of the displaced families as well as host populations, and established local NGOs. Efforts should be made to ensure that all tribal families of ousted villages are resettled together in a particular area. Under no condition should linguistic and ethnic tribal group be fragmented during resettlement. For settlements of tribal families in a new locality, common property land for religious and community gatherings should be allotted free of cost.

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26 As with issues around displacement and resettlement, this one, too, has important bearings on more general environmental and social policy, specifically on forest policy; and concomitant adjustments in policy framework may prove necessary.

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*This is a working paper of the World Commission on Dams.* The report herein was prepared for the Commission as part of its information gathering activity. The views, conclusion, and recommendations are not intended to represent the views of the Commission.
Prior to the acquisition of land for any project in any tribal area, an enquiry must be made by the competent revenue authority to determine whether any tribal lands have been transferred in violation of the law. Social activists and prominent local NGOs should be associated with this enquiry. Urgent measures should be taken to cancel such transfers and restore the rights and title of the tribals on their alienated land, before acquisition proceedings are started.

Measures should also be taken to record the rights of tribals on land previously allotted to them or under their possession. All forest land under occupation of the tribal families on or before 24th October, 1980 shall be deemed to have been allotted or owned by the concerned tribal families, and in case of displacement such families shall be entitled to full compensation and land replacement.

There are very few examples of best practices sensitive to the special vulnerabilities of women. A few principles may be indicated. Firstly women headed households or single women should not be discriminated against in eligibility for benefits. A suggested definition of a family unit for purposes of the rehabilitation policy is that every major adult member, her/his spouse, along with unmarried minor children below the age of 18 would be considered a separate family unit. For a single individual without spouse or children, all benefits of this policy would be halved.

A second problem universally faced by women is that they lack clear and equal rights to land. To the extent that compensation is paid for in the form of land-for-land, it should be prescribed that the land allotted for rehabilitation always be in the joint name of the female and male heads of the family and that the spouse of the male head of family and in her absence, the oldest female member of a family be regarded as the female head of the family. Likewise, homestead land must be allotted in joint name.

It has been observed that payment of compensation in cash tends to go against the interests of women, because they are able to exercise less control over decisions regarding the disposal of cash. In order to preserve choice, although land-for-land must remain the norm, we have allowed project-affected families to opt for compensation in cash rather than in terms of land. But it must also be ensured is that the woman head of the family also gives her consent to cash before the option is accepted. All payments of cash compensation, including the replacement value of houses, must be paid into a bank account in the joint names of the female and male heads of households.

The various provisions for consultation and consent, such as with regard to the design of the rehabilitation package and the location and facilities of the resettlement village, must include women as equal partners. In the special Gram Sabhas held for this purpose, a quorum of 50 per cent attendance must also include 50 per cent attendance of women.

The need for creation of community resources of fuel and fodder, and facilities for health, nutrition and clean drinking water, has already been referred to. These have special importance for women. In the planning of supplementary livelihoods too, women’s self-help savings and credit groups should form the fulcrum.

The sale of liquor in resettlement colonies constitutes a major threat both of violence and pauperisation for women. The special vulnerability in resettled villages is the conversion of assets into

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27 Though there are a wealth of constitutional and legal safeguards for the protection of tribal rights, the provisions are more often observed in the breach. See the Twenty-nine Report of the Commissioner for Scheduled Castes and Scheduled Tribes (1987) for a good review of the status of tribals with respect of displacement.

28 Two papers dealing specifically with women in displacement in the Indian context are S. Parasuraman (1999) (Ch. 10) and Enakshi Ganguly Thukral (1996).
liquid cash, with the accompanying stress and anomie which together fuel alcoholism. The Madhya 
Pradesh legislature has passed a law that if at least 50 per cent women in any Gram Sabha vote to 
close down a liquor shop, it would be closed down. Gram Sabhas in resettlement colonies must be 
equipped with same powers.

We have noted that the most vulnerable are people already on the outermost margins of any society, 
such as the destitute, beggars, the uncared for aged, the disabled, leprosy patients, the homeless, 
mentally ill, widows and abandoned women and orphaned and abandoned children. Rural society still 
has its own traditional support systems for such marginalised people. But in the huge social upheaval 
of displacement, these systems often collapse. The initial benchmark survey must be specially 
mandated to identify such people, and the assistance of professionals must be sought to plan 
specialised interventions for them. In the absence of such measures, these people are likely to be the 
first to go under.

**Oustees of Earlier Dams**

We are left, in the end, with the most difficult issue of displaced persons from older dams. It has been 
estimated that as many as 3 out of every 4 persons displaced by big dams in India have been rendered 
worse off than they were before. In most cases, we do not even know where they are, and if they are 
surviving, how and in what circumstances. Many subsist illegally in forests, others live in sub-human 
shanties in city slums. It is unconscionable that we only look ahead, not behind, that we resolve that 
nothing can now be done for the millions of internal refugees spawned by our development strategies 
of the last 50 years. Some reparation must be made, some attempt to rebuild so many millions of 
broken lives.

The task is admittedly monumental but not insurmountable. An international fund may need to be 
created, with liberal contributions from governments of both the global North and South, and 
international funding institutions. The attempt must be to trace the victims of 50 years of big dams 
and their offspring, and for those whose lives remain fragile, assistance according to the principles 
laid out in this paper for new oustees must be accorded. For those who are very poor and in illegal 
occupation of government agricultural lands, with no alternative sources of livelihood, tenurial rights 
may be needed and assistance to develop and irrigate their holdings. For encroached house-sites in 
city slums and the countryside, tenurial rights and upgradation of shelter may be called for. A number 
of dispossessed oustees may still be resettled in fisherfolk co-operatives in the reservoirs. And there 
remain the large holdings in the command area, which can be shared with the most indigent oustees, 
through measures already outlined, including implementation of existing land reform laws applicable 
to irrigated lands.

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**Note**: Fernandes, Das and Rao (1989:750 suggest that only about 25 per cent of those displaced by dams in the past 
have been fully rehabilitated. Among those that fell victim to official apathy were oustees of the Bhakra, 
Hirakud and Nagarjunasagar dams.
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>HYV</td>
<td>High yielding variety</td>
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<tr>
<td>INTACH</td>
<td>Indian National Trust for Art and Cultural Heritage</td>
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<tr>
<td>IRDP</td>
<td>Integrated Rural Development Scheme</td>
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<tr>
<td>LAA</td>
<td>Land Acquisition Act 1894</td>
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<td>MARG</td>
<td>Multiple Action Research Group</td>
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<tr>
<td>NBA</td>
<td>Narmada Bachao Andolan</td>
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<tr>
<td>NGO</td>
<td>Non governmental Organisations</td>
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<tr>
<td>NPG</td>
<td>Narmada Planning Group</td>
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<tr>
<td>NRR</td>
<td>Draft National Policy: Packages and Guidelines for Resettlement and Rehabilitation</td>
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<tr>
<td>PAF</td>
<td>Project affected family</td>
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<tr>
<td>PAP</td>
<td>Project affected persons</td>
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<tr>
<td>PWD</td>
<td>Public Works Department</td>
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<tr>
<td>R&amp;R</td>
<td>Resettlement and rehabilitation</td>
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<td>SC</td>
<td>Scheduled Castes</td>
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<td>SSP</td>
<td>Sardar Sarovar Project</td>
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<td>ST</td>
<td>Scheduled Tribes</td>
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<tr>
<td>TECS</td>
<td>Tata Economic Consultancy Services</td>
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## GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Ahir</td>
<td>A traditional cattle rearing caste, low in the caste hierarchy</td>
</tr>
<tr>
<td>Anna</td>
<td>Part of the old Indian currency of the pre-metric era, equivalent to approximately 6 paisa, about a ninth of a cent</td>
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<tr>
<td>Bahera</td>
<td>Terminalia Blerica</td>
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<tr>
<td>Bargi Bandh Visthapit Even Prabhavit Sangh</td>
<td>Association of People Displaced or Affected by the Bargi Dam</td>
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<tr>
<td>Bharat Jan Andolan</td>
<td>India People’s Movement</td>
</tr>
<tr>
<td>Chironji</td>
<td>Buchanania Latifolia</td>
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<tr>
<td>Dalit</td>
<td>Literally ‘the oppressed’, a preferred term to describe communities traditionally subject to untouchability</td>
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<tr>
<td>Gram Sabha</td>
<td>Assembly of all adult members of a village, an institution which has constitutionally been equipped with a wide range of statutory powers</td>
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<tr>
<td>Indira Awas Yojana</td>
<td>A welfare housing scheme</td>
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<tr>
<td>Jowar</td>
<td>Sorghum</td>
</tr>
<tr>
<td>Khasra</td>
<td>The number/address used to identify/demarcate/designate a particular plot of land.</td>
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<tr>
<td>Kurburs</td>
<td>A low caste group in north Karnataka</td>
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<tr>
<td>Lingayats</td>
<td>Peasant caste of south India, particularly Karnataka</td>
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<tr>
<td>Lok Sabha</td>
<td>The House of the People in the Indian Parliament</td>
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<tr>
<td>Mahua</td>
<td>Madhuca indica, a tree revered by tribal people and which yields foodstuffs and liquor</td>
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<tr>
<td>Narmada Bachao Andolan</td>
<td>Save the Narmada Movement</td>
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<tr>
<td>Panchayat</td>
<td>A local, constitutionally recognised form of self-government comprising one or more villages</td>
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<tr>
<td>Patwari</td>
<td>Government appointed village accountant whose principal responsibility is the maintenance of land records</td>
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<tr>
<td>Sal</td>
<td>Shorea Robusta</td>
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<tr>
<td>Scheduled Castes</td>
<td>(Dalit) Caste Groups listed in the Vth Schedule of the Constitution of India</td>
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<tr>
<td>Scheduled Tribes</td>
<td>Tribal groups listed in the Vth Schedule of the Constitution of India</td>
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<tr>
<td>Tapu</td>
<td>An island ,formed by the backwaters of a reservoir</td>
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<tr>
<td>Tehsil</td>
<td>An administrative sub-division of a district</td>
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<tr>
<td>Tendu</td>
<td>Doispyros Embryopteris</td>
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ACKNOWLEDGEMENTS

I am deeply indebted to my colleagues Ashima Sood and Smita Gupta for their painstaking research and editing support to the paper, and to Vijay Naugain for his patient and cheerful support in word-processing and logistics. I benefited from the thoughtful suggestions on my outline and draft by Smitu Kothari, Shekhar Singh and Ravi Himadri. I am grateful also to Ravi Hemadri, Vijay Kumar and Ashima Sood for their background papers included as annexures. Anurag Singh and Jharana Jhaveri provided the transcript of their moving documentary ‘Kaise Jeebo Re’.

In addition, regarding policy I benefited from Dr. N. C. Saxena’s ‘Draft National Policy: Packages and Guidelines for Resettlement and Rehabilitation’ (1998) (unpublished) and the Draft National Policy on Developmental Resettlement of Project-Affected people of the National Working Group on Displacement (1988) (of which the co-convenors were Ms. Medha Patkar and Dr. Smitu Kothari), and Dr. B. D. Sharma’s draft policy for Madhya Pradesh (1996).
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World Commission on Dams
Displacement, Resettlement, Rehabilitation, Reparation and Development


ANNEXURE 1

INDIAN EXPERIENCE ON DISPLACEMENT, RESETTLEMENT, AND DEVELOPMENT: PEOPLE’S PERSPECTIVES.30
Ravi Hemadri31

Hundreds of dams have been built in India after independence displacing millions of people. Their resettlement has been grossly unjust resulting in great human tragedy and impoverishment. Due to callousness of the dam builders there is not even any trace of the people displaced due to dams in the early phase of national independence. Even today many projects lack in any kind of systematic recording of the people, their cultures, societies etc. Dams are built and wished that the affected people would just go away.

Many more dams are in the process which will displace more people. The state and all those institutions advocating the dominant ideology of development, of which dams are an integral part, have justified displacement in the name of ‘national interest’, ‘public interest’ and so on. It is also said that ‘some’ will have to sacrifice for ‘greater good’.

However the people displaced due to dams have not allowed themselves to be suppressed by the state and the forces behind the construction of these dams despite the repression let loose on them. Many movements have emerged to resist forced displacement and the callous ways of resettlement. Some have been violent and spontaneous, quickly suppressed by the dam builders, while others have been well organized, militant and having support from many individuals and institutions nationally and internationally. Some have only protested against the compensation in cash, resettlement policies and implementation; while many others have challenged state’s right to displace them and even gone on to challenge the dominant model of development. The people and people’s movements have expressed themselves in many ways.

Displacement

Dams in India have been built in the last fifty years as a part of its ‘modernization’ drive. They were to provide irrigation to vast areas of land, produce the power needed to fuel the industry and achieve flood control. The devastation they caused and the costs they entailed are rapidly being exposed. They have ruined environments by drowning as yet unexplored thousands of species of life-forms, their habitats and forests and have given rise to other ecological and health crises. The single most irreversible consequence has been that of uprooting of rural and tribal communities, cultures and their habitats and dispatch them to become unskilled wage laborers and pawns in modern industrial centers.

There have been many single projects and series of projects across one single river which have led to displacement of whole communities inhabiting a river valley. The SSP and other dam projects across the Narmada is an example. An estimated one million people will finally be the losers due to Sardar Sarovar Project(SSP) alone. Series of dams being built across river Krishna in the Southern states of Maharashtra, Karnataka and Andhra Pradesh is another case where millions of people will be uprooted.

31 Co-ordinator, Samanvay Samiti Bisalpur Bandh Kshetra, Rajasthan, India.

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Lack of any kind of regional development plan is a peculiarity of post-independence India. One dam is built that displaces several lakhs of people. The vested interests then come up with many other types of industrial and business ventures around the dam area to further displace more people and also those already displaced. The Rihand dam and the Singrauli is an area where people had to move more than once to make way for ever newer projects. People were displaced from the Rihand dam in 1960s. There was very little assistance from the Govt. for resettlement which resulted in people resettling in the nearby areas on their own. But their new settlements were also short-lived as subsequent mining, railway, thermal projects and other industries came up to oust them repeatedly. The process continues to this day.

Displacement is much more traumatic and devastating for tribals (Scheduled Tribes), women and dalits (Scheduled Castes). Most dams are built in the remote valleys to benefit the plains, plains people, and their industries. The forest dwellers and tribals have traditionally lived in these remote hills and valleys. Their food gathering, farming and their life styles are a product of living in harmony with their environment for ages. Experience has shown that their displacement is an irreversible process leading to their near total annihilation.

The dalits are a different category who generally live among the Caste Hindu population. Being mostly landless and small farmers and having been compelled to do menial jobs for ages by the dominant sections, their displacement inevitably leads them to the towns where they become pavement dwellers, landless, underemployed and cut off from their small communities.

Women within displaced communities and families need to be studied as a separate category not just because they suffer more than men, but also because it is women who have often taken lead roles in protest movements.

The travails of displaced women basically stems from the already existing gender inequalities within the society and family. Laws, policies and government procedures also discriminate against women. It is a consequence of the unequal social and political set-up that men get preference over women in the matter of land, security, physical space, food intake, jobs, etc. within home, society and in the government. These inequalities accentuate in the event of a crisis situation like displacement-resettlement.

