Gujarat Bachana Hai? Phir Narmada Bachao

The Sardar Sarovar Narmada Nigam Ltd., a Government of Gujarat enterprise, set up to raise funds for SSP and having the charge of seeing the Project through speedily, has recently published some pamphlets making out a case for Sardar Sarovar as the solution to the development problems of Gujarat. The critique that follows is based upon the following four pamphlets :

(i) SSP : A boon to Gujarat (Dr.S.S.Mehta, Gandhi Labour Institute),

(ii) SSP : A Planned Ecological Harmony Amongst Man, Water, Land and Vegetation (Sanat Mehta),

(iii) SSP : A Ray of Hope (V.B. Patel, Gujarat Water Supply & Sewerage Board), and

(iv) SSP: and Environment (B.K. Jhala, Retd. Chief Conservator of Forests, and presently Forestry Consultant to the SS Narmada Nigam).

The Sardar Sarovar project is being hailed as Gujarat's life- line. Shri Sanat Mehta, in the pamphlet published by the Sardar Sarovar Narmada Nigam headed by him, claims that Gujarat has already fully harnessed its water resources by (i) building dams on all the big and small rivers, including those in Saurashtra and Kutch, without consideration for cost-benefit ratio. Shri Mehta further says that Gujarat has sincerely implemented the programme of watershed area development by plugging small nallas. The argument, by implication, is that the rain that falls over the land of Gujarat or the waters that flow through Gujarat's rivers are today permanently and totally inadequate vis-a-vis the needs of Gujarat. Shri Mehta concludes, "the last three droughts have convinced that there is no other alternative except speedy implementation of SS Narmada Project.

It is not entirely clear from Shri Sanat Mehta's arguments whether, in his view, even in a year of normal rainfall water is everywhere in shortage. It cannot obviously have been so till recently, otherwise Gujarat would not have become one of the more advanced states of India during 1970-71 to 1981-82, as claimed by Dr.S.S.Mehta in another of the Nigam's publications. Dr. Mehta traces the decline of the earlier high growth rate of Gujarat's economy only since 1981-82. None would deny that the amount of rainfall in different regions of Gujarat is not the same. Saurashtra and Kutch have always had less rain than south and central Gujarat. That is how Nature is organised into a variety of ecosystems all over the world. Peoples and cultures had over the centuries come to finely tune, not only their agriculture and animal husbandry but also their domestic water use to the amount of rainfall and its peculiar pattern. Not only this, but concentrations of population always everywhere came to be adjusted to the ecosystem of the region : compared to south and central Gujarat, Saurashtra and Kutch have always had sparser population.

Shri Sanat Mehta paints a bleak picture of a Gujarat caught in an ever recurring cycle of droughts and floods : 'drought every third year and flood every second year' since the formation of separate Gujarat State in 1960. He makes out that droughts of such frequency and severity are built in the 'erratic and scanty rainfall', whereas the floods are a result of the Narmada not being dammed properly. If his reasoning was really correct then, in fact, Gujarat could never in recent or

past history have been populous and prosperous. Years of low rainfall and seasonal floods have always been there as part of the pattern. Normal seasonal floods are even a boon to the farmers on the river banks, to a certain extent depositing nutrient-rich silt on the fields. Agriculture and animal husbandry of a region through tradition comes to accommodate itself to periodic low rainfall and floods. Gujarat was no exception to this. Farmers and pastoralists of Gujarat have certainly long established rich, proven traditions.

If, then, low rainfall years have now begun to cause unbearable stress and to threaten a collapse of a whole economy, and if floods have begun to acquire disastrous proportions regularly, the cause of it must be sought elsewhere. We need not disbelieve Shri Sanat Mehta when he cites large figures indicating the costs of coping with famine and floods and yet we can and need to question his causal analysis of the phenomenon. What, then, could have made a significant difference in recent years?

