



An INTACH Series
CURRENT ENVIRONMENTAL ISSUES . 1

SARDAR SAROVAR PROJECT



THE ISSUE OF DEVELOPING
RIVER NARMADA

*As I build this dam
I bury my life
The dawn breaks
There is no flour in the grinding stone.*

*I collect yesterday's husk for today's meal
The sun rises
And my spirit sinks
Hiding my baby under a basket
And hiding my tears
I go to build the dam*

*The dam is ready
It feeds their sugarcane fields
Making the crop lush and juicy
But I walk miles through the forests
In search of a drop of drinking water
I water the vegetation with drops of my sweat
As dry leaves fall and fill my parched yard.*

- Daya Pawar
(song sung by Dalit women in Maharashtra)

PREFACE

Rivers provide the most wonderful backdrop for the expression of harmony between the environmental physical processes, the unbroken panorama of life and the everchanging tapestry of cultures. The physical processes of climate, water cycle, weathering of the substratum, land form evolution and life together create a river. Life itself is a continuous stream of change and the adaptation based upon an unchanging core identity and the unvarying purpose of life. The wide spectrum of living forms and their life cycles include the human species as one recent minute entity. Human culture is the collective response to this rapidly changing tapestry, their recognition and an expression of gratitude for the ability to survive and much more less definable.

The very root of human culture has set down deep in the alluvial flood plains of ancient rivers. As development and modernisation influenced basic value systems and human attitudes humankind and rivers parted ways. Rivers were buried under silt and rivers buried the centres of river valley civilisations under mud.

Ours was a country which always had a spectrum of vibrant cultures. This has been so because the land was rich. We owe the richness of our land to our rivers big and small, great and obscure. That is why in India we venerated our rivers. Narmada is one of the most sacred of our rivers flowing through the real heartland of the sub continent, far surpassing Ganga or any other river in India in antiquity. According to our beliefs she should never be fettered.

We have seen the slow death of other rivers in our land. The tired, exhausted land can no longer support a youthful river. So the latter also dies prematurely. We have seen the outright murder of our rivers for short term profit. We have stone walled our rivers or put them in dungeons of concrete. Naturally then, the land and the culture will die. There is no choice. Of course one can dogmatically say that the culture is advancing and is successful. One can find prosperity in the teeming, consuming and squandering urban centres and in the parasitic pollutive short lived industrial centres. But then the ultimate index of success is survival. And this demands the essential conditions for life to continue for all and forever. That is exactly what a living river symbolises.

We in India had been for a very long time worshippers of our rivers. For us all our rivers are sacred. The names we adorned our rivers with reflect our attempt to bring down to earth around us the Gods we conceive of inhabiting the heavens. Time erodes and weathers down cultures and mountains alike. They transform the rivers also. The river Saraswathi is an example which can now be located only in mythology and traced on earth only by specialists like geomorphologists. Practically every river in India is dying in front of our eyes. Erosion has silted up their beds. So during the monsoons they cause disastrous floods. Dams have simultaneously drowned their reaches and amputated parts of their bodies. The denudation of the hills have desiccated their source and starved them to death. Over exploitation of their waters have emptied them. Uncontrolled pollution has converted them into sewage channels. As the freshwater discharge become less sea water is moving inland through them. Mechanical manipulations of their form in the name of flood control, navigation etc. have mutilated their graceful shape.

Narmada, our biggest west flowing river had escaped till recently. Our east tilting sub-continent gets most of its rain from the south. So the western portions in general have copious fresh water. For a complex set of reasons Kutch and Saurashtra alone, located at the extreme north west are becoming drier and drier. The forests in the Vindhya, Satpura ranges are gradually receding. Yet, Narmada continues to flow unfettered. All other peninsular Indian rivers and even their tributaries have been dammed. Mahanadi, Godavari, Krishna, Cauvery and many others already have their flow tapped. Careless technological capability and lack of understanding of long term biospheric processes coupled with distorted visions of continually increasing linear growth and development have got us to erect barriers across practically all our rivers. Invariably as in the case of all other modern problem solving, here also we turn a blind eye to the root cause of the problem which we know is within us, in our attitudes. But we attempt to suppress the symptoms of our disease and seek magical cures. Solutions for our explosive population growth, distorted land ethics and boundlessly growing needs for the fruits of the earth are sought in irrigation, biotechnology, reliance on toxic chemicals and market manipulations.

The attempt to dam Narmada is yet another symptom of the same collective diseased human mind. It too has all the aspects of other modern developmental schemes. The real long term costs are masked or simply overlooked if not altogether suppressed. Empty promises are copiously given which can never be fulfilled nor are intended to be kept. The all pervading corruption, inefficiency and unjust sharing of meagre benefits give it a banal familiarity. Only the dimensions of this development are mind bogglingly huge. The gullibility of the trusting, common people who are patiently waiting for some relief from the increasing crushing poverty has now become the weapon in the hands of the exploiters who masquerade as agents of development. The inability of the common people to understand issues going deeper beyond the deceptions and empty promises, to organise themselves and defend their resources, with the political machinery opting to be with the exploiters further fuels the vicious cycle of destruction and exploitation. A country of almost 900 million people has become a mute witness or a mere indifferent background for the destitution of a few million of them and the destruction of an extensive rich part of it. This is the terrible tragedy of what is happening in Narmada.

What is happening to Narmada is a clear indication of what is happening to each one of us and to our future. Humankind has come far enough to be able to take stock of what we have gained and what we have lost in the blind pursuit of development and progress. Each one of us must take the moral responsibility to ponder and take a stance, a stance not merely for or against the dam but for the whole future prospects of our species. We have the ability to foreclose the choices of the posterity. Our hope and promise to those yet to be born is inextricably linked up with this stance. We can either be on the side of viability, sustainability and equitability across barriers of time and space or we can be selfishly exploitative, destructive for a very short time. Narmada offers us an opportunity for this self realisation.

River Narmada

Narmada river originates in the Amarkantak plateau located in the Shahdol district of Madhya Pradesh. It flows 1300 km west

through sal and teak forests, through gorges and broad valleys to merge with the waters of the Arabian Sea in the Bharuch district of Gujarat. It is one of the most sacred rivers in India. With many short tributaries flowing into it from north and south, the Narmada basin forms a very important topographic feature of peninsular India. At a time when the Indus and Gangetic valleys were uninhabited wilderness, Narmada valley was the home for a rich mosaic of human cultures. Since those times lost in antiquity till today a very large human population including a variety of tribal societies such as Bhils, Gonds, Saigas, Kurkus, Bhilalas have continued to live depending on Narmada. In short the Narmada basin forms an ideal microcosm of our country with its extraordinary rich natural heritage supporting cultures ancient and more recent. People of India venerate Narmada river as the epitome of freedom and sanctity. Even pumping the waters of Narmada for any purpose is considered by many as sacrilege.

The Narmada Valley Project

As part of the developmental policy our country adopted since independence, to meet the requirements of the growing population for water, power and marketable commodities there has been the demand to utilise the waters of Narmada more and more, in particular after the commencement of Five Year Plans. Since Narmada flows through the States of Madhya Pradesh, Maharashtra and Gujarat this led to disputes between the involved States. In 1969 to solve this thorny problem, the Government of India constituted the Narmada Water Dispute Tribunal (NWDT). Almost after 10 years of legal wrangling the Tribunal came out with its final verdict. Massive schemes to tap the water potential of Narmada were given shape to by planners, technologists and engineers thereafter. The thrust of all these developmental measures was mega river valley schemes geared to meet power and water needs of the growing industries, urban centres and the needs of the rich cash crop farmers. Not only the technologists and planners but also the politicians were exclusively for such costly, unjust, short term resource mining.

According to current plans, the Narmada basin will have more than 3200 dams of which 30 will be major dams, 135

medium and the rest small. In fact the whole construction activity envisages a century long phase. Of this enormously destructive 'developmental blueprint' the most destructive dams will be the Sardar Sarovar Project (SSP) under construction at Vadgam in the Bharuch district of Gujarat and the Narmada Sagar Project (NSP) envisaged at the Punasa in the Khandwa district of Madhya Pradesh.

But today Narmada is no longer an issue revolving around a dam or a number of dams. It has become the fountainhead of questions and thoughts related to the whole of human responsibility and human goals. Through Narmada, we are beginning to see the course we have opted for the future of the whole of humanity. The inter-relationships between economic development and the life supporting environment is better understood now. The issue of the sustainability of human survival dependent on natural resources particularly water, soil and easily accessible and less pollutive forms of energy, are being looked at critically. Social and political issues such as survival rights of tribal societies, the immorality and impossibility of relocating people who are unable to compete with us in the current world, the need to and the means of truly democratising all decision making, the issue of involving people in the developmental processes are being brought up by the currently raging controversy regarding Narmada. Over and above all these tangible issues, there is the ethical, almost philosophical question of our right to destroy a river which could have flown eternally supporting a wide variety of cultural and natural landscapes for the short term despoliation of urban consumerism.

Background to the Sardar Sarovar Project (SSP)

According to the integrated Narmada Valley Development Programme, the Narmada Sagar Project in Madhya Pradesh and the downstream Sardar Sarovar Project in Gujarat must both be completed together. Adequate water has to be stored in the Narmada Sagar reservoir and let out to fill the Sardar Sarovar reservoir. **The Narmada Sagar when constructed will submerge 90,000 ha. of land in Madhya Pradesh, while the Sardar Sarovar will submerge directly 39,000 ha. of land spread over the States of Gujarat, Maharashtra and Madhya Pradesh.**

Table 1.