Women have become victims not just of displacement but also of Development at large. It is also true that the discrimination the disadvantaged groups face in the society generally becomes harsher in the case of women. The Sat Talai Declaration states: ‘…geographically uneven development has led to migration. Woman as a tribal, dalit, labourer, and as a peasant faces the problems that entail migration; she is also subjected to physical exploitation and low wages for work because of the traditional male dominated society’.

Women have taken lead roles in the major struggles against Destructive Development in projects like the struggle against SSP, the struggle against Maheshwar dam, in Tehri etc. Even in major struggles against non-dam displacement causing projects like Baliapal, Netarhat and Enron thermal power projects, women took lead roles. The protest against Union Carbide in connection with Bhopal Gas Tragedy was led by women.

Women have a worldview quite different from men. Men are apt to be attracted by short term benefits like getting cash for their land, but women generally have a long term perspective. This too is perhaps one of the reasons why the major burden of rebuilding family resources upon displacement and resettlement rests on women’s shoulders. But our emphasis should not be totally based on the fact that women have a worldview different from men (because in corollary if they have nothing different to...
say, then should they cease to be treated as a separate category?). The gender aspect of displacement–resettlement is also important because the present social, political and administrative set-up is too male-centric.

How is it that the governments get the authority to change the use of natural resources without the least regard for the local people who had been using and conserving the natural resources for generations? While there is, on the one hand, much talk of decentralizing the powers of the state, on the other the age-old concept of ‘eminent domain’ is retained shamelessly. That there is no law to limit the powers of the state in the matter of determining the use of natural resources, has led to a situation where the highest court of the land shies away from giving any valuable judgements in this matter.

The Land Acquisition Act, 1894 (amended 1984) is one of the draconian laws enacted by the British Colonial Govt. which is retained much in the same form by the Republic’s government. The law neither defines what constitutes ‘public purpose’ and what does not, nor mandates that the state provide information to the people about the projects which are supposed to serve public purpose. It gives few and very nominal right to the citizens to challenge acquisition. (This nominal right too is now being taken away by the proposed 1998 Amendment Bill to the Act). The only right it gives the citizen is to get compensation in cash for the life-sustaining resources taken away from him/her.

Not only is all private land acquired in the name of ‘public purpose’, but the justification for taking over control of common lands, forests and water bodies is also the same ‘public purpose’. This ‘public purpose’ is to be achieved without giving any information relating to the dam projects to the public! Not only is there unwillingness on the part of the state to give information, sometimes projects are shrouded in absolute secrecy. People’s participation in the planning process is really a far cry under such conditions.

All this takes place even while human rights and constitutional norms confer on the citizen a right to live anywhere in the country and to a life with dignity. Hence compulsory displacement is a serious violation of human and constitutional rights. Displacement also violates several international covenants.

Protest movements against dams are not a new phenomena in India. Even in the case of the first large dam of Independent India, the Hirakud, protest had begun soon after construction was started in 1948. To suppress these protests the government of the day used the construction workers brought in from other states, even though the demands of the protesters were simple like proper compensation for land, adequate rehabilitation of the villages, and provision of basic amenities such as water, electricity, roads and schools. Agitation against the Pong dam has also been recorded. Construction of it was blockaded by the local people for fifteen days in 1970. The movement against the Tehri dam had begun as early as 1965, and it is still going strong.

State repression against such movements has been a recurring feature of dam projects. In the case of Hirakud, the Govt. declared the protest agitation illegal, arrested the leaders, and used force to repress the people.

In the case of Suvarnarekha Multipurpose Projects (SMP) the work on acquiring lands near the dam was started only after opposition to the dam was silenced by killing the leader of the protest movement, Gangaram Kalundia. Besides him at least ten others have been killed till date in three separate incidents of firing in cooonection with protseests against SMP. Arvind Anjum, a leader of the Visthapit Mukti Vahini(Displaced People’s Liberation Corps), was also brutally beaten by the vested elements of SMP in July 1996.
The strongest and most articulate protest movement till date is the movement against the Narmada Dams in Gujarat, Madhya Pradesh and Maharashtra. Several attempts have been made by the governments of all three states to suppress the movement but they have resulted in strengthening the people’s resolve to put a stop to the dams. Even the contractor of the SSP’s main dam, J.P. Associates, has not lagged behind the governments in physical attacks on the people and the activists.

The Maheshwar dam coming up across the Narmada in the state of Madhya Pradesh is an important study because it was the first in the country to be handed over to a private company for construction and operation of power generation. The terror let loose by the state machinery and the company personnel during a peaceful protest demonstration at the dam site on 22nd and 23rd April 1998 was heinous to say the least. In two days, 1,453 persons were dragged away from the place of demonstration and arrested: 550 of them were women. Fifteen women and 13 men had to be hospitalized—injuries ranged from broken limbs and bruises to internal injuries. One leading woman activist was dragged over stones, beaten up, her clothes torn away, and arrested.6

The area to be submerged by the Maheshwar Project is one of the most fertile regions in the Narmada Valley with rich black cotton soil. It has quite a prosperous peasantry. Acquisition of land for the dam had started in 1987. The Narmada Valley Development Authority, which has the overall responsibility of developing projects and also collection of socio-economic and other data relating to Narmada dams, handed over this project to Madhya Pradesh Electricity Board(MPEB) because the envisaged project was for power generation alone. MPEB in turn transferred the entire project to S.Kumars, a Bombay-based private company that was primarily engaged in textile industry since its inception. Officially the company has nothing to do with R&R except that the R&R budget is to be met by the company: resettlement is the responsibility of MPEB.7 Despite this the company staff in collusion with the local officials try to coerce the people to keep away from their own land. A strong protest movement is emerging opposing the construction of the dam. The company personnel also indulge in the suppression of the movement along with the local police. Privatization of dam projects has only brutalized further the displacement-resettlement-protest movement scene.

The privatization-of-dam-projects juggernaut is work at a much higher level. According to a news item in the daily Hindustan Times, the Union Power Ministry proposes to float a Special Purpose Vehicle (SPV), a joint venture company with the state-owned Power Finance Corporation(PFC) to prepare a shelf of hydel projects with all the statutory clearances. The SPV itself will be a part of Power Development Corporation (PDC). The company is to be assigned the task of conducting detailed surveys, investigation, studies etc., prepare cost estimates, specifications and designs, and also obtain central and state clearances, acquire land, and carry out pre-construction activities. Major international donor agencies like WB, ADB, OECF etc. are to fund the venture. The newspaper further states that the Power Ministry proposes to immediately offer nine major projects for development. The projects are: Rampur Hydel Project (535 MW), Kol (800 MW), Karchham Wangtoo (1000 MW), Suni (1050 MW) all in Himachal Pradesh, Tipaimukh (1500 MW) in Manipur, Tuivai (210 MW) in Mizoram, Karneng (600 MW), Rangandi-II (160 MW) both in Arunachal Pradesh, and Lower Kopli (150 MW) in Assam.8

In 1980 the World Bank came up with Guidelines on displacement and resettlement. The first one related to minimizing displacement and search for alternatives. In a few cases affected people’s organizations, NGOs, and independent researchers have come up with alternatives to specific projects, but the Bank and the dam builders have failed to take any serious consideration of these alternatives. This raises a doubt whether the Banks position of advocating ‘minimizing displacement and looking for alternatives’ has come out of any of the Bank’s experiences or is it merely a theoretical proposition.
It has been argued by some researchers that displacement also works in positive ways in that local people and their traditional economies are absorbed in wider political economy. One may argue that all the people living in economic seclusion, even those not displaced due to developmental projects, will sooner or later be exposed to wider economies. But this process itself is engendered by degrading natural resource base, increasing population, decreasing productivity of land and lack of financial resources and attention of planners for local development opportunities. Migration from remote and tribal areas is induced by the development in industrial and urban centers. All these can be attributed to the present model of development.

Experience of people displaced from dam and other project has quite conclusively proved that those who enter the so-called wider political economy do so with little bargaining power leading to a worse economic condition than when they were in their original villages. Their lack of bargaining power makes them prone to victimization and exploitation. Thus the process of displacement and their ‘absorption into wider political economy’ is nothing but a denial of human rights.

In any dam project, people targeted by direct displacement are the worst traumatized and affected and physical dislocation takes long years to allow families to stabilize, if they do so at all. It is especially disastrous in the case where the displaced people are tribals located in far away places and in entirely different environments than their own. But the people directly affected by submergence are only a part of the total affected. Others are also affected due to infrastructure development like canals, powerhouses, staff colonies, administrative buildings, laying of power lines, sanctuaries, compensatory afforestation and catchment area treatment programs. Two major categories of affected besides those due to submergence are the downstream people and host communities.

Very little information is available on the downstream affected and host communities. The members of Morse Committee were surprised at the callousness of the state in turning a blind eye towards the likely impact of SSP on the downstream environment and the people. Even about the area in Gujarat, where SSP’s oustees are being resettled, the government has done little to assess the socio-economic impact of resettlement on the host population.

There are two categories of hosts in this area of Gujarat: first is the ‘official’ hosts, who are absentee landlords living mostly in the urban areas, some even living in the U.S. and Canada; the second are those who actually live there and work on the lands of these absentee landlords as tenants, workers and even bonded labourers. The first category of people are those from whom land is purchased by the Sardar Sarovar Narmada Nigam Ltd. (SSNNL). People belonging to this powerful group cannot be actually be termed ‘hosts’; they are not even beneficiaries because they will not utilize the new resource, i.e., water, created by the dam. They are merely increasing the financial burden of the Project. People belonging to the second category are the real losers because they lose the lands given to tribal oustees. They lose the meager livelihood they earned before their landlords sold the land to SSNNL. In an investigation conducted by NBA, it was revealed that some 100 tribal families of village Malu in district Baroda were left without land and jobs after 750 acres of land was purchased by SSNNL from their landlords to resettle oustees from Vadgam and Gadher, two of Gujarat villages under submergence.

In the case of Bisalpur Dam, displacing more than 12,000 families (the official figure is 6,200), the GOR’s resettlement policy provides for the allotment of land to the displaced agriculturists. For this purpose the Govt. decided in 1994 to convert 50 per cent of all charagah (grazing land under the control of panchayats) available in every village in four tehsils viz. Deoli, Todaraisingh, Kekri and Jahazpur. Besides, significant extent of land in Tonk, Piplu, Uniara, Malpura, Niwai and Sarwar tehsils is also being converted into agricultural lands for the same purpose. Thus 24,814.50 hectares
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(some 3,000 ha.s is already allotted to oustee families) of grazing land in 563 villages in these ten tehsils has been converted into agricultural land. Very little of this land is under the proposed command of the dam. An estimated 100,000 people, largely dependent on animal husbandry and traditional dairy, will be affected to varying extents. Moreover, even the oustee families’ incomes from animals will be affected. It is nothing less than redistribution of poverty leading to the impoverishment of the hosts as well.

Pong dam is a classic case of inter-state projects involving a large number of people displaced from the sub-Himalayan hills ‘resetted’ in Rajasthan’s desert, which is an entirely different agro-climatic region among a people of an altogether different culture. If the Central Govt. had taken any heed of the tragedy of Pong dam’s oustees, it would not have permitted SSP, another massive inter-state project.

Four states are linked to the Pong dam: Himachal Pradesh (HP), where all the submergence is; and three beneficiary states of Punjab, Haryana, and Rajasthan with the last getting the lion’s share of irrigation water and power generated. According to unofficial estimates, a total of 30,000 families were displaced. According to the HP Govt., 20,722 families were displaced, whereas the Govt. of Rajasthan (GOR), which had to resettle the people, accepted a figure of 16,100. Of these only 9,200 were found eligible for land in the area to be brought under the command of the dam. The dam was completed in 1974. Land allotment on paper took place between 1972 and 1981 to the families found eligible. But by the end of 1981, only 2,622 allotments remained; the rest were cancelled by the GOR on one pretext or the other.

The lands given to the oustees were undeveloped and water had not reached these lands. The Colonisation Rules in the Command Area (Indira Gandhi Canal) were so tedious as to put severe constraints on the oustees. No medical aid was available. Many sites were not even connected by road. The area being near the international border with Pakistan served the purpose of drug and arms trafficking Mafia. There were many cases of criminal attacks, beatings, and even murders of the oustees. Above all, the area was alien in soil, water, farming, and culture of the local people.

In a statement, the Pong Dam Oustees Association had this to say:

A brief mention may also be made of the unrealistic planning policies of the Government. The fate of the Pong dam, constructed by uprooting tens of thousands of people, seems to be very dark due to present natural trends. For the last few years, there is considerable fall in water level in the dam due to insufficient rain in hills of Himachal Pradesh. At present the water level has gone down to as low as 800 – 900 ft. instead of about 1410 ft. required to feed the link Canals and generate electricity. Previously the Govt. built a tunnel canal on the Beas river at Sunder Nagar in Dist. Mandi to make up for water shortage in the Bhakra Dam built in early 1950s. This also resulted in loss of discharge of water from the Beas river to Pong dam. If this endless process of constructing one dam to feed another goes on unabated, then a day might come when there will be only dams in Himachal Pradesh and no people. Where will the Govt. rehabilitate those uprooted people? There is need for a realistic and rational approach to displacement, rehabilitation and development.

Indeed, their fears are coming true. In this small Himalayan state another major dam is about to be started, besides the four mentioned above which are in the planning stage. The Parbati Hydel Project, being planned to be constructed in the Kullu valley, will be one of the largest hydel projects in the country producing 2,051 MW power. It will displace tribals in this remote area besides causing great environmental hazards in the as yet untouched Western Himalayan ecosystem. Much of the affected area lies within the Great Himalayan National Park, part of which has already been denotified to make way for the Project.
People’s movements, and many NGOs and researchers have denounced the present model of Destructive Development. People have challenged state’s eminent domain. In many places in India, especially in tribal areas, the Hamare Gaon Mein Hamara Raj (Our Rule In Our Village) movement is active.

Even researchers and international donor agencies have stressed the need for planning development with the people. It has been said: ‘The State as well as the people are involved in a relationship of exchange in which neither’s interests are inherently superior; and the issue of displacement requires a political resolution, and it concerns a governance principle’. 13

The real issue that emerges from this position is not one of ‘just’ rehabilitation but that of what constitutes just displacement: or, in other words, under what conditions can people be asked to move?

Even though people’s participation in the planning process has been stressed, there has been little progress in that direction. There is much reluctance on behalf of the state to give up even a little of its age-old eminent domain position.

**Resettlement**

Resettlement in India has primarily been guided by the provisions contained in the Land Acquisition Act. Payment of cash in lieu of life-sustaining resources to tribal communities in the early phase of Independence, led to greater trauma than that unleashed by displacement itself. In the case of Hirakud, Bhakra, Srisailam, Koyna, Tawa, Kadana and others, the non-monetised tribals who were paid cash turned to wage labour, alcoholism and prostitution in the cities. It was only after 1970s that resettlement policies with land as an ingredient became a part of dams. But even today there are dams being built where the essence of resettlement is compensation in cash. In the case of Bisalpur project only title holders are allowed a meagre 4 acres (upper limit) of undeveloped land. Now the latest move from the Central govt. and many other State govt.s is to disown its responsibility of providing land. The August 1997 draft policy of Govt. of Rajasthan ‘The Rehabilitation Policy for the Displaced and Project Affected Persons of Projects in Rajasthan’ states: ‘Displaced and affected Khatedars are given compensation for their land at the market value and therefore, normally the Govt. is under no obligation to allot them land’. And how is the market value computed? By the age-old method of past deeds of sale of land!