Could it be because we have been playing foul with Nature in the name of development? Here's what Sanat Mehta writes himself : "In pursuit of developed systems of agriculture the ground water resources in the coast line areas are being pumped out through wells and tube-wells. As a result salinity ingress has crept deep into the coastal areas...." In another of Nigam's pamphlet Shri B.K.Jhala, erstwhile Chief Conservator of Forest, writes, "Due to less number of trees, storms and gusty winds are generated, which blow up fertile soil and de-hydrate it. The soil is thus continuously becoming less productive. Over three fourth of the land of Gujarat has already turned into desert and semi-desert." Let us hear another expert presented by the Nigam through still another pamphlet. Shri V.B.Patel of the Gujarat Water Supply & Sewerage Board writes, "One hectare of irrigation (of the 'green revolution' variety) consumes water equivalent to all the domestic needs for a year for a population of about 350 people. Irrigation thus came up as a strong competitor for use of ground water.... This would be evident from the fact that, as of 1985, against the total domestic and livestock consumption of 17 cubic kilometers, the irrigation from ground water development alone consumes 150 cubic kilometers of water." Lastly, let us also hear what Dr. S.S. Mehta of the Gandhi Labour Institute has to say in the pamphlet put out by the Nigam. He says, 'the efforts of the population to meet its needs have resulted in the clearing and the loss of forest lands... The grazing of domestic animals in forest has also led to deforestation which in turn has led to soil erosion and damage to watershed areas. Gujarat is suffering from severe ecological imbalance...." When we put all these four observations together the conclusion is self-evident. It is abusive and/or excessive use of natural resources leading to the destruction of the natural eco-system of the region which is really behind the excessively severe impact of low rainfall and is resulting in disastrous flash floods.. We get support for this view from the following passage from Shri V.B.Patel's observations : "Even in years of less rainfall or in areas with rainfall once in three to four years, drinking water was not a major problem because, whatever water was getting stored in underground in good years, was enough to last for several years."

It is the ecological imbalance which needs urgently to be set right once again. It is only when the balance is restored and taken to a higher climax level that famines and floods would be brought under control. Having abused and damaged the natural eco-systems of the various regions of Gujarat the people there are today in dire need of water for meeting their agricultural needs, their cattle and domestic needs, including water for drinking. We do not dispute that as a fact, but accept it fully.

We are, however, still a long way from establishing beyond doubt that damming the Narmada through SSP and NSP and taking the Narmada waters through long canals is the solution to this grave problem.

We do not doubt the powers of man to dam

and divert Narmada waters, the technological and engineering prowess to dig a big new channel for Narmada (as was claimed by Shri Sanat Mehta in one of his numerous interviews). What we do is to question not only the wisdom of the act but also ask if it really solves the problems faced by the people of Gujarat.

II

It is made out that the whole of Gujarat is now permanently in short supply. Is this really so? The question becomes all the more pregnant when one finds Dr. S.S. Mehta voice his apprehension that, were all the Narmada waters to be used in the area only upto Mahi or even Sabarmati, "it can create serious problem of waterlogging and salinity in this prosperous agricultural region. This is because it has already large quantity of ground water." In plain language this, in fact, means that there are regions in Gujarat where normal rainfall is sufficient to meet all natural needs. We can identify south and central Gujarat as areas where rainfall is not 'scanty' and underground water sources are sufficient if they are properly and judiciously managed.

Erratic and scanty rainfall is a description that rather fits North Gujarat, Saurashtra and Kutch region well. Due to ecological imbalance of the type of Dr.Mehta's description it is these areas which urgently require a more assured and augmented water supply today.

So, it turns out that central Gujarat does not so badly need the SSP to meet its requirements of water. For regions of North Gujarat, Saurashtra and Kutch it certainly looks as being the lifeline.

The more crucial question therefore, is: will the Narmada waters really reach the "scarcity" areas of North Gujarat, Kutch and Saurashtra? Tragically, the answer is clearly and flatly No; the SSP canal network cannot and does not reach upto more than the margin of these regions (See the accompanying map).

Dr.Mehta really gives away the case when he writes that, 'Major benefits of Narmada irrigation will be in Vadodara, Ahmedabad, Banaskantha, Surendranagar and Mehsana... This is obviously going to usher a green revolution in many districts, particularly Ahmedabad." It is quite revealing that the map of the command area of SSP that the World Bank has prepared for its own "internal" use shows large parts of Banaskantha and Mehsana districts out of the command area. This makes it more than clear that the SSP as originally conceived and planned was and is meant to pour waters of the Narmada in the very same area which needs it the least.

Let us look a little more in detail at the distribution of the benefits of SSP. Nandini Oza gathered the following information from official sources :"out of a total of 20,86,700 hectares in the culturable command area, 15,02,300 hectares fall in Gujarat and a mere 5,84,000 hectares for Saurashtra and Kutch put together. Out of the 12 districts that will be irrigated by the Narmada waters, 8 are in Gujarat, 3 in Saurashtra and 1 in Kutch. However, it is only 12 talukas of Saurashtra and 4 in Kutch that are covered as against 45 talukas of Gujarat." Furthermore, Narmada waters would help areas of Central Gujarat to increase the percentage of irrigated areas very much more than in other regions. These are precisely those areas that already have extensive irrigation facilities.