Total Area (Official Estimate) to be submerged by the major Narmada Dams

Project	Total Submergence (Hectares)	Forest (Hectares)	Agricultural (Hectares)	No. of Villages
Sardar Sarovar (SSP)	39,134	13,744	11,318	234
Narmada Sagar (NSP)	91,348	40,322	44,367	254
Omkareshwar	9,393	2,471	-	27
Maheshwar	4,856	-	-	58
Total	1,44,731	56,547	55,681	573

Source : Narmada Project Authority

This immense spread of land going to be drowned is immeasurably valuable forest which our denuded and desertified country can never afford to lose. Along with the forests earmarked for destruction are the richest fertile valley lands which had been under cultivation for millennia. The lands to be flooded are unquestionably the only sustenance for a large population of tribal and marginal farmers. Yet in our democratic, socialistic, independent country where development is supposed to be for the welfare of the ordinary citizens, the Narmada Water Dispute Tribunal has not bothered to estimate the socio-economic, cultural and ecological destruction due to the river valley development projects they have proposed. In spite of the fact that some of the dams in the Narmada basin were taken up for construction in the early 1960s, the various negative aspects of this project such as dislocation of large tribal populations, deforestation and even the total inability of the projects to deliver the envisaged benefits came to light only towards the late 1980s. Developmental fiascos which should have enabled us to rethink on our costly suicidal course have not even been topics of public debate. Even within the restricted ambit of directly affected people, such discussions have not evolved. Already the Narmada Sagar Project is stalled enmeshed in social, economic and ecological problems. But the Gujarat government in particular beginning from the Chief Ministership of the late Chimanbhai Patel took the stance that the Sardar Sarovar Project is the lifeline of Gujarat and bulldozing all objections went ahead with the project. In spite of critical feedbacks from institutions like the World Bank, irrespective of insurmountable financial crisis, each day adding to the terrible trail of human rights violations, the vested interests within the social and political leadership of Gujarat is obstinately going ahead with the construction of SSP.

Already 5 dams including Tawa, Sukta, Kolar, Bargi (Phase I & II) are nearing completion or are already completed as part of the Narmada Valley development. These dams are more than enough to show us the irreparable environmental and social disruptions and the massive economic loss inflicted upon the region. For example Bargi dam alone has uprooted and created more than a lakh refugees most of whom are tribal people who have not been paid even a nominal monetary compensation until today. These

hapless people who were part of the age old rich rural agrarian secure social systems have been transformed overnight into mere shadows of people counting their last days in the slums of Jabalpur and Vadodara. It is only since public spirited people like Dr. B.D. Sharma have brought out their horrendous plight that even within our country we are hearing about this section of our society earmarked for annihilation through our development projects. We are shocked when confronted with this unpardonable injustice perpetrated on our own people. On the other side the disparity between the real achievements and the promised returns from these huge investments in irrigation enhancement, drinking water supply and electricity generation schemes are even more unbelievable. For example Bargi was envisaged to irrigate 4.44 lakh ha. fields. But actually water reached hardly 12,100 ha. and even the lands that got the canal waters were totally destroyed through water logging. The soil was unsuitable for canal irrigation and the canal designs did not provide for draining the surplus waters. The Tawa project which was completed in the mid 1970's in Madhya Pradesh also created only waterlogged wasted lands.

The Tawa (Phase I, II & III) Project completed in 1981 was designed to irrigate 55,000 hectares. But by 1978 beginning itself problems of waterlogging became acute. It was advised that the entire canal be lined with concrete to prevent further destruction of fertile soils. Seepage loss from the canals had become 60% instead of the expected 30%. Lining of the canals and construction of artificial drains to connect with the natural drainage system to prevent waterlogging became so expensive that it was beyond the capacity of any farmer to repay. Command area development alone came to be as much as Rs. 5,700/- per hectare. Finally in some villages, roads were used as drains for the excess water from seepage and waterlogging. Also good agricultural land had to be diverted for construction of drains in order to prevent the rest of the land from getting destroyed. Thousands of acres of invaluable farmland became uncultivable wet deserts and the Tawa dam became a tragic case study of the horrendous consequences of large scale irrigation in fragile soils.

It is now feared that once the Sardar Sarovar Project is completed, it will prevent the drainage of the Narmada Sagar -

Omkareshwar composite command groundwater reservoir in the direction of the natural slope of the Narmada Valley ie. towards Gujarat. Waterlogging will then affect more areas.

In areas where the fields are not waterlogged, the sudden availability of cheap and abundant fresh water through canals encourage the massive conversion of traditional farmlands which have wheat, jowar and other coarse grains along with citrus, bananas legumes etc. into very profitable water demanding cash crops like sugarcane. The sudden prosperity of the large landowners in turn initiates social and economic disequilibrium which has its negative impact both politically and ecologically. Once the canals are completed it need not be possible to actually regulate water use or encourage the really necessary and suitable crops like food grains. The immediate profitability thereafter decides the direction of the evolution of the agrosystem to which the political leadership will always be subservient. Along with the disappearance of the cheap local coarse food grains there is the simultaneous, far costlier damage to the fields due to waterlogging, salination, chemical toxicity etc. through excessive irrigation.

Since 1961 through the planned economic development implemented through Five Year Plans we have taken up the construction of 246 major River Valley Projects mostly for irrigation. Of this only 65 have been completed. Taking into consideration the negative environmental and social impacts of these mega projects and the fact that there is no possibility of recovering the thousands of crores of rupees invested in them, many experts and even the Parliamentary Public Accounts Committees have repeatedly asked for a moratorium on mega dams. According to a report based on data of 1990, canal irrigation from big dams costs above Rs. 30,000. per hectare of command area. The soil and water conservation measures and other essential land preparation costs are over and above this estimate. We definitely cannot afford such an enormous squander of scarce national resource. **Between 1975 and 1982, big dams alone have inflicted upon us the dead investment of atleast 20,530 million rupees. (Vohra, 1987)**

To appreciate the magnitude of this fiasco, it is necessary to understand that the total potential that is claimed to have been

created by the so-called major and medium sector (MMS) of irrigation during the 40 year period from the beginning of the First Plan in 1951 to the end of the Seventh Plan in 1990 was no more than 20.2 million hectares (mh). Even in this it has been reported that there has been an unexplained disappearance of 4.9 million hectares of precious irrigation potential. What has been reported as lost represents nearly 25 percent of the claimed total potential. The seriousness of the setback also becomes clear when we consider the replacement cost of the lost potential at today's prices. According to the Ministry of Water Resources the cost of producing 1.76 mh of irrigation potential by large projects during 1992-93 is Rs. 10,701 crores. Thus the cost of creating one hectare of potential during the first three years of the Eighth Plan comes to Rs. 60,000/-. On this basis the replacement cost of the lost potential would be considerably in excess of Rs. 30,000 crores if first, the figure of 1.76 mh is suitably corrected and secondly, if the escalation factor is also taken into account (Vohra, 1995).

The most irresponsible behaviour of the Ministry of Water Resources can be understood only if one sees how closely it has always identified itself with the major and medium irrigation sector and consistently painted it in the rosiest of hues. Yet the serious deficiencies and major scandals regarding large river valley projects have been brought to light again and again by responsible officials and researchers. Its failure to make quick use of the potential created by it and its neglect of the problems of waterlogging and salination in Command Area have become well known. The premature siltation in reservoirs, causing disastrous floods during monsoon when the overflowing reservoirs have to be opened up to save the dam and absolute drought during summer because the silted up reservoirs cannot hold even a fraction of the expected storage also is a regular phenomenon all over the country. Its inability to increase water rates in order to meet an annual loss of around Rs. 2500 crores on operation and maintenance charges alone also makes the whole venture economically unviable. In addition to all this the productivity of canal-fed areas is deplorably low and the damage the large scale canal irrigation does to vast areas of prime quality agricultural land in our country is incalculable. According to a report (Vidyanathan, 1989) an estimated 13 million hectares [8 million by waterlogging

and 7 million by salinity (alkalinity)] of land is forever destroyed by canal irrigation and the extent is growing. The large scale conversion of agricultural land into monoculture tree crops or cash crops or housing colonies or industrial estates is also happening in spite of all the effort and funds pouring in for river valley projects for agricultural development. This sort of disastrous shift in land management also is taking place in the name of development. For example in Kerala the area under paddy cultivation is sharply declining even after the government has spent about Rs. 1500 crores on irrigation projects. The total revenue earned after this heavy investment is only a paltry Rs. 2 crores per year. While it requires around Rs. 40,000 crores for the completion of spill over projects during the ninth and subsequent plans as far as the whole country is concerned, it requires Rs. 1000 crores more to complete the projects on hand in Kerala even according to present estimates. The case of the notorious Kallada Project in Kerala brings out the unviability of major dams clearly. This project in southern Kerala which was started 34 years ago and whose cost estimate has jumped from Rs. 13 crore to Rs. 458 crores (a 3347 percent increase!) is "still a good source of making quick money for engineers, contractors, politicians and a few lawyers" according to none other than the former A.G. of Kerala (Joseph, 1995) It is against this background of our experience from big dams that we should attempt to view the SSP.

The Projected Objectives of SSP and the Feared Impacts

SSP is the costliest and the most massive multi-purpose project taken up in our country so far. **According to the claims of the Sardar Sarovar Nigam Ltd., the apex body constituted to oversee the implementation of the project, 1.8 million hectares of land will be irrigated by this project along with the generation of 1450 MW of electrical energy. More than the raw figures, the promise of providing water to the 40 million people in the Kutch and Saurashtra part of Gujarat and the Barmore and Jallur districts of Rajasthan (which are described as perpetually drought affected) remains the most attractive objective of SSP.** But there are many in the world, not only environmental activists and human rights supporters but many highly competent economists,

planners and technocrats who, along with the directly affected oustees from the SSP, view this as the most horrendous social, economic and ecological disaster being implemented in the world today. The following few highlights though like the proverbial tips of the iceberg themselves are shocking enough:

What would be the ecological cost of SSP?