In the normal course the sociological process of societies and families turning to other occupations from that of farming requires a span of at least two generations. So wherever people dependent on agriculture (whether legal owners of their land or not) are displaced, there is no alternative to giving them land, enough and at least of the same quality for their proper resettlement. The need for land for land has been brought out well by the Morse Committee (on SSP’s oustees):

Central to the Bank’s credit and loan agreements with India and the three states is the objective requiring that all oustees, including those described as landless, be enabled as a result of resettlement and rehabilitation measures taken on their behalf, to “improve or at least regain the standard of living they were enjoying prior to their displacement”[emphasis added by the Committee]. How can this be guaranteed in the case of oustees for whom cultivation is their only skill and at the heart of their social, economic, and cultural lives, except by providing them, on resettlement, with land to cultivate?14

If in any project the Govt.’s contention for not being able to provide land to all agriculturists is that there is no land, then that is enough a case to close the project in question.
An estimated 20 million people in India have been displaced by nearly 2,000 large and medium sized dams since independence. According to Govt.’s admission only 25 per cent of them have been ‘satisfactorily’ resettled. The rest have been either lost without any trace or are waiting for justice to be done.

Causing submergence without completing the process of resettlement has been a hallmark of Indian dams. Dams in the early phase of Indian dam-building did that with the sheer lack of knowledge of the exact extent of areas coming under submergence. But from 1980 onwards such acts have been done to suppress growing resistance to projects. “Chhotu Mohato and Mohatine were taken away by the rising floods. Mohato’s hut collapsed on him while he was collecting the remnants of his belongings. Mohatine, a pregnant woman, could not flee like the others in the village, before the water caught up with her”.

Similar was the fate of 19 persons who were washed away by the dam waters in the submergence area of Kutku dam. During the three days of inundation in 1997, nine others were hanging by the trees half-submerged under water while the bodies of the dead floated in the reservoir. The state and the administration blissfully turned a blind eye towards them.

Such action has even received sanction from highest political leadership of the country. “We will request you to move from your houses after the dam comes up. If you move it will be good. Otherwise we shall release the waters and drown you all” said Morarji Desai to the people of submergence area of Pong dam in 1961. He became the country’s Prime Minister in 1977.

The process of uninformed resettlement work begins from the beginning. Nothing is known about the people to be displaced, their socio-economic status, their culture, their skills, their own concept of development and their choices for resettlement at the time of designing a project. This continues much later into the project implementation stage and even would end up without having any information of the affected people but for the lending agencies which require their paper work to be as voluminous as possible.

But even they failed in SSP. In 1992, more than twelve years after construction was started, the Independent Review Committee (Morse) set up by the World Bank found that the concerned governments had no basic socio-economic data, and had not taken the basic steps.

All this leads to the one endemic problem of dam projects: pace of resettlement work lagging far behind that of dam construction. The Principal Revenue Secretary of Govt. of Rajasthan (also the Chairman of the Committee to review R & R of Bisalpur Project Oustees) admits that the work of rehabilitation was lagging two years behind construction activities.
It is not only that resettlement is not completed before submergence, but in many cases even cash compensation is not given. In the case of Tehri, land belonging to 750 families of 14 villages was taken over by the Tehri Hydel Power Development Corporation. The compensation for this land was not paid to them even after they had left their original villages and settled in Bhaniawala, where the Govt. was supposed to have provided them house plots.\textsuperscript{19}

In a survey conducted by the Samanvay Samiti Bisalpur Bandh Kshetra (Co-ordination Committee of Bisalpur Submergence Area) in 1994, seventy houses affected by blasting at the dam site and got vacated by the Project Authorities had not been given compensation due legally. Same was the case with land belonging to 152 families. River bed cultivators, promised land by the Project Resettlement Policy of 1991, have not been given land till date. Construction on the dam had begun in 1986 and submergence commenced in 1989.\textsuperscript{20} The Project had not received the mandatory clearance from the Union ministries of Environment and Social Welfare till 1997.

Another major problem in resettlement is the lack of proper record of rights relating to land (private and common), water use and occupations. This is a very chronic problem in hill and forest areas where improper and corrupt ways of demarcation of revenue (agricultural) and forest lands took place during the colonial regime and after Independence. Many tribal families cultivating land traditionally since generations are termed ‘encroachers’. The tribal families ousted from their lands in early dams like Tawa, Pong, Hirakud etc. did not get even cash compensation because the land they were ‘illegally’ cultivating belonged to the state. The situation has ‘improved’ in the case of SSP where even ‘encroachers’ are to be given land if they settle in the state of Gujarat. The states of Maharashta and Madhya Pradesh have not been so liberal; they ask for proof of encroachment.

The above mentioned State Policy of Rajasthan allows tenants, sharecroppers and farm wage labourers to be treated on par with landed families. But the identification of such families is impossible as no records in this regard exist, and resettlement is a game of legal documents. Major son/daughter is another such category. Normally a person’s name appears in legal documents only when his/her predecessor dies. There are instances where even sixty year old persons have no title to the ancestral land they cultivate. They qualify to be treated as ‘major person’ for resettlement. Women, neither as daughters nor as daughters-in-law become land owners. Such is the situation of record of rights in respect of private land which is easily quantifiable, apportionable, transferable and saleable. One can imagine what must be the case with common lands, water use rights and occupations. No wonder that the dominant idea of displacement considers only those affected due to expropriation of private land as the ‘displaced’. Downstream affected people and those whose occupations are affected by a dam project do not even qualify as ‘affected’.

It has been held that establishing the displaced people as project beneficiaries is an important factor in resettlement.

‘Resources’ created by a dam may be thought of as belonging to four areas: irrigation (in case of irrigation projects), fisheries, draw down cultivation and job opportunities.

Resettling the oustees in the command areas of a dam could help the people economically. But we should keep in mind the experience of Pong dam oustees in the desert of Rajasthan. While resettling rural and tribal people, it is important to keep in mind not only that the only skill they possess is that of agriculture but also the skill they possess is in what \textbf{type} of agriculture.

In the Indira Gandhi Canal Area of Rajathan, not only that oustees from Pong dam could not survive but even the local people lost out to the large influx of farmers from Punjab, who had the expertise in intensive cultivation unlike the locals who were subsistence farmers. Similar is the situation elsewhere.
too in many irrigated areas of Rajasthan and Western U.P. The recent political controversy over the inclusion of Udham Singh Nagar district in the proposed new state of Uttarakhand had its roots in the type of development that had been unleashed in that area in the last three decades. It caused large influx of immigrants who edged out the local people from resources. As development planners should keep in mind the existing skills of local people to avoid the taking over of benefits by immigrants so also we should keep in mind the levels and the type of farming skills a displaced community possesses.

There have only recently been experiments in organizing displaced people into co-operatives for fishery in the dam reservoirs. Formerly there were either state managed fisheries or auctioning to contractors. In both cases the state corporations would either incur losses or there would be unsustainable over exploitation by contractors. In the case of Bargi, the oustee fishermen’s cooperative not only increased the annual fish yield from 48.7 tons (managed by the state), 355.85 tons (contractor) to 468.3 tons, but also achieved increased wages, establishment of a welfare fund etc. A 1996 study on fishing co-operatives constituted mainly by displaced people in the reservoirs of Gandhisagar, Bargi and Tawa in Madhya Pradesh concluded that ‘ federations were successful in increasing output as well as the wages of fishermen. They successfully marketed fish to distant markets’. The Study also states : ‘Fishing in the reservoir can be a source of employment and well-being to the traditional fishermen as well as some other displaced people’.

Draw down cultivation is another important resource that can be used for resettling displaced people. The experience with dams built in the hills has been that many displaced tribal families settled on their own on the fringes of reservoirs. In dams like Kadana, Mahi Bajaj Sagar and Tawa experience has also shown that governments are generally unwilling to give even cultivating rights to these families. There is much more reluctance where the people use reservoir waters for irrigation. One reason is that the reservoir operating agency (state irrigation or power departments) do not wish to part with ‘their’ water.

As for as jobs created by a project are concerned no experiment worth the name has been done for a study of results. Same is the case with thermal projects where many more jobs are created than in a hydel or an irrigation projects. In India a common feature of dam building is the hiring of construction workers from far away places. The fear seems to be that local people would easily put a stop to construction if ill treated and also demand higher wages. This in itself shows the undemocratic nature of construction of dams.

Conclusions

It can be seen that at least 75% of people displaced from projects completed in the past are yet to be resettled. Losses of even others who were ‘resettled’ are yet to be fully made good. Development has often meant destruction of cultures, sustainable life-styles and irreversible damage to environment. Even whether the benefits under the dispensation of a dam in any area have really been able to compensate the losses economically. Even as more and more dams are planned, there is a growth in resistance in the face of increasing state repression.

Justice S.M. Daud, a retired Judge of the Bombay High Court who conducted an independent inquiry on the status of SSP’s resettled oustees in Gujarat writes : ‘there is yet time to retrace steps from the road to the precipice’. 

The Morse Committee Report clearly says “….Projects as they stand are flawed, that resettlement and rehabilitation of all those displaced by the Projects is not possible under prevailing circumstances…..”
The Scoping Paper of WCD’s present Thematic Review contends that ‘the argument that ‘just rehabilitation’ is not possible is more often connected to large-scale displacement and impact’. But looking at the experience of the displaced people of Kutku, Bisalpur, Chandil and a host of other dams which can be termed ‘medium’, the question that begs a reply is: in what way are the experiences of the oustees of these dams different from those of Hirakud, Pong, SSP?

The idea of a just displacement is one that may be expected to evolve out of a process of continuous dialogue between the state and the people. At present there is very little dialogue and negotiation. However, some conditions can be specified that are inclusive rather than exclusive.
- People who have been displaced from projects completed in the past should be rehabilitated as that is essential to establish the good intentions of the state, dam builders and donors.
- A process of drawing up of national and regional development plans should be launched with institutional arrangements for participation of the people.
- People’s organisations should be directly involved. Other institutions can be the gram sabhas, panchayats, and NGO’s.
- Appropriate laws should be enacted to make institutional arrangements for disclosing information relating to development plans, projects etc. and for participation, thereby limiting the eminent domain powers of the state.
- Development should be socially, environmentally and economically sustainable. All types of costs should be part of Project Cost.
- In case of irrigation and projects involving water supply to urban centers and industries, it should be made essential to conserve all the rain water and other smaller and nearer sources of water in the benefit areas before seeking water from far away sources.
- Local people and local area (burden carrying area) should be given preference in benefit-sharing.
- Rural and tribal people should be resettled in the same agro-climatic area where the culture of the hosts is not much different from that of oustees. Resettlement should be allowed only after a strict assessment of the carrying capacity is done and it is found that the host area is capable of absorbing the oustee population.
- Submergence area, downstream, host area, area for treatment of the catchment, area of compensatory afforestation all taken together should form the Project Area for which there should be a Area Development Plan. The whole area should be developed instead of development of dam and infrastructure and the so-called ‘development-oriented resettlement’.
- Displacement, resettlement and rehabilitation should be parts of Project Plan.

What would be the benchmarks for the people threatened by a project to be satisfied that their lives would indeed improve after the move?

It is true that sharing of benefits of projects with the displaced could lessen people’s economic difficulties created by displacement. As already noted, land in the command areas is useful only if it lies in the same agro-climatic region as that of submerged areas. Fisheries can be useful especially to fisher communities. There could be lot of resistance form the local displaced people to fisheries proposal where fish-eating and fishing are taboo. Inevitably such a situation would lead to non-local contractors and fishermen taking away the benefits. Moreover fisheries and jobs or other kinds of benefits cannot replace the need for giving land for land.

Looking at the experience of the people displaced in the country due to large dams, and due to the fact that there is no land available, and also that in the present state-administrative-legal set up preempts any chance of achieving satisfactory resettlement, construction of large dams should be stopped.

This is a working paper of the World Commission on Dams. The report herein was prepared for the Commission as part of its information gathering activity. The views, conclusion, and recommendations are not intended to represent the views of the Commission.
ANNEXURE-2

PART I

THE POLITICS OF LARGE DAMS*

Dams and the Ecological Imagination

In the keynote address to the 1991 meeting of the International Convention on Large Dams in Vienna, Professor Otto Hittmaier said, “Man’s first duty is to his species. We should obey the Biblical command to go forth and subdue the Earth.” The 45,000 large dams that exist today, around 40,000 of which were built after 1950 (McCulley, 1998), are conclusive evidence that modern civilisation has indeed followed the Biblical exhortation zealously.

The development of technology and engineering has increased exponentially our ability to control nature and tame rivers by damming them. Large Dams, then, have come to be the very symbols of modern civilisation and it should come as no surprise that we successfully aspired to create in this frenzy of dam building some of the only man-made structures clearly visible from outer space - massive reservoirs. These reservoirs which are estimated to hold more than a third of the water of the Earth’s atmosphere are also estimated to have a combined area almost as large as that of the North Sea (McCulley, 1998).

The recognition of our technological and engineering prowess in controlling and harnessing nature sets us apart from all previous civilisations. Two of the most powerful instruments in this process are perennial irrigation and electricity. These are now acknowledged as the material basis for all progress. Engineers and scientists, not farmers, have transformed deserts into productive lands, launched the green revolution and hold out the promise of food security for six billion people. Today hydro-power accounts for nearly a fourth of the total power generated in the world. In the context of diminishing sources of coal and oil and the dangers of nuclear power, hydro-power, especially in the developing nations, is seen as the key to fuelling prosperity.

These developments have also marked the turning point in the history of water. Water resources management has become increasingly technical and the application of technical solutions to the problems of scarcity, excess, or even use of water has changed our very relationship with water. Technological choices and possibilities rather than nature and its limits mediate our relationship with water. Rivers as water bodies are no longer at the centre of our civilisation, like in the past. It is perhaps typical of our ecological imagination that waters flowing into the sea should be considered a waste. They mock and challenge our ability to control nature.

Large Dams therefore, almost naturally fit our ecological imagination, fundamentally altering our intuitive relationship with our nature. Straddling the rivers and extracting from them our necessity and making them yield to us their energy and productivity satisfies our quest for power. Fittingly enough, dams have come to represent potent political power. It is only to be expected that the State, the overarching mediator of power and social relations, should take super dams as a symbol of its strength.

* This paper was written by Vijay Nagaraj for the World Commission on Dams.
“To Lenin and Stalin, big dams formed the core of the strategy to transform the USSR into an industrial super-state; big dams were at the heart of Roosevelt’s public works centred New Deal; to newly independent State leaderships like Nasser, Nkrumah and Nehru these were powerful symbols of their countries’ “pride and progress”, “temples of modernity”; to premier Verwoerd they were the symbol of apartheid power and minority right (McCulley, 1998).”

The result has been large and gigantic multi-purpose projects with vast command areas and high installed capacities to meet objectives of irrigation, power generation, flood control, drinking water, etc. These projects, while apparently serving multiple objectives have a number of varied and complex social, environmental, economic, financial, geological, hydrological, engineering and of course political attributes. Notwithstanding the rhetoric of dam builders, it is true that there does not exist even a single instance in which all the various complex attributes of large dams and multi-purpose projects have been comprehensively addressed to establish beyond reasonable doubt, their claimed overwhelming benefits (Pearce, 1992; McCulley 1998). While India has been at the forefront of dam building the Indian Planning Commission admits that “there is no regular system of assessing actual economic returns of irrigation projects” (Singh et al., 1992).