A look at the World Bank map is enough to show that most of Saurashtra and Kutch, and all the hilly tracts of North Gujarat will not be reached by SSP canals at all.

It is now clearly seen that the scarcity conditions obtaining in North Gujarat, Saurashtra and Kutch are made an excuse to get the SSP sanctioned in the face of mounting opposition. Consecutive droughts over the past 3-4 years

came in handy and are being exploited fully in an exercise of high salesmanship.

The people of North Gujarat (particularly people residing in the hilly tracts lying to the east of the line of the main Narmada canal), Saurashtra and Kutch are being cheated and hoodwinked and made fools of. That is the simple truth.

III

What then is the right solution to the real and urgent problem of scarcity of water that North Gujarat, Saurashtra and Kutch are facing?

Now that the fancy solution of Narmada waters through SSP canals is exposed as a mirage, we are left with the water resources of the area. In short, ultimately the rains that fall over the land in these regions is the only source. Once this truth is grasped and accepted totally the direction in which the solution lies becomes clear.

Essentially the problem is twofold. The prime need is to assure supplies of clean and safe drinking water and also meet the needs of domestic use. Second to that comes the need for water for agriculture and animal husbandry. If traditional crops are not sought to be replaced by cash crops requiring high level of water use (according to wrong prevalent ideas) and old pastoral practices are adhered to the need of water for these two purposes would be not too large. Industries requiring large amounts of water are not likely to be located in these regions, and so the need for that would also be limited.

Before we come to answer how best to augment water resources enough let us note a fact stressed by Shri V.B. Patel in a Nigam pamphlet. For him SSP is Gujarat's lifeline not because it will increase the area under irrigation so much as because it will assure a supply of safe drinking water. He writes to say that even where groundwater sources are available there has been increasing pollution of them due to extensive use of chemical fertilizers, insecticides, industrial effluents and domestic effluent. Water sources in coastal areas have become saline due to sea ingress because of excessive withdrawal of ground water. According to Shri Patel ground water sources are, therefore, to be written off as unsafe for drinking water purposes.

The narration of the situation is thus used by him and the Sardar Sarovar Nigam as a springboard to jump to the conclusion that the only recourse to be had is to make exclusive use of surface run-off from rain water. Now it is further argued that as surface run-off is too inadequate and as the small and big storages in these arid and semi-arid regions are likely to dry up in the long summer season we must have Sardar Sarovar. But as we saw SSP canals do not reach out to precisely those areas! This again exposes the Nigam as practising deception and fraud on the people of Gujarat.

A total reliance on surface run-off rain waters (as stored in massively big reservoirs and taken out over long distances through canals) for meeting the needs of not only metropolises but of thousands of villages is a Tughlaquian dream, an utter madness which will spell the ruin of common people of the villages. But actually that solution is not possible for the regions of Gujarat we are presently considering. Villages and towns, if not the cities, of North Gujarat, Saurashtra and Kutch have to find a way whereby they have sufficient supplies of drinking water through ground water sources precisely because surface evaporation rates are so high and the dry season is such a long one. The problem, then, is not just of augmenting the groundwater sources in the region and everywhere but also of assuring that they remain free from pollution of all kinds.

Most surprisingly Shri V.B. Patel himself gives the lie to his own solution. He writes : "... a human being needs 1 cubic meter of

water for drinking in a whole year and about 30 cubic meters of water for all the uses put together, whereas the average precipitation in the country is of the order of 4000 cubic kilometers which, for population of 1950, would come to 10,000 cubic meters per person per year. The annual recharge of ground is 600 cubic kilometers which would correspond to about 2000 cubic meters per person per year. Even if we assume that 50% of the ground water can be extracted, this would give a share of 1000 cubic meters per person. All this was available for meeting domestic needs and therefore even years of low rainfall or drought did not significantly affect the domestic water supply". Does this not make it abundantly clear that Nature makes plentiful supplies available even accounting for the "erratic" nature of the rainfall and periodical droughts, and that it is man's abuse and excessive use that creates scarcity in the first place?