The SSP can be seen to be the most destructive project we have ever conceived when we take up the issue of the precious land that will be submerged, destroyed in many ways for ever. As mentioned earlier SSP and NSP will together submerge about 1,30,482 hectares of land of which 55,681 hectares is prime cultivable land and 54,076 hectares is forest land. In addition to this a very large area of forest and other land resources will be razed to the ground by the thousands of labourers staying in the area during the long years ahead for the construction of the dams. Over and above all this, there is the incalculable qualitative changes in the ecosystems due to the massive construction activities and long lasting environmental impacts of the dam and the reservoir. The degradation of surrounding forests and the destabilization of the remaining agro-ecosystem all around the reservoir are evident in all dams sites. The drastic change in the local climate of the area due to deforestation and the ecological adverse effects of the artificial reservoir of water on surrounding land and vegetation will ultimately harm the productivity of the land and trigger off a chain reaction of ecological destabilization of the whole area. The meandering reservoir will inundate all the low lying areas which will naturally contain the richest of forests and the most productive of agricultural land. The ecological damage due to the fragmentation of the forests and the temperature and climate changes that the large body of water creates will naturally affect the overall rainfall, climate and productivity of the entire area. Moreover the loss of vegetation cover in the catchment of the reservoir will result in massive siltation and curtail the inflow of water into the reservoir. This will together reduce the water retentive capacity of the reservoir.

The additional land required for resettling the thousands of families and their livestock displaced by the project also has to be

considered. In 1987 the Ministry of Environment and Forests (Govt. of India) had approved the diversion of 13,385.451 ha. of forest land for SSP. But actually the Department had tried to convince the Central and State Governments of the inadvisability of converting almost 55,000 ha. of forest into a reservoir.

The Department did not want any change in the legal status of the land in question, but had directed the concerned States to afforest double the area submerged in non-forest land as the project violated the 1980 Forest Conservation Act. It also had ordered the States to prepare catchment area treatment plans in detail and insisted that forest lands should not be used for rehabilitation of oustees and that tree felling would be permitted in the submergence areas only up to 4 meters below the full reservoir level. The Department also insisted that funds required for compensatory afforestation would be in addition to the normal State budgets for the Forest Departments and that such expenditure be at the cost of the project. There were also strict guidelines given for wildlife management, sand quarrying, surveying, demarcating etc.

All these conditions remain in paper without being considered of any value by the project authorities.

Does this project actually bring under agricultural production more land than the better quality land submerged or otherwise taken out of socially productive use ?

The SSP and the NSP together will destroy more than 1,27,000 hectares of fertile agricultural lands and rich natural forests through submersion. The more than 75,000 km long canals of SSP, the most extensive network of irrigation canals in the world envisaged so far, would alone require more than 80,000 hectares of land. Over and above so much of productive land permanently destroyed there will be the enormous extent of land needed for the project colonies, powerhouses, powerlines, roads, quarries etc. This enormous land modification is being carried out currently with absolutely no environmental impact assessment, without paying any heed to directives from the Supreme Court, directions from the NWDT nor following the guidelines of the Ministries of Environment and Social Welfare.

The SSP cornered mass support in Gujarat by promising a permanent solution to Gujarat's drought problems. Are the areas proposed to be irrigated through SSP really capable of supporting intensive canal irrigated agriculture?

The land which is being submerged is actually the most fertile lands which had been under cultivation for centuries under fairly stable and viable land use which never needed artificial irrigation. On the other hand extensive stretches of the Command Area where water is proposed to be taken through the costly canals are areas with black cotton soils, highly susceptible to waterlogging or very dry sandy soils susceptible to salination.

The SSP plans to irrigate 1.8 million ha. of land spread over 12 districts in Gujarat and an additional 75,000 ha in Rajasthan. **But the fact is that there is about 17 percent less water in the river than planned for. The amount of water actually available for use at the dam site at 75% dependability is only 22.69 MAF (million acre feet) and not 27.22 MAF as assumed by the project authorities.** The decreased water yield makes the entire claims of the project meaningless. The water from the Narmada according to the NWDTA is to be distributed in the ratio 65:32 to Madhya Pradesh and Gujarat while Rajasthan sharing the remaining 3%. Thus while under the original estimate of river yield at 27.22 MAF Gujarat would receive 9 MAF of water, under the revised actual yield of 22.69 MAF, its share would drop to 7.26 MAF. This reduced quantum of water is specially significant for those at the tail end of the SSP system ie. Kutch and Saurashtra since they are the most likely to suffer if there is less water.

The availability of water in the SSP reservoir depends critically on the graduated release of water from upstream projects in Madhya Pradesh (Narmada Sagar, Maheshwar and Omkareshwar). None of these projects have any chance of ever being completed. Thus without water from these projects the irrigation and power benefits of SSP would drop by 17% and the irrigated area drop by 30%. These two pitfalls would mean a decrease in the area irrigable by the SSP to as much as 58-69% of the original estimate.

In addition to this, the irrigation efficiency of the SSP is likely to be only 46% (ignoring evaporative losses) and not 60% as claimed (Ram, 1993). This estimate is endorsed by the World Bank itself according to whom "most irrigation commands in India probably have an irrigation efficiency of 20 to 35%".

Over and above all this is the evaporative and seepage losses of water even in lined canals. However the project authorities have grossly underestimated these losses and have in paper raised the total area irrigable. This they have done by minimising the amount of water they would deliver per unit area. Thus the area to be irrigated will drop by an additional 23.3%. Hence it is to be assumed that the irrigation benefits of the SSP are likely to be only 44.53% of what is claimed (Ram, 1993). All this will come to mean that the drought hit areas of Kutch, Saurashtra, North Gujarat and part of Southern Rajasthan will never benefit from SSP. In fact the project will be able to irrigate only 1.6 percent of cultivable land in Kutch, 9.24% of cultivable land in Saurashtra and 20% of cultivable area of north Gujarat.

The worst threat from the SSP is the danger of agricultural land destruction by large scale canal irrigation. About half the proposed Command Area of the SSP is prone to waterlogging and salination. Preliminary studies (ORG, 1982) have shown that less than half the Command Area can be called "suitable" for irrigation. 25.61 percent of the Command Area has severe limitations for sustained irrigation and 26.5 percent is not suitable for sustained irrigation at all. That means that 52% of the Command Area faces high to very high probability of waterlogging and salination. 41 percent of command area in Kutch and Saurashtra is not suitable for irrigation at all, whereas the remaining 59% has severe limitations for irrigation. Considering the skyrocketing cost of SSP construction, it is estimated that the cost of irrigating one hectare of the Command Area will be more than Rs. 1 lakh, making it the most unviable project.

The already well irrigated rich areas of Bharuch, Khera and Baroda districts will be the first to receive irrigation water naturally as in all such development projects, The economically strong and politically powerful areas will be given more water since the canal

system will not be ready initially beyond the Mahi. Once the farmers get water in large quantities, they are forced to and also tend to shift from multi cropping food farming to water intensive cash crops like sugar cane as has happened over the entire Ukai dam command. By the time the whole system of canals are built, the economic and political clout that comes from growing cash crops makes it difficult for the government to curb their overuse of water. Seven large sugar factories have already come up in the initial reaches of the SSP Command Area despite the fact that almost no sugarcane is grown there at present! In the Ukai Project in Gujarat, sugarcane now accounts for over 75% of the Command Area although the planners had originally decreed that only 30% of the command shall grow sugarcane. The official canal operation policy of the SSP is bombastic in its claims of just water distribution through water co-operatives, scientific protection of the irrigated area from waterlogging and salinity, but considering the gigantic dimensions of the project, vast areas to be irrigated and the existing corrupt and inefficient social, political and official systems, it would be impossible to fulfil a fraction of these regulations and conditions.

Will the drinking water needs of millions of people ever be fulfilled by SSP ?

Drinking water is planned to be supplied to 8215 villages and 135 urban centres in 12 districts of Gujarat, including all villages and cities in Kutch and Saurashtra. This claim has been one of the main moral and political justifications for the SSP beyond any consideration of cost-benefit analysis. Although bombastic claims about the supply of drinking water "permanently solving the water supply problems of villages in Kutch and Saurashtra" are abundant, none of this is supported by any comprehensive data, master plans or cost-benefit or feasibility analysis. The number of potential beneficiaries, villages and towns have increased tremendously without concomitant increase in the quantum of water earmarked for drinking water. At the time of NWDTA, no figures for drinking water beneficiaries were mentioned. But since then, the number has changed drastically from 28 million (1983) to 32.5 million (1989) to 40 million (1992) and again to 25 million (1993) ! Similarly the number of villages that are supposed to benefit has increased from

zero in 1979 to 4719 in the early 1980 to 7234 in 1990 and finally to 8215 in 1991.

The project promises drinking water for 948 villages in Kutch and 4877 villages in Saurashtra. But surprisingly there are only 877 inhabited villages in Kutch and 4727 villages in Saurashtra! Apparently in their generosity the project authorities were inflating all the figures which could depict SSP as a most desirable developmental measure. It is now obvious that the project itself will never get completed nor will water flowing through the canals ever reach the villages at the tail end of the distributaries. At the same time work on the dam continues to take away all the money badly needed for rural developmental schemes in Saurashtra and Kutch including drinking water supply schemes which should have fructified immediately.

According to the two available reports on drinking water (GWSSB, 1982, NCA, 1991), the total projected water requirements in 2021 for domestic, industrial and thermal power projects is estimated to be 1.37 MAF. SSP is to provide 0.75 MAF which works out to a gross demand of 1.06 MAF after adding losses in the system.