Large dams have caused the forced eviction of nearly 60 million people world wide while submerging an area of nearly 400,000 square kilometres (McCulley, 1998). In India alone the estimates of people displaced by large dam reservoirs are anywhere between 33 to 50 million people (Singh, 1997). The massive reservoirs have submerged millions of hectares of virgin and valuable forests and fertile agricultural lands, flooding ecologically precious valleys and destroying entire life-worlds. The impoundment of river water has completely and in most cases irreversibly altered the riverine ecologies leading to hydrological chaos. The changes in the hydrology also affect the dam itself, the most important one being siltation and sedimentation of reservoirs. The accumulation of silt has a direct bearing on the life of the dam and its performance. Experience in India has shown that sedimentation rates are very often far in excess of those anticipated and further accentuated by inadequate catchment treatment. In many cases the sedimentation rates are as much as 400 percent or more than originally anticipated(Dogra, 1992; Singh et al., 1992).

The impacts of dams upstream, downstream and at the reservoirs are highly unpredictable and often unprecedented. Schistomiasis and rift valley fever to mercury poisoning, saline intrusion to reservoir induced seismicity, coastal erosion to loss of bio-diversity, adverse impacts on floodplain ecosystem, shrinking deltas and changes in oceanic ecology, just to mention a few. In the intricate hydro-ecological web of life balance is all important and is built around a number of complex ecological processes and actors, evolved over thousands of years. Every time we stop a river from flowing, we tamper with, if not completely destroy this balance. (For more details on environmental impacts see Goldsmith and Hildyard Vol.1 and 2, 1984)

The promise of perennial irrigation and cheap power comes at a heavy price. Millions of hectares of once fertile land are today water-logged, alkaline, chemicalised and unproductive. It is estimated that by 1985 nearly 33 million hectares of India was degraded because of waterlogging, salinity and chemicalisation of soils. Though dams are ostensibly built to contain floods, they often exacerbate them. The magnitude of water and especially so of floods are constantly in flux particularly as they depend upon anumber of other ecological processes. Once the storage capacity of a dam is exceeded then the floodgates have to be opened with disastrous consequences. After having built more than 4200 large dams 40 million hectares of India are still flood prone (CSE,1999b).

Dams are also fallible. Dam breaks are a very real threat and can cause havoc and massive destruction as in the case of Morvi (Gujarat) in 1972, Vaiant (Italy) in 1963 and the Banqiao and Shimanta
(China) in 1973. According to some rather dated studies India had a ‘failure’ rate of one out of 33 and an ‘incidents’ rate of one out of 11 (Dogra, 1992).
Water and the Politics of Development

Though ecological wisdom would tell us otherwise, dams continue to be built. They enjoy a political legitimacy that has been manufactured by a discourse that has defined the 20th Century - “Development”. Built on the foundation of productivity, progress came to be measured on the basis of gross aggregates of national wealth created such as GDP. With respect to natural resources like water, enhancing consumption and productivity became the priorities, rather than distributive justice and sustainability.

Though ideologically different, Western capitalism and Eastern communism have shared the obsessions of industrial modernisation and centralised decision making. The State undertook the responsibility “developing” natural resources and enhancing their productivity in the larger interests of national good. It was assumed the transformation of nature would result in the transformation of nations with the benefits eventually spreading out to all (Pearce, 1992).

The utilitarianism inherent in development discourse dictates the use of water in the economy. With the emphasis on increasing the productive capacity and diversity of land, expanding irrigation has come to be central to economic growth. With local wisdom and indigenous knowledge already proven unscientific, water development has been handed over to scientists and engineers - with an ecological imagination cultivated in a laboratory and a system of knowledge whose idiom is rooted in technology and management, rather than in inter-connected life worlds. These scientists and engineers have drawn up “projects” to develop water, dictated by their briefs - the consumption and the harnessing of water for specific purposes, industrial, agricultural, or domestic.

The development of technology to enable power generation from water has excited scientists, engineers and above all the State and its most loyal allies, the industrialists. Hydro-power potentials measured, targets set and explorations for their exploitation soon became more ‘projects’. Large dams built with massive reservoirs and high installed capacities for power generation.

Dams are not cheap to build, and their large scale social and environmental impacts threaten their viability. Neo-classical Economics “displaying a knowledge of the price of everything and the (social) value of nothing” (McSweeney, 1998) has contributed a cost-benefit analysis that internalises selective monetary flows to the exclusion of everything else. Considering that Economics, Liberal or Marxist, is oriented to a concept of value that can only be imputed by humans whether in use or in exchange, this is understandable. The social and environmental losses/impacts do not come under the ambit of costs and have been conveniently externalised; at its best the cost benefit analysis amounts to a crude reduction into monetary terms entire life-worlds. The social and environmental impacts, it is assumed can be treated by mitigation measures which being externalities are not factored into the cost-benefit analysis. Projects are thus made viable and the lure of thousands of hectares of irrigation potential, ‘cheap’ and ‘renewable’ source of power have seen billions spent on large projects( McSweeney, 1998).

The project approach to developing water resources sees no reason to be concerned with the questions of balance between consumption and availability, for technology has all the answers. Any water that is not consumed is equated with being not productive, a waste. The consumption and harnessing of water is not seen in the context of the limits and potentials of the larger hydro-social cycle but in the context of technological options and scientific possibilities to maximise its productivity. The complex interconnections within the hydrological system and between various surface and groundwater resource units as well as their interconnections with other longer and short-term ecological processes are ignored (Goldsmith, 1998).
A holistic water resources development strategy is still nowhere in sight and critical issues of sustainability also remain unaddressed. A recent Asian Development Bank (ADB) recorded that between 1991 and 1995 less than 25% of ADB supported projects in the Water Sector were derived from a coherent water resources strategy and less than 15% addressed issues of catchment protection and sustainability (ADB, 1996).

**Dams and the Politics of Irrigation and Power in India**

The first three Five Year Plans concentrated heavily on building the industrial infrastructure in the country, especially with respect to capacities in the core sector. By the third Plan however, increasing agricultural productivity was becoming a major area of concern in the context of the growing population and the need for food security both nationally as well as internationally. The answers came in the form of High Yielding Varieties (HYV) of seeds, first developed and tried in Mexico, and the intensive modernization of agricultural practices that held out the promise of exponentially increasing agricultural yields. HYV agriculture driven by mechanisation and bio-technical inputs had two very important features:

- it was water intensive requiring perennial irrigation; and,
- it was highly energy dependent.

In fact HYV agriculture has forged a new relationship between water and power in more ways than one, exemplified in the case of tubewells, which ushered in the Green Revolution in Punjab and Haryana. HYV agriculture is also highly dependent on inorganic bio-chemical inputs like fertilisers and pesticides. Lacking sufficient indigenous capacity India was forced to import fertilisers and pesticides, which in fact accounted for nearly 20% of the export earnings at the time of the Green Revolution (Dias, 1986). This pushed the Government into launching major efforts in the expansion of industrial capacity in the areas of chemicals and fertilisers as well as machine tools, serving to further increase the demand for power in the country.

Between 1960-61 and 1970-71 the consumption of power in the agricultural sector increased from 833 million kilowatt-hours (mkwh) to 4720 mkwh while the consumption in the industrial sector rose from 9584 mkwh to 29579 mkwh. At the same time the net irrigated area increased from 24.8 million hectares to 31.2 million hectares (CSE, 1999b). Meeting this increased demand for irrigation and power became one of the most important priorities of the planning process. Thereafter major/multi-purpose projects i.e. large dams with massive storage for irrigation and high installed capacities for hydro-power came to be seen as effective solutions. Between the Second and Fourth Five Year Plans the investment in major/multi-purpose and medium projects increased from 380 crore rupees to 1242.30 crore rupees (CSE, 1999b). Indeed Large Dams were here to stay. According to the Central Water Commission by 1994 India had 4291 large dams, nearly 3000 of which were built after 1960 with 695 still being constructed (CSE, 1999b).

The large number of major/multi-purpose irrigation projects that were built also came to be seen as demonstrated examples of India’s growing self-confidence in its scientific and technological abilities. In fact there is more than just an element of truth in the argument that the successful completion of large projects like Nagarjunasagar, Linganamakki, Kangsavati Kumari etc, with very little or no external assistance also greatly enhanced the power of the nation’s relatively young technocracy and induced a professional bias towards large dams and major/multi-purpose projects (Krishna, 1992). That the Chief Engineer of the Nagarjunasagar project went on later to become the Union Water Resources Minister is more than just a case of political good fortune.
In an incisive analysis of the politics of dam building in India Singh (1997) argues that large dams were perhaps motivated by political expediency as much as they were by the concerns of economic planners. Accordingly large and multi-purpose projects were part of the Congress party (the most powerful political party of that period) gameplan to placate the politically powerful middle and upper peasantry- its traditional rural allies- who were angered by the excessive favours shown to industry. “In fact the choice of the Green Revolution as the method of enhancing agricultural production that was undertaken suited the needs of the industrial bourgeoisie. The Green Revolution led to a spurt in the agro-based industry in the form of pumps, tractors, harvesters, etc. and also helped to expand certain sectors like cement and steel, required for the construction of large irrigation projects” (Singh, 1997).

It is assumed more often than not that dams and major projects irrigated the Green Revolution but this is not borne out by the facts. Between 1965-66 and 1979-80 the net area irrigated by wells increased from 8.6 to 17.8 million hectares while the net area irrigated by canals increased only from 10.9 to 14.7 million hectares. The data that are available up till 1992-93 clearly indicate that notwithstanding the huge expenditure on them, canal irrigation from large/multipurpose projects accounts for just around a third of the total irrigated area, 17.1 out of the total net irrigated area of 50.2 million hectares. Wells on the other hand account for 26.5 million hectares (of which 15.8 million hectares are irrigated by tubewells), a little more than half the total net irrigated area (CSE, 1999b).

More than 132,000 crore rupees (at 1996-97 constant prices) have been spent on major/multi-purpose and medium irrigation projects under various plans upto 1998 (CSE, 1999b). The Public Accounts Committee (PAC) of the Parliament reported in 1983 that not even a single major irrigation project taken up since independence has been completed on schedule. In fact the PAC notes that of the 205 major projects taken up only 29 were completed till 1979-80 (Singh et al, 1992).

We have already seen that contribution of canal irrigation through major projects is far less significant than is made out to be. However the vain boasts of dam builders continue to project the benefits of dams as unprecedented, the reality however is other wise. The Planning Commission accepts that there is in fact no regular system of actually ascertaining the economic returns of irrigation projects. In this regard the PAC says that:

“The Committee are surprised to learn that net increase in yield in the command of an irrigation project is not assessed. In the absence of such an assessment the Committee wonders how actual benefit derived could be ascertained and compared with the project anticipation. (PAC 1982-83 in Singh et al, 1992)

It is estimated that between 1985-89 the average cost of irrigating one hectare through major irrigation schemes was around 200,000 rupees (Dogra, 1992).

Even this rather preliminary survey of major irrigation (it is worth noting that we have not examined a number of other aspects of major irrigation projects such as drainage, transmission losses, utilisation of potential, sedimentation etc) obviously beg the question. However such projects continue to flourish. Despite the massive cost over-runs, delays and losses, priority is still to be given to projects involving massive capital expenditure but whose benefits may only accrue in the long run. “As such priority is not given to projects where relatively low outlay will lead to major benefits. These principles will have to be changed” (Adisheshiah ed, 1990).

Planning and development are not politically neutral and more than administrative discretion it is political expediency that has driven the dam building effort in India. The large capitalist landowners and various sectors of organised industry have always benefited the most from large dams and multi-
purpose projects. Though there are no comprehensive ex-post facto analysis of dams in India, micro investigations of who gains and who loses from dams are rather revealing.

A study conducted for the Department of Rural Development (in Dogra, 1992) in the irrigation command areas of the Hirakud (the first multi-purpose project in Independent India) and Tawa (one of the first large dams on the Narmada) dams clearly reveal the inequalities in the irrigation benefits. In the Hirakud command area land holdings of less than 1 hectare and less than 2 hectares constitute 34.66 and 63.56 per cent of the total holdings respectively, but enjoy only 6.9 and 24.10 per cent of the irrigation respectively. On the other hand holdings of more than 4 hectares which account for only 12.67 per cent of the total holdings enjoy 47.2 per cent of the irrigation. Similarly in the Tawa command area less than 15 per cent of the command, with land holdings in excess of 10 hectares, gets more than half the irrigation benefits while almost 60 per cent of the holdings get less than 18 per cent of the irrigation.

The major irrigation and power benefits (in agriculture) are usually exploited the most by rich farmers who cultivate cash crops or have large surpluses. In fact a closer analysis of state-wise irrigated area under select crops in the states that have the largest number of dams such as Maharashtra, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh, especially promises to yield very significant indicators of the real beneficiaries of major irrigation. A brief look at Maharashtra and Gujarat, who together account for 2066 of India’s 4291 large dams reveals a significant trend.

**Maharashtra and Gujarat: Percentage of total national output of select crops**

<table>
<thead>
<tr>
<th>Foodgrains</th>
<th>Groundnut</th>
<th>Rapeseed/</th>
<th>Cotton</th>
<th>Sugarcane</th>
<th>Tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3</td>
<td>19.39</td>
<td>10.56</td>
<td>18.07</td>
<td>21.14</td>
<td>47.82</td>
</tr>
</tbody>
</table>

Adapted from CSE, 1999b

The above figures are very significant because they clearly establish that the cash crops, the preserve of rich farmers, have guzzled most of the benefits of the irrigation from the hundreds of dams in these two States. It is common knowledge that the Sugarcane and Tobacco farmers in Maharashtra and Gujarat are amongst the most powerful political elites in the two states. They need water and electricity for their fields, Sugar mills and Oil Presses. Clearly the 2066 large dams in Maharashtra and Gujarat are not mere projects but sites of ‘power’. Finally, it is no coincidence that the level of groundwater development (the percentage of groundwater extraction for irrigation to the net available groundwater resource for irrigation) is only 30.39 per cent in Maharashtra (lower than the national level which is 31.02 per cent) and 41.45 per cent in Gujarat.

The situation as regards power is no different. The major share of electricity that dams generate go to urban areas or the industrial sector. Given a situation in which only 30.54 per cent of the rural population have access to electricity as compared to 75.78 per cent of the urban population the answer to the question of who has gained from the generation of additional electricity is very self-evident. Even in the agricultural sector, as we have already seen it is mostly the rich farmers or large landholders who capitalise on the subsidised electricity that they are supplied with.

Hydro-power is bandied about as a cheap and renewable source of power. This however is almost always at the cost of externalising social and environmental costs. If one were to account for costs incurred in catchment area treatment, desilting and dredging, dam safety, etc. not to mention the massive social costs, hydro-power would be far too expensive. Pearce (1992) rightly points that if hydro-power is ‘cheap’ it would not be renewable and if it has to be ‘renewable’ then it would be prohibitively expensive. Therefore the easiest way is to falsify cost and benefits of power.

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This is a working paper of the World Commission on Dams. The report herein was prepared for the Commission as part of its information gathering activity. The views, conclusion, and recommendations are not intended to represent the views of the Commission.
One such glaring instance is that of the Bedthi project in Karnataka which was scrapped after massive public protest against it. An independent analysis of the costs and benefits showed that the State Power Corporation would have to experience an annual loss of over 30 million rupees due to the project. The greatest irony was that the study conducted by Vijay Paranjpye revealed that while the Bedthi project needed 50 hectares of submergence to produce one megawatt of power the same equivalent of energy could be produced by bio-mass from 20 to 30 hectares. In other words the project was consuming more power than it would actually produce! (Bandhopadhyay, 1984).