IV

In an effort to justify SSP Shri Sanat Mehta has made a twofold claim that (i) Gujarat has already sincerely implemented the programme of watershed development by "plugging small nallas", and (ii) "Gujarat has constructed dams on all the big and small rivers. Even such rivers of Saurashtra and Kutch as are not shown on the map, are also harnessed without considering for cost-benefit ratio". He then goes on to say that as Gujarat is facing water scarcity problem even after this, what it needs now is SSP to bring in the Narmada waters.

As the Narmada waters are not going to reach most of North Gujarat, Saurashtra and Kutch, does one then conclude that these regions are forever doomed? Remember, it is Shri Mehta himself who is insisting that the only solution is SSP.

In respect of North Gujarat, Saurashtra and Kutch, the regions we are concerned with here, the first question to ask is, are the rains so very scanty all over the area as is made out by the Nigam advocates? The rainfall map of India shows that the precipitation in this area is in the range of 40 to 100 cms. Erraticness is certainly a feature of monsoon-type rains everywhere. If we have an efficient system of holding water underground and reducing the rainy season run-off to the minimum there would be enough water to tide over difficult years. This was the case till recently as admitted by the Nigam pamphlets themselves. This means that precipitation is not all that insufficient.

If the rains are not really scarce what has led to a general scarcity of water in the area? The straightforward and simple answer is that the land no longer absorbs and retains much of the rain as it falls to the ground. Even in a year of good rainfall there is, therefore, no adequate recharging of the ground water sources. Secondly, there has been ever increasing excessive exploitation of ground water sources with disastrous effects in coastal areas.

It is the greedy grabbing and looting of natural resources in pursuit of short term monetary gains that is the main cause of destruction of forest and grass cover over large parts of the country. We have not been wise enough to work within the carrying capacity of natural eco-systems. In the name of development, and because of a mistaken faith in the powers of 'science and technology', we have, in fact, encouraged an attitude of total disregard towards Nature's ways and systems. The shortest way to recovery is to restore ecological balance and stay within the limits of the eco-system. Each time and in each place whenever this has been done it has given dramatic and quick results. Nature's restorative and regenerative powers are astounding.

Shri Mehta wishes to suggest that all the rainwater has already been fully impounded and yet it is not sufficient to meet the requirements. Does he not know that dams are not designed to collect every drop of rain water

run-off but are designed to hold only a certain amount of it? If the catchment areas are not properly treated much of the precipitation is lost quickly in the form of instantaneous surface runoff and much of it then has to be let off through the dam gates. Dams also get quickly filled up with silt. This what seems to have already affected the performance of the dams and irrigation systems in the whole of the region. A situation of water scarcity even after water has been fully harnessed through dams is a sure proof that watersheds have not been developed. Shri Sanat Mehta's statement also shows that impounding of water through dams is of only a limited use.

Shri Sanat Mehta is doing a great disservice to the people of North Gujarat, Saurashtra and Kutch by trying to persuade them that there is now nothing else they can do but wait till some project brings water as a gift from outside Gujarat to save them.

The lesson to be learnt is crystal clear : the rains are not insufficient if, respecting Nature's ways, man enables and allows the land to store enough water underground by maintaining sufficient tree and grass cover everywhere, by stopping soil erosion, by not disturbing the capacity of the soil to absorb and retain water like a sponge. There are the examples of villages like Ralegan Shindi, Adgaon and others from the most drought prone areas of Maharashtra where with the initiation of comprehensive watershed management measures availability of water has gone up many times within a matter of just 2-3 years. There can be no village or area where such measures cannot be undertaken. And wherever they are undertaken it, without fail, augments water supply considerably.

It is now sufficiently well established that the augmented water supply is more than enough to meet all the judicious needs of the people. Not only drinking water needs and other domestic needs are met but there is enough water stored to insure a steady production of foodgrains and fodder. Admittedly, the increased underground and surface storage is not adequate to grow irrigated cash crops with prevalent excessively high water use. This can be no reason to reject this solution as it is also now known that it is the prevalent levels of high water use which are damaging lands extensively all over the country.

There are two major constraints. Pumping out of ground water has to be controlled taking a long term view and, secondly, the carrying capacity of the natural eco-system of the region should not be exceeded.

The crisis of drinking water supply is being blown up in order to justify SSP. We do not deny the existence of the crisis. What we do find is that, in the first place, Sardar Sarovar is NO SOLUTION for those areas and, secondly, there is an alternative permanent solution of proven effectiveness to the crisis which begins to solve the crisis from the very first year of its implementation.