The NWDTA had allocated 1.06 MAF for non-agricultural uses from Gujarat's share of 9 MAF water from the Narmada. Of this 1.06 MAF, 0.853 MAF has been set aside for drinking water purposes and the rest (0.207 MAF) for industrial use. According to one study (GWSSB, 1982) drinking water requirements are 227 litres/capita/day (LPCD) for cities with a population of more than 1 million, 140 LPCD for other urban areas and 70 LPCD for rural areas. In the same document the drought hit rural areas of Kutch and Saurashtra are assigned only 55 LPCD. It is mentioned that areas with high cattle density will be provided with 30L/cattle/day but then this need is ignored while calculating the amount of water required! It is worth remembering how the sad picture of thirsty cattle was used in all the media as advertisement for the project's benefits.

The cost of supplying drinking water to an extensive area has not been included in any cost-benefit analysis of the SSP to date.

This additional cost will make the financial feasibility of the project very questionable (Ram 1993). The estimated cost of supplying drinking water is 728 crores (1981-82) which is well over 1500 crores in current terms (GWSSB, 1982). The NCA (1991) report however asserts that the cost "would run to several thousand crores". While the GWSSB study considered 4719 villages in its cost estimates, the current number of villages is estimated to be 8215. The projected cost of supplying water to villages is 3-4 times that of supplying water to urban areas. Thus the cost of supplying drinking water may become incalculably high with the current increasing claims and targets.

The GWSSB report (1982) displays a strong urban bias in the supply of drinking water. In an area where the population is approximately 70% rural, 63% of project beneficiaries are urban dwellers. Cities are to receive 80% of the total quantity of drinking water. Four major cities, Ahmedabad, Vadodara, Rajkot and Jamnagar accounted for over 40% of the water to be supplied by SSP and Ahmedabad and Vadodara alone accounted for 25%. Thus it is clear that the large urban centres in Gujarat are to be the true beneficiaries of SSP (Ram, 1993).

The geographical spread of the beneficiaries (the area of Kutch and Saurashtra alone is 109,630 sq.km.) requires very large pumping capacities, thousands of kilometres of pipeline construction and maintenance, filtering and treatment plants and setting up of extensive bureaucratic and technical infrastructure, all of which is prohibitively expensive. According to the Central Ministry of Water Resources and also the World Bank water will reach Kutch only in the year 2025 and Saurashtra in 2020! Another aspect is the need for large pumping facilities, all requiring electrical energy, due to the widely dispersed and diverse terrain. As such, the SSP has run into serious financial crisis and hence it is highly probable that drinking water from SSP may never reach these areas.

Will the SSP produce the expected quantity of electrical energy ?

The planned installed capacity of SSP is 1450 MW, of which 1200 MW will be generated by turbines installed in the riverbed

powerhouse (RBPH) and 250 MW from the canal head powerhouse (CHPH). But actually power will never be produced at 1450 MW. The RBPH will produce electricity only when there is enough water in the river. As the canals for the SSP are completed, water abstraction for irrigation will decrease water diverted to the RBPH turbines. Thus the firm power generated by RBPH will drop from 415 MW to zero MW and the power from CHPH will increase from 24 MW to 50 MW. Thus the final firm power from the entire SSP is only 50 MW, while at its highest, the firm power from SSP is 439 MW. However, the graduated release of water from the Narmada Sagar Project upstream is essential for even this power generation to occur.

It is now clear that the SSP will actually consume more energy in Gujarat than will ever be produced for Gujarat by the dam. Power from the SSP is to be divided amongst Madhya Pradesh, Maharashtra and Gujarat in the ratio of 51:33:16. Gujarat's share of the highest firm power production is 70.4 MW (16% of 439 MW) which will only be obtained in the few years the canals are not supposed to be in operation. Once the canals start functioning, the SSP will require vast quantities of energy for lifting water in the canals, operating the extensive tubewells etc. Supplying drinking water to 8215 villages and 135 towns is going to require large expenditure of energy for pumping and maintaining flows in very long pipelines. None of these power costs have been included in any cost-benefit analysis of the SSP. (Ram, 1993)

Is it really ever possible to successfully relocate and rehabilitate such a large human population belonging to fragile, distinct, diverse cultures ?

The SSP reservoir will directly destroy under submersion 37,000 ha. of land. Canals, weirs, dykes, colonies for project staff, land to be protected immediately around the vicinity of the reservoir to prevent siltation, and for compensatory afforestation, forest land which will have to be developed into a Wildlife Sanctuary after evicting the local resident tribal societies will all together result in the displacement of more than 10 lakh people. A very significant proportion of the population which will be displaced are tribal

societies. These tribal groups with very distinct cultural identities cannot easily adapt to any means of survival and in any place other than what they had been traditionally accustomed to. Our past experience and the current trends leave no doubt as to the fact that there is neither the political will nor the land or money even to merely physically resettle them. In today's cruel competitive world we all know that once such fragile human societies so deep rooted in their surroundings are uprooted they perish in no time. We can forcefully relocate communities but we can only rarely rehabilitate even individuals and never for sure human communities of such complex dimension.

What is going to be the actual final cost ?

The almost certainty of the fact that in spite of the enormous investment even a small fraction of the professed objectives cannot be achieved becomes obvious to anyone. It is clear that economically SSP in going to be a gigantic losing investment. According to the World Bank's current estimates the construction costs of SSP alone will come upto about Rs. 34,000 crores. Independent estimates put the figures as high as Rs. 44,000 crores. The drinking water supply scheme linked up with the augmented water availability are not included in this figure. After the withdrawal of the monetary assistance from the World Bank and the Japanese government, even if all the money earmarked in the Gujarat's Five Year Plan for irrigation and electricity generation are diverted for SSP it will not be adequate to complete the project. As it is, SSP spending is 53-63% behind schedule and it consumes 80% of Gujarat's irrigation budget. Only about 10-20% of the total project costs has been spent so far and hence it is wrong to conclude that the project is now a fait accompli and cannot be reviewed.

Beginning of Organised People's Resistance

Gradually over the last few years, individuals, many small local groups and organisations such as the Narmada Bachao Andolan (NBA) supported by scientists, technologists, economists, social scientists and some politicians, along with global environmental organisations have studied critically all aspects of the SSP and

generated a considerable amount of information which is adequate to make any one of us take a stance against the project. Going beyond opposing this project, the path of enquiry of this movement is now leading to critically opposing the consumer culture, lifestyles and goals of modern civilization, the inequality and injustice which have become so much a part of the current world order and suggests as an alternative vision for the future a life of simplicity, frugality, tolerance based on biospherical justice. But the most potent issue which has drawn attention to the project and precipitated public resistance to it is the inhuman way in which the project affected people are being dealt with. The SSP is at present a boon for a handful of contractors, officials, and politicians. In future if completed it may be profitable for a few more people. But from the very first day of implementation of the project all through there is a growing multitude of very ordinary poor people whose lives have come crashing down.

Unparalleled Genocide

More than the ecological impact or the economic loss, the Narmada issue concerns us personally directly through its planned pogrom of the people of Narmada valley. It is ironic that Narmada valley which is possibly the oldest centre of agricultural civilization and what we consider the Indian culture is targeted for erasing through drowning. For the average urban Indian it is really difficult to conceive of the impact of the dam on the lives of lakhs of tribal people who live totally dependent on the river and the forests around. They venerate the river and the forests and they depend on both for survival. The husbandry of their natural resource base had been so efficient that they have remained self sufficient for so long without destroying their life support systems. But the concept of sustainability dawned on us only after our own excessive exploitation had damaged its very base. Using the machinery and the power of the State, driving them out of their homes might succeed and its impact is not as outstandingly patent as the concrete edifice of a dam. In fact in our country the millions of human lives which have been rendered destitute because of the various development projects have never been calculated as part of the cost of development. The growing slums in the cities and shanties along the roads and the rail tracks,



the beggars and the scrap collectors who eke out an existence in the urban refuse piles all constitute a section of the society earmarked for annihilation to make the lives of a small number of people easier.

In fact it is not possible to accurately estimate the magnitude of the social disintegration and the cultural collapse directly due to SSP. In the modern developmental jargon we have coined a new term for these people whose existence suddenly collapses due to some decision taken in some far away Yojana Bhavan. They are called the 'project affected people' further abbreviated to PAP. Truly indicative of what is coming is the case of 800 families who were uprooted in 1960 for the Kewadia colony of the SSP staff. They have not been given even monetary compensation upto now. According to procedures framed ostensibly to save public (!) money, rehabilitation assistance is available only to those directly affected by reservoir submersion.

Yet lakhs of families fall within the deadly reach of this mega developmental project. The canals of this project alone are going to cause the uprooting of 1,70,000 families. The Wildlife Sanctuary which is going to be established as a window dressing of environmental concerns will force the evacuation of 108 villages. In the name of protecting the reservoir and for compensatory afforestation, countless thousands will be forced out of their hearths. Since below the dam there will no longer be the river, the survival resources of many more will disappear. There are no figures for the multitudes who currently eke out an existence by fishing, or by grazing cattle in the forests or collecting non-timber forest produce. The list is pretty long. The lives of at least 10 lakh people will be drastically affected. Yet according to governmental norms none of them have the right for resettlement and rehabilitation (R & R).

Even if we are to leave aside such vague numbers and come down to the formal PAPs definitive figures are surprisingly absent. Each year since the first estimates of NWDT their numbers are increasing. Tentative current official estimates are that in Maharashtra 3500 families, in Gujarat 4500 families and in Madhya Pradesh

33,014 families will definitely be flooded out of their homes. Even though the dam height is now 80.3 metres the basic surveys of submergible area oustees have not been completed. Hence the figure is expected to be even more.

In 1979 for the first time in India, the NWDT formulated a National Rehabilitation Policy for the PAPs. The policy promises as much land as lost due to submergence in addition to a plot for their house, short term monetary grant, monetary compensation for unmovable assets, grants for rehabilitation, infrastructural facilities for the community, irrigation etc. Although all these conditionalities had been laid down more than a decade ago, until now not even a single family who have been dislocated has received them. This gross injustice has been reported by several organisations like the World Bank and even pro-dam organisations such as the "Arch Vahini" demanding just rehabilitation.