To say that “no project exists in a political vacuum” (Goldsmith and Hildyard, Vol. 2, 1984) is an understatement. More accurate perhaps is the assessment of a senior bureaucrat that “there is more politics in irrigation than water!”.
References


PART II

Relocating Displacement: Unravelling the Anti-Dam Peoples Movements' Understanding of Displacement*

Anti-Dam Peoples Movements in India: A Brief Overview

(The objective of this section is to place the peoples movements against dams in perspective. It is by no means an in-depth analysis of the same)

The anti-dam struggle in India dates back to the 1920s when the farmers and other local people resisted the building of the Mulshi dam by the Tatas with British co-operation near Poona. The people led by Senapati Bapat, organised themselves into the Mulshi Dam Committee and rasied many fundamental questions that are being asked of big dams today; the submergence of fertile agricultural lands and community forests and questions of who benefits from the dam.

“Though the Mulshi satyagraha was suppressed and the dam was built, it had all the elements of present day struggles against the large dams - displacement, compensation, cost-benefit of the dam, the value of resources like land, forest and water and people’s right over it, state repression in favour of the Bombay capitalists, a peoples movement, non-violent resistance and the resolve not to move out of their lands, and their commitment going to the extent of self-sacrifice. Significantly, the first ever dam related struggle did not merely petition for ‘proper compensation’, it challenged the dam and its politics as well as its claims of benefits and social justice” (Sangvai, 1998).

Sangvai’s observations of the nature of the Mulshi Satyagraha could indeed well be an accurate description of any of the contemporary struggles against dam projects such as in the case of Sardar Sarovar, Tehri, Koel Karo, Pooyamkutty and so many others. In as early as 1946 nearly 30,000 people took to the streets resisting the Hirakud Multi-purpose project, the first of its kind in India. The 1960s and the 1970s saw political leaders such as Ram Manohar Lohia join the struggle against destruction caused by large dams. However the struggle against dams really gained considerable ground in early 1980 with the protest against the Silent Valley project. The issue of submergence of some of the most ecologically precious forests in the world was the centre of the efforts to stop the Silent Valley. This was perhaps the first example of pro-active environmental campaigning and advocacy and it drew much support particularly from the urban intelligentsia which catalysed mobilisation of media focus and public opinion. Finally the Indira Gandhi government scrapped the project in the early 80s.

There were similar sparks of resistance across the country to many other projects like Tawa, Bedthi, Ukai. The formation of the Narmada Bachao Andolan in 1987, a coming together of some local organisations in M.P., Gujarat and Maharahstra who were fighting the Sardar Sarovar Project (one of the largest of the 30 large dams planned on the Narmada), radically altered the nature, scope and shape of the resistance movements in the country.

The primary instrument of these movements has been the massive mobilisation, organisation and politicisation of the displaced people. Bold and innovative public action, unprecedented advocacy and campaigning as well as strategic networking and national and inter-national alliance building have also played a critical role in the process of strengthening the reach and power of the peoples

* If this paper makes any meaningful contribution to the debate on displacement it owes it to the struggle for justice of the millions of people who have survived development and in particular to the struggle to free the Narmada. I also acknowledge my debt to the legal imagination of Usha Ramanathan and Shripad Dharmadhikary and Jean Dreze. This paper was written by Vijay Nagaraj for the World Commission on Dams.
movement against big dams. But the bedrock of the struggle has been the firm and increasing determination among the people whose rights to life and livelihood are violated by these projects, not to accept the injustice of a non-participatory process of State led development and the use of force against them.

Over the years the nature of the peoples movement against big dams and large development projects has undergone significant transformation and served to greatly enrich and in fact redefine the nature of the non-party politics in India. Going beyond the issues of compensation for the displaced and dams, they have raised a number of critical issues with respect to development, governance, the State, role of civil society and its politics, our lifestyles and indeed our very future.

The peoples’ movements against big dams and displacement have thrown the single biggest challenge to the received wisdom of development and have significantly altered the development imagination in terms of distributive justice, sustainability and ecological wisdom. The debate has been widened in the search for ecologically wise alternatives with equity as a central concern. Therefore while the peoples movements have played a major role in focussing attention on the displaced people, the widening of the agenda of political empowerment to include all marginalised and vulnerable communities is another very significant aspect of the peoples movements against big dams in India today. Displacement and the development process in general have been re-articulated in the context of relationships of power and this has exposed the political biases of public purpose, cost-benefit analysis, technology, financial institutions etc.; the peoples movements have firmly established that "no project exists in a political vacuum" (Goldsmith and Hildyard, 1984).

At the same time it is important to recognise that all the resistance movements cannot be lumped together and there is a rich diversity in their processes as well as formulations. Their refusal to accept displacement has catalysed much controversy with many even being branded anti-national or at least anti-development. The controversy over peoples movements’ consistent refusal to accept displacement as the price of development has overshadowed the understanding of displacement that informs their position. All the surrounding sound and fury has served to distort and blur the articulation of peoples movements’ theory of displacement, reducing it to one of non-acceptance. The objective of this paper is to discuss displacement from the perspective of anti-dam peoples’ movements and outline elements of the theoretical framework of the anti-displacement position.

Understanding Displacement

The Collins Cobuild Dictionary (1988) enunciates displacement as meaning: "...the forcing of people away from the area or country where they live." According to the same dictionary Eviction is the "act or process of officially forcing someone to leave a house or a piece of land." The distinction between the two definitions is of some significance when one realises that after all displacement in India under the Land Acquisition Act amounts to "officially forcing someone to leave a house or a piece of land" that is required for a public purpose. This is more than just a semantic debate for Forced Eviction has a political content that is more loaded than displacement. The implications for the rights of those who have been forced to leave their homes and lands is also very significant as there exists a UN Convention on Forced Eviction to which India is a signatory (Paranjpye and Fernandes, 1999). In usage however, besides the aspects of physical relocation and the use of officially ordained force,
displacement has also been imputed with a third aspect, that of compensation. In this sense displacement does differ from forced eviction. Again however when one looks back at the history of displacement in India it is littered with instances in which the displaced received nothing that could amount to a fair compensation. And even with compensation the fact that under the present legal regime the displaced had no right to question their displacement and the fact that compensation makes up only the market value of property but not the totality of rights lost still renders it a case of forced eviction. While for the present we will continue to use displacement it is important that we keep forced eviction in mind while considering displacement.

The displaced peoples around the world have had to struggle very hard to establish the political legitimacy of displacement, as against merely the 'right to resettlement' as a 'problem', whose nature and scope merits the attention of civil society intervention and particularly public policy. Protest movements of the displaced have played a major role in displacement becoming a key issue in the debate on development. At the same time on the one hand the State continues to displace people in the name of development. While on the other under pressure from civil society as well as key International and National actors such as the World Bank, Asian Development Bank etc., it mouths platitudes on resettlement and rehabilitation, without so much as a National Policy on the matter. The Judiciary for its part has been at best inconsistent and only occasionally sensitive to the issue of displacement.

The debate on displacement has been dominated by two approaches to displacement drawn largely from the following standpoints;

- the causes of displacement; and,
- the outcomes of displacement

Displacement in India is mediated by the Land Acquisition Act of 1894, amended in 1984, which provides the legal framework for the State to take over land for public purposes. The State, largely viewing displacement from the standpoint of its causes, has consistently maintained that displacement is justified in national interest. It is argued that displacement is inevitable in large development projects but the long term good these projects will bring may well merit the sacrifice of a few in favour of the larger good. This position essentially maintains that public interest in the displaced people results in them being 'adequately' compensated to regain their former levels of livelihood.

Those who view displacement from the point of view of its outcomes would in effect say that though some level of displacement is inevitable its negative consequences are not. It is acknowledged that displacement causes severe social, economic and environmental stresses that translate themselves into physiological, psychological, socio-cultural, economic and ecological damage. At the same time it is acknowledged that by expanding resettlement objectives beyond merely aiming to improve the standards of living of the people, it would be possible to offset these disabilities. Thus moving towards such a just resettlement and rehabilitation is the focus of this school of thought. The concern of this school of thought is with effective rehabilitation but not the politics of displacement.

There is a large body of academic literature on displacement rather paradoxically called Resettlement Anthropology. In fact the very fragmented and one-sided view of displacement that one encounters in most of this literature is reflected more than anything else in the discursive categories such as involuntary resettlement, forced relocation and even development induced relocation. At their best they reflect (to their credit) the critical problem of the just relocation, resettlement and rehabilitation of displaced. Displacement is thus cast primarily in terms of the problems of physical relocation and rehabilitation. Underlying all this is the assumption that displacement is inevitable. It is rather typical of a colonial discourse like Anthropology that it should concern itself with the spaces and conditions...
of the 'weak' i.e. the rehabilitation of the displaced rather than the 'projects' of the powerful i.e. the nature and politics of displacement itself.

The ruling establishment, particularly the State has turned this to its advantage, all the while tearing away even the last vestiges of political correctness and imposing its own typically hegemonic discursive categories on the displaced such as Project Affected Persons and even worse, Oustees. The State by projecting the issue of displacement as one of just resettlement and rehabilitation has actually begun to project displacement as an opportunity for development. Moreover, the positioning of displacement within the resettlement and rehabilitation context also reduces its political costs. Apart from not having to contend with the thorny issue of resistance to displacement the Rehabilitation Packages and Policies can also be effective vehicles for pursuing other political ends. The result has been that it has come to be more or less accepted that displacement is inevitable and a just rehabilitation process will manage the displacement.
At the heart of this problem is the uni-dimensional and fragmented view of displacement that is centred on physical relocation, which however is only one very important aspect of displacement. The treatment of displacement from the point of view of its outcomes and impacts on the displaced population, particularly the risks involved in forced relocation and the problems of resettlement and rehabilitation, has only served to further entrench this one dimensional view of displacement.

It is very important to understand that displacement is a multidimensional phenomenon of which physical relocation is only one. It is a sufficient but not necessary condition of displacement. The reduction of displacement to a problem of effective and just resettlement and rehabilitation renders the problem manageable. At best the displaced are viewed as a group of people who are in need of rehabilitation, not empowerment for there is no recognition of their disenfranchisement.

The seminal contribution of displaced peoples movements towards the understanding of displacement lies in forcefully arguing the separation of the issue of displacement from resettlement and rehabilitation (NBA, 1998; Sangvai 1998). The struggles of displaced peoples challenges this fragmented view of displacement with physical relocation at its centre and instead attempts to encapsulate the nature and politics of displacement within its understanding.

Displacement is conceived as:

a) the systematic alienation of individuals’ and communities’ customary and legal rights and privileges of using, managing and controlling their habitat/sources of livelihood;

b) through the use of officially ordained force or coercion;

c) resulting in socio-cultural uprootment, accompanied very often by physical relocation with the resulting trauma and risks; and,

d) for which they are legally entitled to a compensation made up of

- market value of the sources of land based livelihood lost; and,
- a solatium.

In the following section an attempt is made to outline the implications of this understanding of displacement.

1. It is important to understand the process of displacement more as a systematic alienation of the individual's and communities' customary and legal rights to livelihood and their habitat rather than as merely physical relocation. Displacement not only 'affects' people but also results in an alienation of their customary and legal rights. Only when one views displacement this comprehensively can we appreciate what displacement is not:

a) Displacement is not an event that occurs at a single point in time as opposed to certain notions of physical relocation. "The decisive discursive category here is that of 'Oustees' of today who, of course, were the rightful owners of yesterday. And a series of cumulative consequences of displacement are now compensated- under the Land Acquisition Act, 1894 through a consolidation of temporalities of many future deprivations. 'Displacement' is not one event, but a series of happenings, affecting human lives in myriad ways". (Baxi, 1989)

In actual practice the process of displacement begins once the intention to acquire the area is announced (following the initial surveys etc. and leading to the issue of notice under Section 4 of the Land Acquisition Act) and 'culminates' (in case of dams) with submergence/construction. Under the existing legal regime and executive practice all public investment in the area is avoided once the intention to acquire is final. Similarly any value that is added to the land that is to be acquired (such as digging of wells or building of houses) after the issue of notice under Section 4 of the LAA is not
taken into account when assessing the market value of the land. Apart from this there is the immense psycho-social pressure that comes from the knowledge of impending uprootment which brings with it new uncertainties and fears. Living in the shadow of such uncertainty can create unanticipated individual and social imbalances. For instance in the still under construction Maheshwar Dam project area the villages in the submergence zone are finding it difficult to find brides as people are hesitant to give their daughters in marriage into villages which will be submerged if the dam is constructed (personal communication).

b) Displacement is also not an event that that is suffered only individually: no individual or community exits in vacuum. Individuals and communities are bound together in webs of social and ecological significance. Individual and community life is inextricably linked particularly in communities that live close to nature, more specifically rural and even more true of tribal communities (who account for nearly 50 % of the displaced community) as well as poor communities in urban areas who live in close interaction. This is most typically exemplified by people whose habitations/houses may not be submerged but are also displaced by the project as their sources of livelihood (non-land based) may vanish with the relocation of the population they were servicing. For example, landless labourers who worked on the lands that have been acquired for the project, artisans or petty traders and various others from cattle grazers to liquor brewers all of whom stand to lose their sources of livelihood as well as relationships in the event of their 'hosts' being relocated. Then there is also the case of downstream communities that often have to face the impacts of the dam in myriad ways.

c) Displacement is not politically neutral. According to the 29th Report of the Commissioner for Scheduled Castes and Scheduled Tribes, 1989 40% of the people displaced by dams and other projects are Tribals. And if the Scheduled Castes are to be added then the figure goes upto 60%. While thousands of villages have been submerged or displaced a negligible number of large towns have come in for submergence or displacement.

Acknowledging that displacement is a process by which individuals’ and communities’ customary and legal rights are alienated is also very important in the context of compensation for Acquisition, a point we shall return to later.