In the project affected areas of Madhya Pradesh, Maharashtra and Gujarat, all that the government has done so far in the name of resettlement and rehabilitation is essentially forcefully evicting people, promising them neither monetary compensation nor equivalent land. In Gujarat, for 924 families, relocated in 1981 belonging to 5 villages, all that the government did was to pay compensation according to the Land Acquisition Act of 1894. These tribal families relocated in very poor quality lands far from their native places now live in utter misery. Even though these people were not materially affluent or prosperous, they had dependable social security in their tribal social order and clan relationships. And of course they had the sustainable healthy survival knowledge to meet all their material requirements from the forests and the river. When such internally and externally integrated communities are broken up and scattered in many places their collective cultural fabric gets totally shredded. The functional order of individual villages when broken up renders each family really destitute. In the new ecologically impoverished surroundings, their survival knowledge, art and craft, beliefs and traditions have utterly no relevance. In short, they have been condemned to slow dissolution and death. But compared with what is happening currently, those were kinder days. Now as the waters rise, as the construction activity gathers

momentum, hundreds of families are driven off their homes and lands using the police. Either by design or due to the chaos, cattle and other material assets are usurped from these innocent disorganised people and they are dumped with nothing to fall back upon in some remote degraded land.

When the pastoral people are not given land for grazing their cattle, when the forest tribes are not given forests to depend upon, when people who have lived since time immemorial secure in the close bond of kinships and mutual dependence are scattered over the winds, it is the modern development's genocide. This puts to shame marauding, plundering armies of the so-called less civilized times. Hundreds of families from Vadgam, Khatlebi, Makadkheda villages of Gujarat, the Manibeli village of Maharashtra and Chilkar, Amlali, Khatarkheda, Debani, Chachgva villages of Madhya Pradesh who were promised land and housing in rehabilitation centres, finding that they have been exiled to wasted lands have abandoned the so-called resettlement areas and come back to the Narmada Valley. Even the World Bank's Morse Commission report (an institution not famous for its stance in support of the poor people anywhere in the world) has described democratic India's governmental R & R in explicit critical terms. This report categorically states that there is no chance of real resettlement or rehabilitation for all the PAPs.

At the same time Gujarat government unheeding every plea from the affected, recommendations from NGOs and eminent people, Govt of India's directives and even court orders continued with the construction of the dam and closed the sluices which, coupled with the copious monsoon rains, resulted in unexpectedly quick and early impoundment of waters in the reservoir. Houses and fields of between 1200-2000 families were inundated during the monsoon of 1994 and there was not even a symbolic move to rehabilitate them anywhere. In pouring rain, as the waters were rising and swallowing all that they had in their lives, people who had no recourse but to cling on to whatever they have were driven away by brutal police force. In a few locations there were a few tin sheds on slopes above the rising water. What shelter they can afford to people who have nothing else excepting what they are carrying in their hands to rebuild their lives is a question which everyone of us, beneficiaries

and supporters of this development must ask ourselves. During the monsoon of 1994, the Narmada Bachao Andolan (NBA) activists who were working in the project affected areas and the people who refused to be driven away from their homes were repeatedly subject to police brutality and arrest. In the suddenly rising waters many villages along the banks of Narmada which were not facing the threat of submersion were completely cut off and the people marooned. With no governmental machinery to help them in any manner, humanitarian assistance to these man-made flood affected people also became the responsibility of NBA.

This prompted the NBA activists and the flood dislocated villagers to hold a public dharna in Church Gate in Bombay during July 1994. Their plea was for just compensation to those whose properties have been damaged by the waters and they were pleading for a factual, honest reappraisal of the whole project. Although Maharashtra Chief Minister Sharad Pawar invited Medha Patkar, leading the dharna, along with activists and affected people for discussion, he refused compensation outright. His condition was that if NBA abandoned its opposition to the dam, the government will consider rehabilitation. He also agreed to make available boats to the isolated villages. The government also agreed to constitute an independent fact finding team to visit and take stock of the rehabilitation centres. In spite of all these peripheral concessions and half hearted promises, the fact remains that the State, the Judiciary, political parties and the intelligentsia in this huge country have not taken upon themselves any responsibility nor shown any concern for this enormous crime against nature and humans.

Recent reports on the progress made by the three States on the issue of resettlement (NBA Press Release Oct.1995) are shocking. The work on the spill way portion of the dam was stopped in Jan. 1995 due to lack of progress in resettlement. It is seen that there is no worthwhile progress since January, 1995 as the following figures of progress in R&R in Gujarat (where by far maximum rehabilitation has to be done) shows:-

Table 2.

Resettlement (land allotment) in Gujarat

Date	Gujarat PAP's	Maharashtra PAP's	Madhya Pradesh PAP's	Total
Dec.'94	4344	656	2535	7535
Aug.'95	4360	656	2548	7564
Between Dec.'94 - Aug.'95	16	0	13	29

(All figures from official documents)

Thus in the eight months since the work on the dam was stopped, Gujarat has been able to resettle just 29 families. More number of families have abandoned resettlement sites in the period than that. These figures should be seen in the light of the fact that Gujarat has yet to resettle atleast 12,110 families, even as out of the over 41,200 reservoir affected families, an overwhelming 80% families remain, yet to be resettled. Thus there is absolutely no ground for resuming the construction on the SSP dam.

Actually the story is much worse. If we look at the figures of resettlement over the last 14 months we see that Gujarat Government has been able to resettle only 94 families from the three States. With greater number of area and people coming under submergence with each additional increase in height of the dam, the project authorities seem to be failing miserably in resettling them. This only proves that sufficient land for resettlement of thousands of families is just not available when 80% of reservoir affected families are yet to be resettled. On Dec. 14th 1994, a report by a 6 member all party team of MLAs from Madhya Pradesh, the Sardar Sarovar Displaced Inquiry Committee stated that only 2% of 33,014 families in the submergible area have been resettled. The rehabilitation sites were water-logged, amenityless, barren, waste and fallow land. More than 75% of the land allocated to the

dispossessed was of appalling standards. Even after three years they are still housed in tin sheds with no approach road and water supply and even the Rs. 10,000/- for making house foundation have not been given (VAK, 1994).

The chief obstacle to the process of resettlement (rehabilitation being a far cry) is the non-availability of land in Gujarat where maximum resettlement is planned. In a recent meeting the R&R sub-group of the Narmada Control Authority -- the inter-state monitoring and control agency -- decided that in future, Gujarat authorities should provide land in contiguous chunks of 200 ha. or more, so that more than 100 families can be resettled in one place. This reflects one of the basic principles of community resettlement. According to this decision almost all the present R & R sites in Gujarat would be invalid. Obviously concerned governments do not have the political will or sensitivity for proper rehabilitation. Resignation of an important supporting NGO of Gujarat - Arch Vahini from the SSP Rehabilitation Agency supports this contention (Himanshu Thakkar, 1995).

The History of Suffering and the History of Resistance of the people of Narmada Valley

Like all other developmental projects in the country, in the case of Sardar Sarovar Project also, the people who are directly affected by the project came to know about its impact much after the work had begun to dam the river. The illiterate, marginalized, disorganised farmers and tribals living in secluded villages scattered across the hills and forests came to know of what was coming only when the felling of forests and forced eviction started on the adamant insistence of the then Gujarat Chief Minister, Chimanbhai Patel for the speedy implementation of the project. When the massive felling and uprooting caught the media attention, many national and international organisations for the protection of nature, for the protection of tribal societies and for human rights started raising their voice against it. All over the world particularly in the less developed nations, most of such massive development projects for the exploitation of nature and traditional societies are funded by the World Bank. World Bank was funding the Sardar Sarovar Project

also. Hence naturally the World Bank became the target of the anti-dam movement.

Here rather than the complex and poorly understood impact of the gigantic project on the ecology of the area, its destructive impact on the fragile tribal societies and the poor people of the valley was highlighted. As the human rights violations mounted in the valley, the issue became better known outside. The immorality of uprooting and destroying traditional communities who have lived in harmony with their milieu in an egalitarian healthy social order, for the sake of ephemeral goals of the modern man and for what is considered as progress came to be realized by more and more people. We the people outside the valley who find our satisfaction in crass materialism, priding ourselves in providing tin sheds as rehabilitation for "those tribals" whom we consider as having nothing essentially reflect our inner poverty. The security given to countless people by the living river Narmada and the happiness their self reliant lifestyles had always provided them can never be equated with the surroundings we recreate in the rehabilitation centres. Uprooted from their motherland the tribal communities perish. But this holds true for us too in a more broad ecological sense. Possibly as mega development sweeps more and more of us also off to destitution in its accelerating momentum, there is a growing realization all over the world of what is really happening everywhere, including in Narmada.

Perhaps it is this collective growing consciousness that prompted even the World Bank to send to India in 1991 a two member team to assess the rehabilitation aspect of the Sardar Sarovar Project. Bradford Morse and Thomas Berger after visiting most of the places affected by the SSP submitted their report which came to be well known as the 'Morse Report'. This report in no uncertain terms, with factual accuracy severely criticises the unpardonable failures of the State and Central governments in the rehabilitation measures adopted for the project affected people of the SSP. The Morse Report was the strongest weapon the activists who opposed the dam could get. The renewed vigorous campaign by the activists across the world and the Morse Report together forced the World Bank to stop further funding for SSP. But the

Gujarat government with its then Chief Minister Chimanbhai Patel, as well as the Govt. of India simply refused any reassessment. The State machinery brought all forces at its disposal to crush resistance against the dam. As the country was sucked in deeper and deeper into financial crisis, with the emphasis on projects like the SSP, which were nothing but enormous drains of scarce public money, not only all other developmental work slowed down, but the daily lives of people also became a continuous misery.

Promises and offers to the people both affected by dislocation and expecting benefits from the project have been continuing for decades. But those detrimentally affected started losing all that they have in the world as the waters started rising. The realization that promises on the part of the government will not be kept, while overnight their lives were turning upside down, forced the people to organise themselves in the Narmada Valley. During the 1993 monsoon season confrontations between the PAPs and the governmental machinery started. Those who have been promised the life giving waters in distant Saurashtra and Kutch continue to wait neither believing nor disbelieving the promises they have got while the urban and industrial lobbies, land speculators and the rich farmers closer to the dam and sure of early benefits mount their pressure and lobbying for accelerating the construction of the dam. The complex web of the construction lobby with its conduits of bribe and corruption with ramifications in both the administration and political machinery remains the most vociferous proponents of mega developmental projects everywhere in India.

The rest of the population are either indifferent supporters or silent sufferers. No political party or national level political leaders has so far dared to commit themselves on the side of the suffering ordinary people. During June-July 1993 when Manibeli village in Maharashtra became the first village to be totally submerged under the SSP reservoir, the villagers along with NBA activists led by Medha Patkar were forced to take the stance that rather than face eviction they will drown themselves in the rising waters. They were forced to take such a stance due to the indifference of our society to the basic right for survival of its own weaker sections, in this instance living in the valley of Narmada. Even such an ultimate expression of non-violent commitment for the cause of survival was

met with unprecedented brutal police oppression. The broad public support to NBA's 'Jalsamarpan' agitation evoked a stalling response from the Central Government which constituted an Independent Review Committee under the chairmanship of the Planning Commission Advisor Sri. Jayant Patil. The Committee had its public hearing and invited opinion from any willing expert. Gujarat violently opposed the Central Government's gesture and refused to co-operate. The report of this committee which was to have been released in November 1993 got delayed indefinitely.

In spite of the fact that the Supreme Court had given a directive against forced eviction of the PAPs and in spite of the fact that the Central Ministries of Environment & Forests, Social Welfare and the Scheduled Caste and Scheduled Tribe Commission had demanded a total review of the project and the Narmada Water Dispute Tribunal, Narmada Control Authority and the World Bank also recommended total reviews, the Gujarat government disregarding all these directives, recommendations and opinions continued the construction of the dam submerging more and more forests and villages. The unprecedented heavy monsoon during 1994 caused severe floods in Narmada resulting in water level of the reservoir rising to unexpected heights. This caused even more misery as many villages which even according to the SSP authorities would not be affected were submerged. As the suffering of the ordinary people increases, their hope for justice from the State recedes. As the actual experience of the so called rehabilitated trickle back to those who are yet to be displaced, the resolve on the part of the latter not to accept governmental rehabilitation increases. These people have no history of organised resistance to the all powerful opponents like the State. The spectrum of human societies directly affected by the dam are non-homogeneous, afflicted by internal contradictions and conflicts. Yet the support of the people for the NBA and the stance that "even if one is to lose one's life one shall not abandon one's land" has been unanimous and strong.

The life and death struggle in the Narmada Valley continues

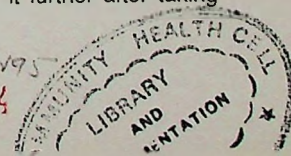
The non-violent struggle in the Narmada Valley which started as an agitation against the injustice of permanent submergence of

traditional lands and invaluable life support natural systems and forceful eviction of thousands of villagers and indigenous peoples has grown into a focal point of all struggles for the basic survival rights inside the country.

Bhopal Dharna and Fast - 1994

Thousand of peasants and tribals under the leadership of NBA converged in Bhopal for an indefinite dharna from the 18th October, 1994 with the demand to stop the work on the dam and also to provide minimum compensation and subsistence allowance for the families who lost their houses and land during the 1994 monsoon. The submergence due to the dam in the monsoon was devastating giving lie to all the estimates of the dam builders, and the backwaters reached up to the plains of Nimad in Madhya Pradesh. Any further construction of the dam would have brought more disaster and destitution. The Government of Madhya Pradesh was forced to take a firm stand in favour of stopping the work of the dam at 80.3 metres. But the Government of Maharashtra continued with cynical callousness towards its own people and supported the Gujarat government's demand to raise the height of the dam to 110 metres till the monsoon of 1995. The work on the dam was however halted due to several reasons including the strengthening struggle in the valley, the lack of progress in the resettlement and strangely also, because of a quirk of fate the entire stilling basin and the bund protecting the underground riverbed powerhouse were completely washed away during the heavy 1994 monsoon. Independent experts have raised questions about the flaws in the design, the structure, hasty construction and the geology of the dam which have brought about this havoc within two years of construction. The Academy for Mountain Environs in a geo-scientific survey in April, 1995, had found that the area around SSP has a fractured zone similar to that associated with the Latur earthquake and the SSP cannot be considered safe.

The dharna in Bhopal was launched to stop the continued construction of the dam up to a height of 80.3 metres. The Madhya Pradesh Chief Minister was committed to stop the work of the dam, although only after 80.3 metres and "raising it further after taking



stock of the resettlement" as he agreed during his several meetings with NBA and in the meeting of Sardar Sarovar Construction Advisory Committee on Oct.28th, 1994. This was despite the fact that even those families, submerged during the monsoon of 1994 could not be resettled when the height of the lowest level block was 69 metres. In view of this cynical callousness on the part of the government, the Andolan declared that four of the 'Satyagrahis' including Medha Patkar would undertake an indefinite fast from November, 21,1994 in Bhopal with the demand to stop the work on the dam and to make the review report public.

The Review Report

The fast went on for weeks with no response from the authorities. However subsequently the Review Report was made public. This long awaited report of the Independent Review Committee (mentioned earlier) indicated that many studies, action plans regarding the proposed benefits, hydrology, environmental and rehabilitation aspects, are still incomplete. The report raised questions regarding the government estimates of the water availability in Narmada. The report criticised the proposal to grow sugarcane in the SSP Command Area and made it clear that the irrigation coverage proposed for Kutch and Saurashtra are limited. The report strongly recommended a detailed planning for providing drinking water and asked the Govt. to publish a full list of all the villages and urban centres to be provided with the drinking water benefits. On the issue of rehabilitation, the review observed that efforts must be made to count all the various human, social costs of the project so that the data base needed for planning is comprehensive. But inspite of all these conditions, nothing has been done.

Singh Deo Committee Report

The most outstanding report about the tragic plight of those 'rehabilitated' PAP's have come from the earlier mentioned seven member Sardar Sarovar Displaced Inquiry Committee of the Madhya Pradesh Assembly. The Committee set up on 3rd December, 1994 chaired by the former Madhya Pradesh irrigation Minister,

Ramchandra Singh Deo has recommended immediate stoppage of the work on the dam.

Manibeli Meeting

On the 30th April and 1st May '95, an important meeting of NBA and supporters of the struggle was held in Manibeli. They discussed the current situation and further course of action, especially in the monsoon. The people of the valley who were facing submergence for the third time were determined to fight for their land and way of life to the last.

World Bank "Project Completion Report"

The World Bank has recently come out with a Project Completion Report (PCR) of SSP as the project had been closed as far as the Bank was concerned. The 400 page unprecedentedly long PCR upheld all the aspects that plague the unjust project virtually endorsing the Andolan's stand in many aspects.

The monsoon of 1995 was mercifully weak and the people of the valley stood firm in front of the rising waters, just as several families returned to the valley from the rehabilitation sites and joined the life and death struggle.

Narmada Nyaya Jagar Yatra

Nearly 350 activists of NBA and other supporting organisations led by Medha Patkar arrived in Delhi on 18th October, 1995 culminating their week long Nyaya Jagar Yatra. The activists had started their journey from the Narmada Valley protesting against the decision of the Gujarat Government to recommence the construction of the SSP. The yatra also aimed at focussing public attention on the plight of the people uprooted by SSP. The activists stormed into the Shram Shakti Bhavan which houses the offices of the Water Resources Ministry to present their demands. The plans to raise the height of the dam from 80.3 to 85 metres which would result in vast scale destruction and displacement, the move by concerned State governments to give cash compensation to the

oustees who had abandoned the uninhabitable land given to them and the status of the displaced people who have returned to the valley were some of the major issues raised by the activists to the officials.

Final hearing in the Supreme Court on the comprehensive case

The NBA had filed a comprehensive case to the Supreme Court in July, 1995 raising several questions regarding displacement, environmental and seismic impacts and economic feasibility of SSP. The final hearing in the Supreme Court started on the 28th Nov. 1995. The court had earlier allotted 5 days for hearing the case, the first two for NBA, third and fourth for Union of India and the concerned states and final day for clarifications. But as all arguments had not been heard in six days, the court adjourned till Jan 24th, '96. Although the Govt. of India and Govt. of Gujarat made a fervent plea for allowing the construction to take the height to 90 mts, this was flatly refused by the court. However, the court said that they had not stopped the R&R activities which the government could continue. They also called upon the NBA to co-operate in this process. The court is likely to give some interim orders after it finishes hearing NBA's rejoinder on Jan 24. The broader issues raised by NBA including the oustees challenging the public purpose of the project remain to be heard, which the court will hear after Jan 24th (NBA Personal Communication, 12th Dec. '95).

The real nature and cost of the so called development has been largely neglected by national media for long. There has been a high power costly advertisement campaign aimed at confusing the general public outside the area. Yet as the people's resistance in the valley continues it has caught the attention of many thinking people in this country and abroad. Our country has been basically a tolerant open society where the problems of our poor were sought to be considered national problems to be solved and not to be masked or erased through annihilation. Yet the anti-people policy behind mega developmental concepts such as SSP which affects directly, adversely such an extensive area and the lives of so many people have not been questioned so far. This indicates a major

failure of our political process. Ironically but sadly in spite of the fact that we have a free press, a socially committed intelligentsia, an adequate number of unrestrained technical expertise and a basically independent judiciary, we owe it to the World Bank's so called Morse Commission to bring out the shocking failure and disregard for people on the part of the State. The environmental movement in this country has had an adequately effective span of time to develop the vision, the expertise and the machinery for an alternative communications network. They should also have developed the ability for mass mobilisation. But the absence of these highlights a serious failure on the part of the people's machinery.