2. The use of officially ordained force and the element of coercion is another very important aspect of displacement. This has emerged as the most critical concern in the struggle against displacement and forms the core of the peoples movements’ understanding of displacement. It is important to stress that the legal framework that sanctions displacement does not allow for questioning of the rationale behind the abrogation of peoples’ rights that leads to displacement. At the same time there is also a need to unravel this principle of Eminent Domain and throw light on its assumptions. There is a basic assumption implicit that people have to be forced to move by the State. This indicates two very important aspects:

a) There is a lack of commitment to ensure that notwithstanding their displacement peoples’ quality of life will improve. Indeed if there was such a commitment clearly demonstrated then it is only reasonable to assume that potential displaced persons would have decided to accept it rather than protest. If the State can convince the people that their lives will change for the better and prove its commitment to the same then there is no need to use the force of acquisition.

b) The State has put the issue of questioning the public purpose of the project that may displace people beyond executive and judicial redress. The most definite implication of this is that the Executive keeps open its options of resorting to politically expedient interpretations of public purpose. It is entirely against the spirit of democracy that public purpose is beyond public debate.
Another very important aspect of this use of force and coercion is that it precludes the need or the possibility of considering other alternative options that would perhaps result in lower social and environmental costs. Alternatives to large dams in particular, are a highly contentious issue and it is to the advantage of vested interests of politically powerful 'stakeholders' in dam building to locate acquisition in a politco-legal regime that is undemocratic.
Acquisition in Perspective

A very fundamental contradiction visible here is that while displacement as result of acquisition is legally sanctioned there is no legal framework in India that governs the process of displacement itself; what goes for land and other property goes for people too! The law protects the sanctity of what causes displacement but the displaced are at the mercy of executive/governmental largesse. And if this largess is not forthcoming or falls short of what was promised the State cannot be held accountable; the law places no obligation on the State beyond that stipulated in the Land Acquisition Act i.e. following the due process as laid down and paying the market value of property. Dismissing a petition of people displaced by the Rourkela Steel Plant claiming preferential employment on the grounds that displacement was a violation of Article 21 of the Constitution, the Supreme Court said:

"The Government has paid market value for the land acquired. Even if the government or the steel plant would not have offered any employment to any person it would not have resulted in violation of any fundamental right".
(Ramanathan, 1996)

Acquisition is not a process but a discourse legitimised by imperialist principles like that of eminent domain, assuming the inherent superiority of the state in determining the public interest. Acquisition does not recognise displacement. It’s only interest is in the land, the physical space that is required by the 'State' for the project. In keeping with its neo-classical nature it can only recognise that which has a monetary value in exchange and that too only in terms of individual ownership. The customary and legal rights and the future value that the land may generate for the community and community resources are not valued. Acquisition reduces the rights of individuals and communities to property and the maximum value that it can bestow on it is the market value. Compensation amounts to the net worth of that which is 'individually owned' and can be assessed as property, the “totality of the rights that are violated is not compensated” (Ramanathan, 1996). By so doing Acquisition sanctions the claim that the land and all rights and privileges that go with it has been 'legitimately sold' to the State and the people are not entitled to any direct share in the benefits of the project. In practice the State tries to minimise the cost of the forced sale and tries to compensate itself (rather than the displaced) by usurping any additional value that the land acquired is capable of generating but denying the same to the displaced. The ultimate corruption of public purpose is witnessed in the selling of forests/trees that will be submerged; a ‘value’ that the displaced communities generated by nurturing and protecting the forests, now usurped by the State.

Acquisition rather than create altered rights actually entails a complete alienation of rights of the displaced (Ramanathan, 1996). This is true even of rights that would not come in the way of fulfilling the public purpose of the project. The building of a dam automatically revokes the rights of the displaced, who till just before the project were rightfully entitled to the benefits of the river, to claim any share of the direct or indirect benefits of the water. Therefore the displaced people lose their right to even fish in the river, nor can they cultivate the lands exposed when the waters recede in the summer etc.

Moreover while Acquisition provides for the operation of the market in determining the value it denies the displaced any option of ‘not selling’; those who have something that the State wishes to buy cannot refuse to sell. Even the value of the solatium, for the coercion that the 'seller' is subject to, is evaluated according to the market value (now 30% of the same). Acquisition thus represents a sinister convergence of state power and market economics.
Re-articulating Displacement

Displacement and democracy do not go together.

1. The question 'Is displacement justified?' is a point of heated debate today. It seems we are seeking the right answer to the wrong question. In a democratic context the systematic alienation of peoples' rights through officially ordained force, whatever its consequences, is acceptable only in the face of a criminal act that is proved beyond the shadow of reasonable doubt. Displacement especially as we have seen it in India and indeed by its very definition is undemocratic and unacceptable. It will of course quickly be argued that there is a provision for compensation and even resettlement and rehabilitation packages and that above all it is always in 'larger', 'national' interest. Unfortunately the 'nation' belongs as much to the fifty or so million people who have been displaced as it does to the rest of us and ‘national interest’ has to be defined as much by their interest, as by ours. The critical issue with respect to displacement is not whether the State has the right to redefine peoples' rights to land, nor is it whether the due process of law has been followed in redefining those rights. The nature and scope of compensation and rehabilitation are also secondary. The most fundamental question is whether or not citizens have the right to participate in governance and decision-making as well as in the process of development in particular.

While asserting that displacement is unacceptable one is not denying that there may be supra-local interests or public purposes for the consolidation of which some local interests may need to be altered and these include rights in land, forests, water etc. Even as this is acknowledged it has to be emphasised that this cannot be at the cost of local interests particularly the disenfranchisement of people and poor communities. Displacement by its very definition and even more so in executive practice as well as judicial interpretation denies people the right to protect their lands, livelihoods and social ecology from being destroyed.

2. Even as the rights of the State too are not absolute the process and definition of public purpose must be brought within executive and judicial scrutiny and redress. The process of determining public purpose must be participatory with citizens, particularly those whose rights will be affected, having full information regarding every aspect of the proposed project. It is the duty of the State to establish not by force of law (particularly one of colonial antecedent) but through a democratic process the sincerity of public purpose. The people whose rights may be affected have to have a decisive role, protected by law, in the 'acceptability' of the social cost vis-à-vis the public purpose.

It will amount to a vile contradiction if the entitlements that may be affected in the process of consolidating supra-local interests are not protected by public purpose. The public purpose of any project must include by definition the protection of entitlements of those whose original interests may be affected.

a) No public purpose or supra-local interest can result in complete alienation of the rights, customary and legal, of people. The consolidation of a public purpose can only result in the alteration and not the alienation of rights that are affected by the project. The mere payment of one time compensation cannot result in the total alienation of all rights of people. A direct share in the benefits of the project must accrue to those whose rights and entitlements are affected.

b) The sincerity of public purpose is best demonstrated when the minimum possible set of rights of the individuals and the community are altered. In other words the project option that least affects the peoples’ rights best serves the public purpose (for a discussion on minimising and avoiding displacement see Part III). The building of a dam cannot automatically alienate the ‘affected’ people from the river, their lands and the benefits that accrue from them, or even from...
reclaiming the excess land that may have been acquired. In effect the interests and rights of the displaced must be fundamental to the public purpose of a project.
State and Displacement: From Acquisition to Negotiated Exchange

It is evident that the framework of Acquisition is perhaps more suitable in cases where it is proved beyond doubt that a citizen is enjoying privileges disproportionate to his or her legitimate rights and entitlements, typically in the cases of lands in excess of ceiling or unaccounted wealth. The same framework cannot be applied in the case of affecting or altering peoples' rights in supra-local interests or for public purposes. The process of affecting changes in rights and entitlements of people in larger public interest must be one of informed negotiation on the premise that neither interest is absolute or inherently superior.

The assumption that people have to be forced into re-negotiating their rights or to move is completely unfounded and above all exposes the State's lack of commitment to safeguard their entitlements. There is on the other hand every reason to assume that people would want to improve their conditions and quality of life. And further, there is every reason to believe that people would be willing to negotiate their existing rights in favour of altered ones, if indeed they believed it would be to their advantage. The onus of convincing the people that the potential gains of the new set of rights outweigh the losses they would suffer then is on the State or the interested agency.

It must be acknowledged that people have a right to their homesteads, livelihoods and environment. In fact implied in the Right to Life and Livelihood is the Right of a people to retain their socio-cultural complex and their specific social-ecology, and their way of life that goes with it. The State of course has the mandate to call for re-negotiation of these Rights. But however it must be incumbent upon the State to convince the people, through a fair and participatory process of negotiation that accepting an altered set of rights will be of greater benefit to them. Therefore any alteration in or transfer of rights must take place on the basis of an agreement reached through fair negotiation on acceptability of the social costs vis-a-vis the benefits.

It is fit to clarify here that a case is not being made against the State being empowered to compulsorily alter or even take over peoples' rights to land, which may well be the case in exceptional circumstances. Also there is no case being made out for the retreat of the State and the unbridled play of market forces in a transaction of Rights between the State and a group of people. The objective is merely to protect the participatory rights of people particularly in the light of present contradictions in executive procedure and legal process.

a) At present the onus of disproving public purpose or disproving the estimation of costs and benefits, adequacy of compensation etc is on the people. In other words people are on the defensive in the face of the merest intention of the State or any executive action to take over their lands and livelihoods. This situation has to be reversed urgently, for the State, with its vast financial and human resources, must bear the burden of proof - proving public purpose, establishing the veracity of costs and benefits to the advantage of the people etc. must be the responsibility of the State.

b) It is only in the fitness of things that any process that will drastically affect or alter the rights of people, particularly those with respect to lands and livelihoods of vulnerable communities must be biased in their favour. Therefore it must be more difficult for the State to affect or alter peoples' rights to livelihood and land etc. than for people to defend them, i.e. a reversal of the present situation will be more in keeping with democracy.

As for the unbridled play of market forces it must be remembered that even as of now the market has a significant influence, as market values determine compensation, solatium etc. We have already unravelled the sinister nexus between the State and the market in Acquisition. In this light one
wonders if at worst a nexus between people and the market is not more desirable? Of course of
greater concern is the fact that marginalised communities will hardly be able to deal with the market,
let alone establish a nexus and it is also possible that demands for exaggerated benefits may emerge.
There is no doubt that these issues are important but they also have to be looked at within the overall
context of poverty and deprivation. Moreover, appropriate legislative design and institutional
frameworks can mediate and tune these processes. There are also other critical questions:
i) the process of negotiation between unequals and enforceability of mutual agreements,
especially of the commitments tendered by the State;
ii) of different interests among the population in question; and,
iii) of representation, just to highlight a few.

There is also a strong case for new institutional and regulatory frameworks that may be in the nature of:
i) a new comprehensive legal framework that would facilitate a process of re-negotiation of
peoples’ rights over land, water and forests in the context of supra-local interests. This must
replace the Land Acquisition Act.
ii) a multi-sectoral Arbitration Panel or other such statutory bodies at the regional/national level
to act as an Ombudsperson in the process of rights re-negotiation are some possibilities.

This process must be governed by law and cannot be left to executive control. In every instance it
will be found that administrative expediency and not affected peoples’ interests directed the process
of displacement with disastrous consequences for the displaced. The key elements of such a law
would have to be:

- Freeing from judicial closure the process and definition of public purpose and placing on the State
  the onus to establish both public purpose and the project in question being the best alternative in
  process of open and participatory negotiation.
- Defining and protecting the role of affected people in the process of determining the
  'acceptability' of the (social) costs vis-a-vis the benefits that are anticipated, qualifying it for
  public purpose.
- Defining the parameters of determining compensation, resettlement, rehabilitation and reparation
  benefits and peoples' participation in this process, should they consent to relocation or
  surrendering some of their rights.
- Mechanisms to enforce the accountability of the State or any other agency to specific policy
  commitments.

"Displacement of executive discretion by legislative design would by itself solve no problems if it is
not genuine; that is, if it fails to address itself adequately to the logic of participatory rights in the
process of development" (Baxi, 1989). And indeed establishing the inviolability of participatory rights
is at the very core of the struggle against displacement.
References


Paranjpye, Vijay and Fernandes, Walter, Rehabilitation Policy and Law in India; a Right to Livelihood, ISI and Econet, 1997, New Delhi.


ANNEXURE 3

APPRAISING ECONOMIC APPRAISAL*

For many decades after Independence, the experience of displacement was a massive black hole in the state’s consciousness—the displaced were sucked into the relentless logic of dam-building but their stories rarely escaped to enter official discourse.

And the process of pre-project economic appraisal and planning was no exception. A series of retrospective cost benefit analysis conducted over the 1980s—from Bedthi to SSP and Tehri—documented a persistent pattern of underestimation of costs of land submergence and displacement (Paranjpye 1988, 1990; Bandopadhyay 1986)

Yet as Goldsmith and Hildyard show in their seminal 1984 study ‘The Social and Environmental Effects of Large Dams’ this feature—of underestimation of costs and exaggeration of benefits—is by no means unique either to India or to issues of displacement. What lends particular poignancy to displacement in the Indian context is its sheer magnitude—some 50 million, according to recent estimates (see discussion in Part I)—and the recognition that rigorous application of economic appraisal may have helped avoid much of it. This view, strongly indicated by Goldsmith and Hildyard, is also borne out by a 1993 World Bank review of Bank-financed hydro-power project over 1978–1992, which shows that even a 50 per cent resettlement cost over-run in projects with a more than 10 per cent resettlement cost component could jeopardize their financial viability status (Gutman 1993 quoted in Pearce 1999).

By this standard and given the chronic state of underestimation of such costs in Indian projects, many of the most grandiose schemes might have suffered abandonment at the project appraisal stage itself. Kalpavriksh and Hindu College Nature Club point out, for instance, that ‘for Sardar Sarovar, land acquisition for rehabilitation and for canal construction was estimated to cost Rs.2000 per acre. Yet the rehabilitation of the first five villages to be resettled has alone cost Rs.4600 per acre’. Moreover ‘a…mid-1985 estimate by the World Bank puts the cost of adequate rehabilitation at… about 5 times the cost shown by the Gujarat government’. (Kalpavriksh and Hindu College Nature Club 1986:241)

Cost-benefit analysis as a tool for social decision-making has been the subject of profound ambivalence as far as resistance movements are concerned. Some of the reasons for this unease we shall encounter in the course of our discussion. Yet it would be wrong to reject outright the kind of techno-economic evaluation epitomized by cost-benefit analysis for two reasons. First, the fact that it enjoys tremendous support amongst policy-makers, both academic and official, and offers considerable leeway to exert influence with these sections. Second and more importantly, as we have attempted to show above, the scope that it offers for substantially reducing the number of displacement-inducing development interventions is far from saturated.

In the following section, we try to analyse some of the reasons why cost-benefit analyses, as they have been carried out in India, have failed to fulfil this potential.

ECONOMIC APPRAISAL IN INDIA

In his landmark study of the Narmada river valley projects Vijay Paranjpye asks a question similar to ours: why cost-benefit analysis?

* Written by Ashima Sood for the World Commission on Dams.
Listing a five-fold set of objectives for economic appraisal of public investment\(^{32}\), somewhat tongue-in-cheek he adds another: `(f) generating a project appraisal for satisfying the technical and nominal requirements of a funding agency (for example, the World Bank…) or a government agency like the Planning Commission or Department of Environment or Department of Social Welfare’ (Paranjpye 1990:146). He goes on to recount:

In 1981 when the Narmada Planning Group, government of Gujarat, assigned to the Tata Economic Consultancy Services, the work of conducting an economic appraisal of the Sardar Sarovar project, the decision to go ahead with the execution of the project had already been taken. The NPG therefore merely wanted TECS to prepare a project proposal which would appear sophisticated enough for obtaining loans from the World Bank. [Paranjpye 1990:147-148]

But this state of affairs is by no means unique to the SSP. Singh, Kothari and Amin reproduce a very illuminating table from the report of the Public Accounts Committee of the Seventh Lok Sabha (PAC 1982–83)

**TABLE 1**

<table>
<thead>
<tr>
<th>Name of Scheme</th>
<th>Date of approval by Planning Commission/Ministry of Irrigation</th>
<th>Date of Commencement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nagarjunasagar (Andhra Pradesh)</td>
<td>22/09/60</td>
<td>1955</td>
</tr>
<tr>
<td>Gandak (Bihar)</td>
<td>13/07/61</td>
<td>1961</td>
</tr>
<tr>
<td>Kosi (Bihar)</td>
<td>25/04/58</td>
<td>1955</td>
</tr>
<tr>
<td>Tawa (Madhya Pradesh)</td>
<td>05/08/60</td>
<td>1956</td>
</tr>
</tbody>
</table>

*Source*: Singh, Kothari and Amin 1992:184

‘The PAC goes on to add ‘The tendency to take up many projects without getting prior clearance of the Planning Commission/ Ministry of Irrigation amounts to pre-empting such clearance… The Committee considered that any ad-hocism in project selection could be a self-defeating exercise’ (quoted in Singh, Kothari, and Amin 1992:185).