In the years to come, more and more supportive evidence will accumulate for the people's case against SSP. Similar stories will be reconstructed about the past mega developmental projects in this country. We are also rapidly becoming the most populous and the most impoverished country in the world. As we become more and more unable to take care of ourselves the people may decide to dissociate themselves from the race after the mirage we currently call progress as promised to us. Then perhaps we can return to an ideology of survival, social justice, equal collective responsibility and holistic harmony.

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The Loss As Seen By One Who Pays

With the poignancy of a winter sunset the 20th century is drawing to a close. For millennia the long slow changes have been moulding continents and cultures. But now at this critical juncture in the history of life all previous order seems to be in the throes of some basic change. Change with a bang or a whimper it is difficult to distinguish. In one sense we are all being uprooted and dispossessed from our biological antecedents. This view can be considered as originating from the nebulous realm of fanciful fiction. Or it can be considered a projected scientific hypothesis. But really murderous misappropriations and deprivations are happening all around us in the name of conflicting ideologies, in the competition between races, religions and lifestyles. It may all be justified as for the improvement of a few, for whom it is tangible development. But all this is at the cost of faceless multitudes who are less assertive of their privileges and rights. Narmada yet again brings into sharp focus the whole injustice inherent in the thinking of modern man and epitomised in the concept of Big Dams.

As the flood waters pile up behind the rapidly rising Sardar Sarovar dam, it is becoming obvious that it is a race to riches for a few. These few have now the identity, not only of all the haves but also the support of the State, the might of the powerful nation and the tacit approval of all the victors of the world. Promises of prosperity for downstream urbanites, industrialists and rich farmers in the command areas where water will reach soon are made again and again. And of course the contractors and politicians who are the intermediaries of this development also stand to benefit immensely. But for a large faceless mass, it is a rapid slide to oblivion. In abstract printed figures on the statistics of 'Project Affected Peoples', in the governmental rehabilitation project documents and in land acquisition, compensation proceedings, they are made to appear well taken care of. The entire operation seems to be presented as clean, clinical and unanimously acceptable. But the real situation is beyond description nor can it be really conveyed. It can only be suffered first hand. Or if one has the sensitivity to realize the same insult and injury being meted out to oneself more subtly by some other developmental process, it is easier to share the feeling.

The feelings of those so called tribals and poor farmers in the submergible area or of those displaced from outside the submergible area for various dam associated developments cannot be put down in words. It is overnight pauperization. It is total cultural disintegration. It is the negation of the very right and freedom of the ordinary people to live.

Even in the midst of utmost deprivation and poverty people have kept alive a hopeful vision of life. Kept alive in the soul of the people which helps them survive and retain the most cherished values and dreams. This has made human species so different from all other life forms. But when that vision fades a living being suddenly becomes will-less and soulless. The body may putrify fast or may wither and turn into dust more slowly. That is exactly what is happening to Bava Mahalia and his kinfolk in the Narmada valley. This appeal or reaching out is from the depth of a living human being who sees the fading of that vision in oneself.

Transcript of Letter Dictated in Bhilali by Bava Mahalia of Jalsindhi Village, Alirajpur Tehsil, District Jhabua, addressed to the Chief Minister of Madhya Pradesh

Shri Digvijay Singhji,

We, the people of Jalsindhi village, Tehsil Alirajpur, district of Jhabua, are writing this letter to you, the Chief Minister of Madhya Pradesh.

We are people of the river bank; we live on the banks of the great Narmada. This year, our village Jalsindhi will be the first village in Madhya Pradesh to be submerged by the Sardar Sarovar dam. Along with us, four or five other villages - Sakarja, Kakarsila, Akadia and others - will also be drowned. We were supposed to be flooded during the monsoon this year, but now that the Gujarat government is already closing the sluices, we will probably be submerged in the summer itself. For such a long while you have been hearing that, in Manibeli in Maharashtra and in Vadgam in Gujarat, people have been ready to drown themselves. We the first to face submergence due to Sardar Sarovar in Madhya Pradesh, will also give up our lives, but we will not move from our villages. When the water comes into our village, when our homes and fields are flooded, we will also drown - this is our firm resolve.

We are writing this letter to let you know why the adivasi peasants of Jalsindhi, who are coming under submergence are preparing to drown themselves.

You, and all those who live in cities, think that we who live in the hills are poor and backward, like apes. 'Go to the plains of Gujarat. Your condition will improve. You will develop' - this is what you advise us. But we have been fighting for eight years - we have borne lathi blows, been to jail several times, in Anjanvara village the police even came and fired on us and destroyed our homes. But our people have, with the slogan we will die but not move, stayed firmly in their places. Why ? The government has been offering money as well as beating us up to oust us. Then why are we refusing to move and resisting the might of the State ? If it is true

that our situation will improve in Gujarat, then why aren't all of us even now ready to go there?

To you officials and people of the town, our land looks hilly and inhospitable, but we are very satisfied with living in this area on the bank of the Narmada with our lands and forests. We have lived here for generations. On this land did our ancestors clear the forest, worship gods, improve the soil, domesticate animals and settle villages. It is that very land that we till now.

You think we are poor. We are not poor. We have constructed our own houses where we live. We are farmers. Our agriculture prospers here. We earn by tilling the earth. Even with only the rains, we live by what we grow. Mother corn feeds us. We have some titled land and some nevad (forest fields). On that we grow bajra, jowar, maize, baadi, batti, saanvi, kudri, chana, moth, urdi, sesame and groundnut. We have many different kinds of crops. We keep varying them and eating.

What grows in Gujarat? Wheat and winter jowar, tuvar and some cotton. Less to eat, more to sell. We cultivate in order to eat; we sell only the excess for buying clothes etc. Whether the price in the market be high or low, we get food to eat.

We grow so many different kinds of food, but all from our own effort. We have no use for money. We use our own seeds, manure from our own livestock - from that we get good crops. Where will we get so much money? Who will know us there? Which money lender will give us money? If we don't get a good crop and don't have any money, then we will have to mortgage our land.

Here we bring water to our fields by making channels from streams and nullahs and carrying it for kilometres. In other fields we cultivate only in the monsoons. If the soil stays moist then, in winter, we sow chana and wheat. If we have electricity, then we could also pump up water from the Narmada and get a winter crop. But even though forty-fifty years have passed since independence, there is no electricity in the villages along the river, nor is there river irrigation.

This is regarding our cultivation. But we are people of the hills and of the river. All through the year - in winter and in summer - we have flowing water and good fodder in the forest. We don't live as much by farming as we do by our livestock. We keep hens, goats, cows and buffaloes. Some have 2-4 buffaloes, some have 8-10. Almost everyone has ten-twenty-four goats. And there's no counting the hens. Not only do we keep our own livestock, we tend the cattle of our relatives as well as of distant people. From Gujarat people come to our hills to graze their cattle. Our fodder and water is so plentiful. By selling our livestock and their milk and ghee, each household earns three-four thousand rupees a year; some earn up to 8-10 thousand. If we face a sudden crisis and need money urgently, we go to the market and sell a goat and promptly get 5-6 hundred rupees. What we get by selling tuvar, groundnut and sesame, we get more than that from our livestock. Many people from Jhabua district have to go to Surat and Navsari as labourers to feed themselves in the summer. We people of the river bank never go to work as wage labourers.

The State is taking us to Gujarat and giving us land, but it is not giving us grazing land. It is very hard to get fodder there - there are no leaves or grass. People keep only a pair of bullocks. They feed them on the margins of the fields or give them jowar stalks. If our bullock dies now, our cows will give us calves. But how can we keep cows there? We would have to buy a new bullock. If we don't have money, we'd have to hire bullocks from the patidars and give them a share of our crop. We'd become labourers on our own land.

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 teak and bamboo. From ningodi and hiyali splints we weave screens. From the forests we make baskets and cots, ploughs and hoes, and many other useful things. In the hills and the forest we get fodder which sustains our livestock. We get various kinds of grasses; and when the grasses become dry in summer, we still get leaves.

We also eat leaves from the forest, hegva, muhka, amli, goindi, bhanjan - all these leaves we eat. 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. This forest is like our mother; we have grown up in its lap. We know how to live by suckling at its breast. We know the name of each and every tree, shrub and herb; we know its uses. If we were made to live in a land without forests, then all this learning that we have cherished over the generations will be useless and slowly we will forget it all.

After the forest, how can we live in the plains or in cities? We have not seen electricity. But we have made our own light by bringing wood from the forest. Our women cook roti and rabdi on a wood fire. In Gujarat they cook with dung cakes or with jowar stalks in chulhas. It is hard to find fuel to cook with there. Here we have so much that we call the forest our quilt. Its wood gives us fuel to cook with, light to see by and we sleep in its warmth on winter nights. If the forest nurtures us, we too protect it. During the monsoon, when the grass crops is knee-high, we worship neelpi. Till then we don't cut grass with our sickles, nor do we make sheaves of grass. We don't cut the young leaves of teak either.

Such is our life in the lap of the forest and in the belly of the river Narmada. We worship our gods by singing the gayana - the song of the river. We sing the gayana during the navai and divasa festivals, describing how the world was made, how humans were born, from where the great river came. The Narmada gives joy to those who live in her belly. She has many kinds of fish in her belly - khari, moyni, lagan, tukun, tumen, and tepro are just a few of them. We eat fish often. Fish is our standby 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 all through the year for the big river never dries up. In the belly of the river, we live contented lives. We have lived here for generation after generation; do we have a right to the mighty river Narmada and to our forests or don't we? Do you government people recognize that right or not?