The consequences of this attitude have been uncomfortably concrete: No project since Independence has been completed within approved cost estimates or stipulated target dates (PAC 1982–83 quoted in Singh, Kothari, and Amin 1992). In the face of the determined opposition to big dams that has arisen over the 1980s and

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\(^{32}\)These are to find out whether:

(a) a particular investment has the potential of yielding reasonable returns in terms of the costs and benefits over a period of time, (b) … the concerned investment specific to a technological option will yield net benefits at the lowest costs and in the shortest possible time…(c)… the end result leads to an improvement in economic welfare…(d)…the proposed investment is manageable in terms of financial availability, technical and organisational skills (e)...the concerned activity is sustainable over a long period of time or yields results which establish equity between present and future generations…

…The methodology and techniques developed or rather, practised so far are equipped to answer …(a) and (b) reasonably well and (c), (d) and (e) less adequately.

[Paranjpye 1990:146]
1990s, this condition is only likely to have worsened. And these over-runs have an important bearing, not only on Gutman’s (see above) general point but considering that they also raise the opportunity costs of invested funds, on the economic viability of the project rate of return of the project. Since most public investment in India faces a ‘soft’ budget constraint (Kornai 1981) these projects are rarely abandoned but their overall attractiveness is severely undermined and thrown open to question.

A deeper flaw, however, is seen to inhere in the remit of officially sponsored cost-benefit analyses, in that they emphasize benefits over costs and financial considerations over economic or social.

A clue to the former bias is to be found in the history of economic appraisal of irrigation projects in India. Pre-Independence dam projects had to satisfy a financial productivity test criterion that posited a certain rate of return to be earned over capital and interest costs and working expenditure. After Independence (when landmark projects like the Bhakra, Damodar and Hirakud were commissioned), the criterion was found to be too stringent and was relaxed from 6 to 3.75 per cent. However it was felt that this criterion tended to ignore benefits of increased agricultural production due to irrigation, as these were not reflected in irrigation charges. It was in 1964, that the benefit-cost ratio was adopted as the criterion for undertaking projects. Significantly the Ministry of Irrigation has this definition to offer:

In the benefit-cost ratio, the benefit represents the total gains accruing from a project and the cost represents the expenditure involved in producing them, all in terms of current values. (emphasis added) [Ministry of Irrigation 1980:10)

Clearly benefits are interpreted in a sense much wider than costs.

Further even as the treatment of benefits continued to be refined to include indirect and second order effects, the treatment of costs remained narrow. Apart from displacement impacts, Singh, Kothari and Amin (1992) point out that environmental costs (including downstream impacts), problems of water logging and salinity, siltation etc., all of which have quantifiable economic repercussions, are routinely ignored or underestimated.

An interesting distinction made by Singh, Kothari and Amin (1992) between financial, economic and social cost-benefit analysis is of particular relevance to submergence and displacement costs.

In case of financial cost-benefit analysis they point out ‘where land has to be acquired, the monetary price of this land is… included in such an exercise. ’An economic cost-benefit analysis considers… for example the loss of produce from land to be submerged or the economic loss of fisheries, or timber and firewood, even though this is not a monetary outflow from the project’. Lastly ‘social cost-benefit analysis calculates… for example, the dislocation and suffering of the people who have been ousted’ (Singh, Kothari and Amin 1992:171-172).

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33 Though the substantive cause of these over-runs may be bad planning, the function of a rigorous CBA is precisely to weed out such flaws.
34 A term first used in the context of the command economies of East Europe to describe the state’s willingness to underwrite losses and subsidize inefficient use of resources by state-controlled economic enterprises.
35 The interested reader is referred to the source of this discussion: the Ministry of Irrigation’s ‘Guidelines for Preparation of Detailed Project Reports of Irrigation and Multipurpose Projects’.
36 This distinction is somewhat artificial in the sense that CBA aggregates all these aspects into one figure. ‘Social’ is added before CBA as a matter of course (see for instance Todaro 1990). We use this very illuminating definition for purposes of exposition and to distinguish the degree of difficulty and ambiguity involved in estimating a specific cost element.
It would be clear that treatment of displacement costs has remained primarily at the first level. For instance, Paranjpye (1988) in his study on the Tehri dam lists the following ‘rehabilitation costs’ included in the cost-benefit analysis of the project: compensation for houses, land crops and solatium plus an ambiguous category designated as ‘suffering to oustees’ (STO) by the Department of Environment and arbitrarily quantified as 1.5 times earnings in 2 years multiplied by total number of displaced persons (Paranjpye 1988:102).

(It is instructive to note that even in this woefully inadequate list, Paranjpye demonstrates discrepancies of the order of 86 per cent, for the estimate of total eligible population to 1034 per cent for total compensation for houses).

At a very fundamental level, this failure reflects the effects of legal and institutional structures on technoeconomic variables. Project authorities could legitimately ignore resettlement costs in economic appraisal because they were in fact pure externalities—the only legally mandated cost according to the ruling LAA (see part II for discussion) was compensation payment for acquisition of land.

This state of affairs has begun to change. In the early 1980s, the World Bank, under pressure from resistance movements worldwide, come out with the first set of policy guidelines on rehabilitation. In India, the success of the NBA meant that the issue of displacement could no longer be brushed under the carpet—and there has been over the 1990s, a steady spate of state government policies and legislation culminating in the NRR 1998 (see part III).

As the contours of ‘just’ rehabilitation come to be more clearly defined, displacement and rehabilitation costs will have to be more and more fully ‘internalized’ and widened to include economic and social aspects (The Ministry of Rural Development policy, for instance, speaks of ‘total’ rehabilitation to cover cultural and social losses [Sinha 1996]).

How far, however, this process is carried to its logical end, viz., that of weeding out projects that do not meet the Planning Commission benchmark cost-benefit ratio of 1:1.5 (Singh, Kothari and Amin 1992), remains to be seen, given the resilience of the ‘Iron Triangle’ (the politician–bureaucrat–dam construction company nexus) (Roy 1999).

Our review of cost-benefit analysis of Indian dams leads us inescapably to one conclusion: Befitting, perhaps, its status as ‘temple of modern India’, and resisting all attempts at objective evaluation and the dam has de facto been its own legitimator.

SOME POINTERS FOR THE FUTURE

We saw in the last section how the failure to account for displacement and rehabilitation costs in economic decision-making was three-fold: (1) in the casual manner the mandated cost-benefit analysis (CBA) exercise was carried out (2) in the narrow remit of the officially mandated exercise and (3) in the legally permitted neglect of both the responsibility and costs of rehabilitation.

The ultimate upshot of this multiple default is that there are, in practice, few firm pointers to how displacement and resettlement and rehabilitation (R&R) costs should be accounted for in techno-economic evaluation of projects. Progress is further hindered by the parallel neglect of this issue in academic research.37

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37 Cernea (1999) points to two Indian volumes to illustrate this lacuna: ‘Economic Dimensions of Sardar Sarovar Project’ (Alagh et al. 1995) and ‘Economic Appraisal of Irrigation Projects in India’ (Sinha and Bhatia 1982).
But if, as suggested in part III and in the preceding section, CBA is to become a cornerstone of displacement policy, a clear-cut guide-map must be provided to this no-man’s land in economic appraisal. And such a guide-map must not only define what degree of comprehensiveness is reachable (and this is not to be underestimated) but also the limits of the CBA’s terrain.

There is, in fact, one elegant advantage to CBA—in essence, it provides the missing link between resettlement policy and displacement policy. As was suggested in the previous section, a well-delineated R&R policy is the first step to adequate internalization of resettlement costs. Once this is in place, a rigorous CBA can help reject proposals that entail unacceptably high costs—whether resulting from unwieldy size or irreparable social or environmental losses.

Another way CBA can help minimize displacement applies more generally to systematic economic appraisal. As Pearce points out economic analysis of resettlement must incorporate the following elements:

- The fundamental need to engage in standard full cost minimization in project design, where full cost refers to the sum of economic, social and environmental costs.
- The need to engage in trade off analysis where resettlement minimization is at the expense of project benefits. [Pearce 1999:57]

These two principles can dampen significantly the ‘engineering biases’ discussed in part III.

What we set out to do in this section is to salvage and summarize from various sources (and World Bank research provides the richest) considerations relating to what costs need to be included and in what form. Here the categorization between financial, economic and social aspects, on the one hand and the schema of compensation, resettlement, rehabilitation (discussed in part III) will form the scaffolding.

We may also clarify that we do not attempt to comprehensively delineate all the nitty-gritties of the very wide field of CBA. Nor do we attempt a structured critique of the methodological and philosophical issues involved except as they bear on the specific issue of displacement and resettlement.

II.1 A brief word at the beginning, about how the benefit-cost ratio is calculated. Any project comprises three elements—a cost stream $C_1, C_2, C_3... C_n$ for the first n year gestation period, a benefit stream $B_1, B_2, B_3...B_m$ for the next m years and operating costs $R_1, R_2... R_m$ for the life of the project. To compare these streams, they need to be converted into present value.

For any given year m, the present value of the benefit $B_m$ is $B_m \frac{1}{(1+i)^m}$

Here is the discount rate. In commercial projects, this is taken to be the opportunity cost of invested funds i.e. the ruling market interest rate. For public investment, the suitable discount rate is a matter of much controversy and debate (which we will not enter into here).

The present value of the entire benefit stream at the end of m years is:

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38 Apart from the government’s own (such as the Ministry of Irrigation’s quoted above) guidelines, seminal contributions in this area comprise the UNIDO and OECD studies.
39 Here we follow Paranjpye’s (1988) exposition.
40 Goldsmith and Hildyard point out for instance that while a low discount rate is used for the benefits of the project itself, ‘unrealistically high discount rates are employed to evaluate the ecological benefits that eventually will be lost’ (Goldsmith and Hildyard 1984:273).
\[
P_B = \sum_{t=1}^{m} \frac{B_t}{(1+i)^t}
\]

The cost stream on the other hand is compounded. For any year \( P \), the present value of the cost \( C_p \) is given by:

\[
C_p = \frac{(1+i)^{n-p}}{\sum_{t=1}^{n} C_t}
\]

since the cost is locked up for \( n-p \) years.

Further \( S = \sum_{t=1}^{n} (1+i)^{n-t} \)

Analogous to the benefit stream, the present value of the working expenses stream is given by

\[
P_R = \sum_{t=1}^{m} \frac{R_t}{(1+i)^t}
\]

Finally the benefit-cost ratio\(^{41}\) is

\[
B/C = \frac{P_B}{S+P_R}
\]

The Planning Commission requires that this \( B/C \) ratio be at least 1.5:1 for the project to be taken up.

II.2 Next, we outline the conceptual framework for situating displacement and resettlement costs in CBA. The World Bank’s 1988 guidelines are categorical on this point:

The inclusion of involuntary resettlement in the project is not by choice but by necessity. Its cost is an integral part of project cost… What matters is that the project as a whole has a net present value.

[Cernea 1988:56]

That such a temptation—to treat resettlement as a ‘separate’ component—could exist is evidenced by the endemic tendency to underestimate costs in dam projects including, as Roy (1999) scathingly shows, attempting to treat even drainage as ‘optional’.

However, the risk that project authorities will resort to cost-cutting, inherent in this approach is tempered by the World Bank’s opt-repeated position that resettlement be treated as full-fledged developmental programme [Cernea 1988].

Apart from the persuasive ethical justification for this principle, there are also significant economic grounds. An argument often made against the CBA is that it only requires that aggregate social benefits exceed aggregate social costs and ignores the spread of benefits and costs across social groups. What matters in CBA is that winners be able to compensate losers, not that they actually do so. However, as Layard points out, this also makes the pre- and post-project scenarios Pareto incomparable and this Pareto-incomparability may be

\(^{41}\) Even here, Paranjpye (1988) points out basic flaws in the CPWC (Central Power and Water Commission) methodology.
avoided if compensation were to occur in practice [Layard 1972].

Pearce follows up this insight by postulating a ‘no-worse-off’ criterion grounded in the philosophy of sustainable development.

The World Bank’s policy requirement that those resettled, at the very least, not become any worse off and its focus on resettlement as a development package receives strong support from the recent literature on sustainable development. The essence of sustainable development is (a) that future generations should be no worse off than those currently living and, (b) that the currently least advantaged in society should be given special attention and, at the very least, should be no worse off because of development.

[Pearce 1999 : 58-59]

As we have emphasized before, the first step to this is recognition of what losses are in fact entailed by the construction of dams and how these can be redressed. For the former question, we refer the reader to Cernea’s useful seven-fold classification of impoverishment risks (also discussed in part II). These risks are: landlessness, joblessness, homelessness, marginalization, food insecurity, increased morbidity and mortality, loss of access to common property resources (CPRs) and social disarticulation.

Cernea stresses that turned on its head, this model yields a realistic set of policy guidelines through

…the rehabilitation that must follow displacement: … landlessness risks should be met through land-based planned re-establishment; homelessness—through sound shelter programs; joblessness- through employment creation; inevitable disarticulation—through purposive community reconstruction and host–resettler integrative strategies.

[Cernea 1995:268]

The policy recommendations offered in part II aim to achieve precisely these objectives and in our subsequent discussion, we follow the compensation, resettlement, rehabilitation schema given there. We also refer extensively to the distinction between financial, economic and social aspects to define the degree of quantifiability or monetizability of the various costs we encounter.

II.3 First, compensation. One point of much debate in India has been whether the basis of compensation should be the market price of the asset (most importantly, land) or its replacement value. Pearce (1999) has a number of interesting observations to make here, particularly in relation to persistent time lags between when compensation is determined and when it is paid.

Inflation is one obvious route via which real incomes and asset values can remain uncompensated if there is a delay in compensation and which renders market price utterly inadequate as a proxy for the costs of land loss.

As was suggested in part III, the effect of delay also shows up in another direction that has bearing on the appropriateness of market price as basis of compensation. Particularly with respect to land, it is likely that the shrinkage of supply following submergence and the increase in demand with displacement will push up prices. And the next way to deal with this situation, as Pearce points out and many others have argued in the Indian context, is to include a commitment to land-for-land in the compensation package with careful guidelines to

42The Pareto criterion is the cornerstone of neo-classical welfare economics. A standard microeconomic text defines a Pareto improvement as ‘any change that makes at least one individual better off and no one worse off.’ Further two or more Pareto efficient situations ‘in which it is impossible to make anyone better off without making someone worse off’ are said to be Pareto-incomparable.
ensure equivalent quantity and quality. This commitment will ensure that the costs of land loss are fully internalized by the project budget and not remain externalities borne by resettlers.

But by far the most useful insight in this context relates to what Cernea, drawing on an environmental economic analysis by Pearce, describes as a resettler’s income curve:

Resettlers income curve during the displacement–relocation process consists essential of four segments:

- A slow-growing or flat segment preceding displacement;
- A sudden downward segment at dislocation;
- A more-or-less flat segment during the adjustment/transition period at the new site; and
- An upward segment once income restoration begins.

[Cernea 1995:269]

For the slightly different case where income growth is occurring before displacement, Pearce gives a diagrammatic interpretation of this analysis.
The community’s income levels follows a growth path disrupted at time \( t \) by the project. After adjustment, at time \( t + n \), the new income level shows a growth path of its own. However the new income profile must grow fast enough (faster, in fact, than the original growth path \( NR \)) so that at any point of time \( t + x \), the community cannot be said to have suffered a real cumulative income loss from displacement. And this should be the aim of rehabilitation assistance. Note that this income loss compensation (given by the shaded area) is different from the compensation for asset losses at replacement cost.

This point casts doubt on the desirability not only of market price but also of ‘replacement value’ of assets as basis for compensation.

As Pearce points out, pure ‘replacement of assets’ compensation will be adequate only if the displaced community has a stable or static income profile, as may in fact be the case in many rural/tribal communities forced to resettle in the aftermath of dam projects.

But even here, the widespread economic marginalization that has followed displacement in many Indian dam projects means that the asset path following displacement may in fact fall away from the original static path. This is a situation opposite to that envisaged by Pearce, but besides revealing the flaws of the resettlement programme means that the implied income loss to be compensated may be substantial.

A similar set of issues is raised by the consumer surplus. Here, we quote Pearce:

**Figure 1**

[Source: Pearce 1999:61]
Welfare economics has shown that market prices do not capture the full economic benefits of a good or asset to the consumer or owner. The difference between the “willingness to pay” for the benefit in question and the market price is known as the consumer surplus. Figure [2] illustrates this concept. When the market price is $P_m$, the individual’s willingness to pay is shown by the demand curve. The shaded area is the consumer surplus. If an asset is lost, proper compensation must be based not on the market price, but on the market price plus the consumer surplus. If the asset is replaced, the loss is the consumer surplus. Finally, if the asset has no market value because it is not traded (as with cultural or religious assets, for example), the surplus is again the relevant measure (the price is zero, but the surplus is positive).

[Pearce 1999:65]

**FIGURE 2**

[Source : Pearce 1999:66]

Where a purely financial CBA can account for previously listed considerations, the consumer surplus brings in the need for wider social accounting. We follow up on these issues in sub-section II.5.

Before we move to sub-section II.4, one final word on the treatment of assets lost in CBA. A comparison is made in the 1988 World Bank Guidelines between the pros and cons of using market values versus estimating the stream of annual net benefits foregone:

The (present) market value of an asset reflects the perception of the actual and potential owners (‘the market’) of the net income the asset may produce in the future, and thus what people are willing to pay to obtain those benefits. In this sense the market value (with some adjustment for distortions) would indeed be a proper measure of benefits lost. However, we don’t know what discount rate is implied in the market’s valuation of future benefits. If we are using a uniform discount rate for everything else in the economic analysis, as is implicit in both net present value and internal rate of return methods, this would almost certainly introduce an inconsistency. Also, analysts usually project economic benefits of an investment themselves, based on some
estimate of quantities and economic prices of goods to be produced… the treatment of benefits foregone should be consistent with such estimates.

[Cernea, 1988:58]

Thus the use of market prices in calculating compensation must be abjured, not only in actual payment to displaced persons but also in financial analysis.

II.4 The 1988 World Bank Guideline’s general approach to resettlement is to recognize that the major chunk of investment on resettlement infrastructure and administrative overheads will in fact figure as financial costs.
### TABLE 2

**Checklist of resettlement costs**

**Preparation and Compensation**
- Cost of census of affected population and inventory of properties
- Compensation for properties lost
- Foregone benefits from all assets (for economic and financial analysis)
- Cost of residential site assessment in receiving area
- Cost of replacement land
- Cost of preparation of replacement farm land

**Relocation**
- Cost of moving and transport
- Cost of replacement housing
- Cost of village/urban infrastructure at relocation site
- Relocation/replacement of other infrastructure
- Subsistence packages
- Special welfare services during resettlement

**Re-Development**
- Large-scale schemes
- Small-scale (household) packages
- Incremental Services (extension, health, education, etc.)
- Environmental enhancement packages (forestry, soil conservation, grazing lands)

**Administrative overhead**
- Physical facilities
- Vehicles
- Materials
- Operational staff (managerial and technical)
- Support staff
- Training
- Monitoring
- Evaluation (contract)
- Technical assistance

**Source:** Cernea 1988:62–63

The checklist reproduced above is more or less self-explanatory and we do not attempt to elaborate. The aim of the resettlement component must be to prevent food insecurity, morbidity, mortality and loss of access to CPRs by making requisite investments. To the extent that these investments are made, the economic benefits generated particularly from re-development programmes, must be included on the benefit side of the CBA.
Further, one element that will not show up in the analysis of cash flows and falls in the ambit of economic (not to mention social CPR) costs is the foregone (net) benefits from land and natural resources that are submerged. However to the extent that environmental enhancement packages such as compensatory afforestation are in place, a financial estimate may be obtained though complete replacement may be well nigh impossible.

One insight of particular importance in the Indian context relates to the environmental costs of resettlement. Given the general pressure on land and the fact that resettlement sites are often degraded or forest lands (whether officially provided or encroached) (see for instance, Parasuraman 1999), this is an aspect that should not be, but is often overlooked. To quote the 1988 World Bank guidelines:

Environmental costs may include pressure on forests, grazing lands and soils at resettlement sites. It will often be difficult to make precise estimates of the physical damages expected and to attach values to those. On the other hand, careful design of resettlement would anticipate such incremental ecological pressures and include measures to mitigate or prevent resulting damages as well as shortages of fuelwood, fodder, etc., in part as a measure to accommodate the interests of both host community and settlers at the relocation sites. Such measures could include afforestation, community fuelwood plots, grassland and rehabilitation, soil conservation measures and the like. The costs and benefits of such measures can and should be identified and included in the evaluation.  
[Cernea 1988:62]

II.5. As far as rehabilitation is concerned, many of the considerations have been enumerated in relation to compensation and resettlement.

The re-development component mentioned in the checklist, for instance, addresses issues relating to the resettler’s income curve, by tackling the joblessness and marginalization risks of Cernea’s typology.

However a major set of risks remained unaddressed—those that fall under the ambit of what Cernea describes as ‘social disarticulation’.

Why include socio-cultural and psychological costs under rehabilitation and not compensation (in the narrow sense in which we use the terms)? Our judgement is based on the very real danger of arbitrariness (not to mention misplaced rigour) in assigning monetary values to what are essentially non-monetizable losses (see the discussion on STO in section I).

Also as numerous activists and thinkers have suggested, loss of socio-cultural resources are not only the most difficult to replace but may be the most important.

The key to appreciating this is to recognize that for the substantially rural and (even more) tribal displaced in India, displacement means moving from what is primarily a subsistence economy to a predominantly money economy. Roy (1999) points out, further instance, that this is a shift from having forty-eight kinds of fruit at your doorstep for free to being able to afford none.

Many of the outcomes of this shift are implicit in Cernea’s model and will have tangible manifestations (for instance, falling nutritional standards may show up in increased morbidity and mortality). Other consequences however may be more obscure (see Nanhe’s story in part I). Even with adequate investment in and availability of medical facilities, for instance, the health profile may change but not in any straightforward sense, improve. Alcoholism or cancers may replace communicable disease. (Though what has been documented in most Indian studies is mounting morbidity following displacement).
Moreover, displacement itself is a profoundly disempowering experience (See Roy 1999). At the very least, the sensitive observer must recognize the existence of tradeoffs.

Once this recognition occurs, the only way to incorporate this element is to allow for the judgement of affected individuals. As it happens, tradeoffs are the staple of economics. The established economic methodology in this case is contingent valuation, used to quantify, for instance, the ‘existence’ values of pristine ecosystems [Freeman 1993].

As Pearce points out the whole range of contingent valuation methods could be brought to bear on problems of resettlement—not just social disarticulation, marginalization, morbidity and mortality costs and costs of access to common property resources, in Cernea’s framework but also the psychological uncertainty and alienation caused by displacement.

Contingent valuation methods are based on questionnaire surveys about willingness to accept compensation (WTAC) for loss and willingness to pay (WTP) to secure a benefit. This area has seen a rich and rapidly growing literature in recent years and the interested reader is referred Pearce’s paper for a fuller introduction to it. For reasons of paucity of space we merely quote Pearce here:

Contingent valuation works by asking respondents to state their WTP to secure a given benefit and STAC for giving up some benefit, usually (and preferably) in face-to-face interviews. A number of potential sources of bias exist, including hypothetical bias if the respondent is not facing the actual choice in question. However, modern questionnaire design has overcome many of the biases; investigators can test for the biases that remain to see if under- or overestimates are likely to arise. The hypothetical bias is likely to be minimal in the resettlement context because the threat of dislocation is a real one. (Hypothetical bias is not wholly absent, as several surveys have shown that people do not believe the event will happen until the day for relocation actually arrives). As resettlement involves a loss, the relevant measure is the WTAC. In virtually all contingent valuation studies the means of compensation is money.

…In studies in industrial countries a fair degree of evidence indicates that WTAC measures exceed WTP measures, often significantly). While the reasons for this disparity are disputed, many believe that it reflects a general phenomenon of loss aversion, whereby individuals attach greater value to losses than to equivalent gains. How far this asymmetry of valuation applies in the developing world is difficult to gauge, because no studies appear to have obtained WTP and WTAC measures. However, if it does apply, then compensation measures may well be understated by reference to the market prices of assets.

[Pearce 1999:67,68–69]

The issue of the hypothetical bias is one that Pearce returns to:

The WTAC approach may prove unworkable in some contexts. In the resettlement case respondents are effectively asked to state the value of their assets, income, and other sources of well-being in the context of a development that they may well not understand or may not believe will actually take place.

…However, the observed ability of such groups to organize themselves when the threat of development is realized suggests that they may well be able to respond rationally to interviews involving STAC questions. Moreover, the contingent valuation approach has an additional virtue: its compatibility with participation exercises. Because WTAC questions require that respondents understand the exact scenario for relocation, contingent valuation can be added to baseline social surveys fairly easily. At the same time, the questionnaires can encourage a sense of involvement in the project on the part of the affected populations.

[Pearce 1999:69]
In the foregoing discussion, we have done no more than follow the lead of Pearce who is an environmental economist of repute and a well-known proponent of contingent valuation methods.

Yet, though the participatory nature of this exercise is attractive, we must be under no illusions that the surveyor is the one in the position of authority. Given the wide socio-economic gulf between displaced persons and state functionaries and the vested interests in dam construction, this authority is amenable to misuse (see part I for how misuse has occurred innumerable times in other contexts). And this shortcoming is in addition to others documented in the literature, of which hypothetical bias is only one [Freeman 1993].

Are `social disarticulation’ losses condemned then to escape identification and inclusion in CBA?

Luckily we can answer with a firm no. An interesting way out is a suggestion made by Jean Dreze (1994) and taken up by Sangeeta Goyal (1996) viz. the development of an acceptable rehabilitation package through bargaining between project authorities and communities facing displacement. As Goyal puts it:

A simple version of this approach involves giving displaced persons a right to refuse displacement, and leaving it to project authorities to put forward a rehabilitation package which displaced persons find acceptable. This is the most obvious way of giving displaced persons bargaining power that would make it possible for them to negotiate a substantial share of project benefits. [Goyal 1996:1466]

Pearce (1999) reports that some version of this approach is in fact in use in China, though it is not known with what efficacy. In the Indian case, resistance is understandable:

This approach effectively gives project-affected persons a right of veto against the project, which the state and project authorities may not be willing to concede. Also, it may be argued that the cost of this approach would be prohibitively high, if project-affected persons make unreasonable demands. However, if project authorities are confident that the project has a high rate of return even after displaced persons are adequately compensated, they ought to be able to design a resettlement package which is acceptable to displaced persons and still preserves the economic viability of the project. [Goyal 1996:1466]

This point was also made in part II in relation to the discussion on eminent domain. As was argued there, in projects that generate monetary gains for privileged groups, this approach ensures an equitable sharing of costs and benefits. What this approach does is to effectively convert involuntary resettlement into some form of voluntary resettlement. As Eriksen (1999) shows outcomes for the migrants in the latter case have been uniformly better all over the world.

The merit of voluntary bargaining from the point of view of economic analysis is also considerable—it effectively converts a scenario of Pareto-incomparability to a Pareto improvement by compensation to the losers (see sub-section II.2).

Moreover, from the point of view of socio-cultural losses such a package has the potential to offer a very realistic cost estimate, avoiding problems of `hypothetical bias’ and arbitrariness in cost calculation. It can in fact ensure to a significant extent the full `internalization’ of resettlement externalities.

The standard way to account for distributional issues in CBA, which is otherwise an equity-blind technique, is to use weighting to incorporate the fact that ‘a $1 loss for project losers has a higher social value than a $1 gain
to project beneficiaries’ (Pearce 1999:57).\footnote{For a discussion on the use of weighting, see Pearce and Nash (1981).} Voluntary bargaining helps obviate the need for this somewhat messy procedure.

The institutional and political requirements of this approach are likely to be stringent. In particular, the politico-economic clout of the groups forcing displacement is likely to limit substantially the maneuverability of groups facing displacement. However, the cumulative gains of two decades of committed activism and research are likely to come in handy not only in forcing the legislation and implementation of such an approach but also in ensuring that the migrants get a fair deal.

Even so, communities facing displacement need not be homogenous entities. As elsewhere here too the interplay of political interests may determine outcomes that are detrimental to the most vulnerable groups in the community—destitutes, disabled, uncared for aged, landless labourers. And the state’s responsibility to ensure a free and fair bargain that addresses the needs of the most vulnerable is arrived at, is critical.

Nonetheless at this point, the need is to more fully explore, through academic research and institutional innovation, the implications of this truly democratic approach.

II.6 To sum up, our conclusions have been as follows:

- Market price may be an inadequate proxy for asset value, especially to the extent that delay in compensation causes erosion of value due to economy-wide inflation and local demand-induced price escalation of land.
- Not only market price but also replacement value of assets may underestimate income loss in the resettler’s income curve following displacement and fail to account for consumer surplus.
- Environmental costs, both in terms of net benefits foregone due to submergence of land and natural resources and pressure on resettlement sites must be included.
- Investment in facilities at resettlement sites generates benefit streams that must be included in CBA.
- The merits of voluntary bargaining are many, particularly with reference to internalization of socio-cultural and psychological costs. Its potential deserves to be explored further.
- Till such time as such an approach becomes operational, contingent valuation surveys may be used instead to value difficult to quantify costs.

Finally, we must point out the grey areas left over in this process of internalizing displacement and resettlement costs in CBA. The literature offers few clues, for instance, as to how to internalize the fact that paradoxically those with the least to lose in economic terms—incomes/assets—in fact stand to lose the most from displacement. As shown in part I, the assetless (destitutes, women, landless labourers) often have the most precarious livelihoods, prone to rupture at the slightest disruption. Their dependence on the community is also often the greatest. Only a well-implemented and comprehensive rehabilitation programme can address these issues to the extent possible, with the costs of such a programme being entered into CBA.

This lacuna also brings us to the very boundaries of what a techno-economic appraisal grounded in neoclassical economics can achieve. Other tools must be developed for use beyond this point.
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2 The Sat Talai Declaration, 28.4.1995. (translation from Hindi is author’s)
Tribal people
Land for land
Development oriented resettlement
Sharing of benefits with displaced people
Land in the command area, fisheries, jobs
Institutions and legal measures
REPARATION
People waiting to be resettled Standards of living