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 construct a house in a single day, weed our fields, and perform any small or big task as it comes along. In Gujarat who will come to lend us a hand and make our work lighter? Will the big Patidars come to weed our fields or to construct our houses? In our weddings and funerals, everyone contributes to the brideprice or the funeral costs. If there is a quarrel then the elders of other villages sit as panch to break the quarrel. If we are uprooted from here, then how will we arrange for our weddings and funerals, who will come to settle our quarrels? Here, if we are out of seeds or if our bullock dies then everyone - all our relatives - help us out. In Gujarat, if there is no rain one year, if our seeds finish or if our bullock dies, then who will give us another bullock or some seeds? Our daughters' and sisters' husbands' villages are close by here; our wives natal homes are also near. When we go away from here, then we will never get to meet our relatives. They will be dead to us. The women of our village threaten us, "We are willing to leave our husbands; we can always find other men. But we can't get other parents; so we will never leave this place. In Gujarat, if any sorrow or evil befalls us, to whom can we go to tell of our troubles? You are not going to give us the bus fare and send us back, are you?"

Here in our villages, from our villagers, why do we get so much support? It is because we are all alike here; we share a common understanding. Only a few are tenants; everybody owns land. No one has a lot of land, but everyone has a little bit. When we go to Gujarat, the big landowners - Bania and Patidar - will crush us. As early as forty-fifty years ago, they took away the land of the adivasis who used to live there. Even now they are doing this. And we strangers - we don't know the language or the customs; it is their rule. If we can't do the kind of farming that needs a lot of money, then we'd have to mortgage our land to them, and slowly they would take it over. If they took away the land of the adivasis who lived there, then why won't they take away ours? Then who will give us other land? This is the land of our forefathers. We have a right to it. If this is lost, then we will only get spades and pickaxes, nothing else.

We were born in this village. Our umbilical cords are buried here - it is as if we sprang from this earth. Our village gods are all here. Our ancestors' memorial stones are all here. We worship Kalo Rano, Raja Panto, Indi Raja. We also worship Aai Khada and Khedu Bai. Our great devi is Rani Kajal. Her and Kumbai and Kundu Rano's mountain is in Mathvad. If we leave all of them, then where will we get new gods from? People come from all over to celebrate our festivals - indal, divasa and divali. For bhangoria, all of us go to the market where our youth choose their own spouses. Who will come to us in Gujarat?

You tell us to take land in Gujarat. You say that our leaders are inciting us, and that we should not be swayed by them. So we are not being swayed by them. We are being swayed by our land, our forest, our river and our livestock. They are what is leading us astray.

You tell us to take land in Gujarat. You tell us to take compensation. What is the state compensating us for? For our land, for our fields, for the trees along our fields. But we don't live only by this. Are you going to compensate us for our forest? In the forest we have teak, bamboo, umbar, tendu, salai, mahua, anjan, palash and many more. What will be compensation for this? Or are you going to compensate us for our great 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 livestock and the fodder - water that is essential for it - are you going to compensate us for that? How are you compensating us for our fields either - we didn't buy this land; our forefathers, cleared it and settled here. What price this land? Our gods, the support of those who are our kin - what price do you have for these? Our adivasi life - what price do you put on it?

You tell us to go to Gujarat, that our situation will improve there. There will be schools and our children will get educated. There will be roads and travel will be easy. There will be electricity and if we fall sick, there will be doctors. We also say that we want all these things. But we want them in our own villages. Our women have to start grinding corn at the break of dawn. If we get electricity, we can get flour from the mill. If we get handpumps, we won't have

to drink river water in the monsoons. If we have a school, our children can get educated too. If we have electricity then we can take water from the river and get a winter crop as well. But why don't you give us motors for irrigation, electricity and schools in our old villages. Forty-five years have passed since independence - why haven't you given us these things till now? Why do we have to go to Gujarat to get these things? Our relatives from other villages spent all the year labouring in Surat and Navsari. Why don't their children get an education there? Do they get electricity there? They have to build tall buildings and themselves sleep on the roadside. This is becoming the state of adivasis everywhere. The government doesn't ask us, consult us; you sit in Bhopal-Delhi-Ahmedabad and decide our life and death. Do you think that we adivasi peasants are not human too?

We have been fighting against displacement, but even those people who have agreed to move have been forcibly settled in Gujarat. Till today, you have not shown even an inch of land in Madhya Pradesh. You tell us that the policy here is not as good as Gujarat's. Are we the residents of Madhya Pradesh or of Gujarat?

We understand that you will consider and decide this matter in your own way. As you are the new Chief Minister, we have put this entire matter before you. We have also reached our collective decision. For the first time in Madhya Pradesh, land will be flooded, our village will be drowned. All of us adivasi people are going to drown in Jalsindhi village.

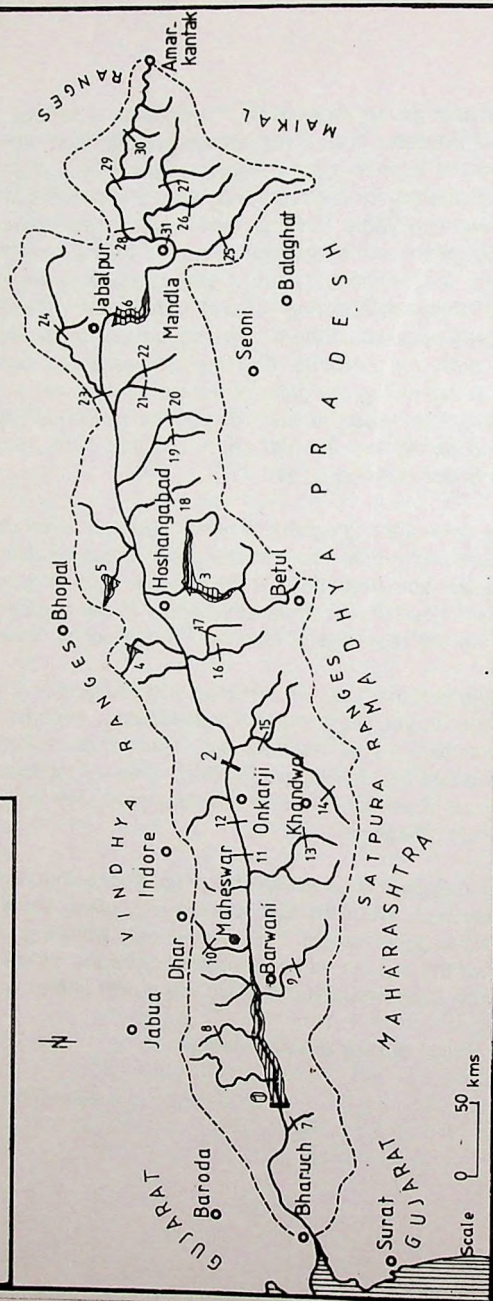
The land in Gujarat is not acceptable to us. Your compensation is not acceptable to us. We were born from the belly of the Narmada, we are not afraid to die in her lap. You will just keep watching - now Gujarat has shut the sluices; in the summer before the monsoons our village will be filled with water and we will drown in that water.

We will drown but we will not move !

1994

- Bava Mahalia

THE NARMADA BASIN EXISTING AND PROPOSED DAMS



DAMS

1. SARDAR SAROVAR	7. KARJAN	13. BEDA	19. SITAREWA	25. DHOBATORIA
2. NARMADA SAGAR	8. JOBAT	14. SUKTA	20. SHAKKAR	26. HALON
3. TAWA	9. LOWER GOI	15. CHOTA TAWA	21. MACHAREWA	27. BURNHER
4. KOLAR	10. MAN	16. GANJAL	22. SHER	28. ROSRA
5. BARNA	11. MAHESHWAR	17. MORAND	23. CHINKI	29. RAGHAVPUR
6. BARGI	12. OMKARESHWAR	18. DUDHI	24. ATARIA	30. UPPER NARMADA

*'I praise you, O Narmada,
You who have come from the heavens
to reslove the troubles of the world,
Just your presence brings us salvation'*

Narmada Puran

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The outstanding characteristic ability of life is response. The responses need not always be rational or logical. Yet so long as there is life there will be a response to stimuli. Populations of animals and human beings also respond collectively. Such codified responses are an important aspect of culture. Perhaps the most stirring, poignant responses are evoked when the very foundations of culture and life are threatened. For millions of people across the length and breadth of India this is what is happening right now. This is the soul stirring poignancy of movements by the Bhopal gas affected people, the Narmada oustees, the tribal people displaced by military firing ranges etc. Development, the direction, the process and the proceeds of which none of these people have any say are bulldozing them to oblivion. Their common resources are taken away, plundered, their cultural identity and their social cohesion are torn to shreds. They then can no longer respond. They are easy prey for the rapacious consumers after cheap human energy and lives.

All this is in the name of progress and prosperity for some. True. But who are those beneficiaries we realize only too late. As development becomes more sophisticated those who profit by it become fewer and fewer, even though the quantum of profit for each may be big. Yet collectively humankind has not asked itself two basic questions. The first is regarding the intrinsic injustice of this developmental model towards the weak, the poor, the marginalised, the ill-equipped, the micro-cultures, the old, the women and so on. The same injustice extends to the rest of the living world and to nature in general. We must ask ourselves how injustice can be corrected through changing the very model of development. The second question is regarding the sustainability of the monetary prosperity and the material progress attained through the current development. If the profits and achievements attained by even those few are not long lasting what is the real balance sheet of profits and losses. This question will also lead us to change the basic concept of development.

The Narmada valley development, both the story of the dams completed in the past and the ongoing Sardar Sarovar Project bring into sharp focus the terribly costly myth of modern development. At the cost of countless precious lives, it provides us yet again an opportunity to reset our goals.