V

Shri Sanat Mehta thus outlines the benefits of SSP (other than meeting the drinking water crisis) : 'Then every year 17.92 lakh hectares dry land in Gujarat will be brought under irrigation and similarly 75000 hectares of dry land in Rajasthan will get benefits of irrigation. Western grid will have an increase of 1450 M.W. installed capacity in energy generation. In addition to this 4720 villages and 131 towns in Gujarat will be permanently relieved from the problem of drinking water. It will help to increase industrial production because needs of water supply of various industries will be satisfied.. 62 talukas of 12 districts of Gujarat where 70% area is suffering from frequent droughts will be benefited with this project."

No doubt these look like substantial benefits for the sake of which people in the submergence areas could be displaced and a lot of good forest could also be lost without much compunction. We need to examine the nature and extent of the benefits in more depth.

We have already found out that most of the command area of SSP covers the more advanced and prosperous region of Gujarat where there is no real scarcity of water. In fact, the Narmada waters are likely to play havoc with the health and productivity of the land in that area.

17.92 lakh hectares is, no doubt, a very impressive figure. The figure only tells us how many hectares can be reached considering the alignment of the canals. It does not really tell us anything about either the need of the lands/crops or about their capacity to use water without damaging themselves. There can be no two opinions as to the fact that timely supply of needed water insures good production of any crop. For this it is important that farmers, whenever and wherever they can, have at hand a storage of water which they can make use of. But the needs of the crops are not all that big.

It has by now become the conventional, received wisdom that supply of water through canals leads to excessive and untimely use of water. In fact it has begun to dawn on agriculturists themselves that it is the most crude, inefficient, and prone to abuse system of irrigating crops. To insist on it today is comparable to the folly of a person who goes in for overkill.

Even sugarcane which, till recently, was thought to require large amounts of water is now found to need very much less of it, if grown scientifically, i.e., more naturally. The gains of the so called progressive systems of modern agriculture, i.e. "green revolution", are extremely short term as is being currently proved all over India. Let us stop being impressed by figures, however astronomical they be, and ask the right questions.

The right questions to ask are : If water be a scarce resource which are the crops which give maximum return in terms of water consumed? Which are the crops that best suit the soils, climate and the particular ecosystem and what are their needs of water? How to achieve maximum utilisation of water through cycling it again and again as in nature? How best to catch most of whatever rain falls in any particular year and then retain it the longest?

It is certain that an agricultural or pastoral production system that comes to depend almost totally on supply of water through canals invites its own ruin in a matter of decades. This is primarily because it disregards, abuses and destroys nature's arrangements for the storage and supply of water. So much so that even when the rains are ample the land fails to hold it underground or in the top soil. In bad years the plight becomes miserable. This is what Gujarat experienced during the recent years of consecutive droughts.

What are touted as benefits and bonanzas are, in fact, invitations to self-inflicted disaster. Agriculture and animal husbandry in Gujarat is not going to benefit from SSP beyond, at the most, a generation. Beyond that lies an irreversible, ever deepening crisis if it relies on the canals to supply its water needs.

In the interest of their livelihood and lands farmers in the prosperous regions of Gujarat need to wake up in time and stop the tentacle like canals of the SSP octopus from striking deep into their lifelines.

VI

However, there are two groups who stand to gain completely from the completion of SSP. The urbanites and the industrialists are the two groups who stand to gain substantially.

We have seen that villages can solve their drinking and domestic water supply problem through better, more reliable and permanent alternatives. This is, however, not the case with city and town populations. All towns and cities in India are facing crisis over supply of water unrelated to the amount of

rain that falls in any particular year in the locality and the region.

There is, prima facie, a real need to be met here. Water in sufficient quantity can be brought to them only by building large reservoirs at increasingly long distances as their requirements outstrip the earlier local arrangements. SSP like projects are, therefore, an attractive proposition as they promise a permanent and ample water supply without fail. In addition the promise is of water supply at very cheap rates.

Many modern industries need massive amounts of water as part of the manufacturing process. Industries are located near urban centres or urban centres grow around them. They come to demand that their needs be met by the governments at special concessional rates as they are helping the country to develop and are generating employment. It is increasingly becoming difficult to supply their needs without resort to creating large reservoirs.

Urbanites and industrialists also need large amounts of cheap power. They are growing energy-hungry, nay they are greedy for more and more energy which they wish to be supplied cheaply.

The crux of the matter is that neither of these groups is willing to pay the full costs for either water or energy. They have found out that they can successfully pass on the costs to other sections of the population and to generations coming after by persuading the government to take over resources that belong to other people elsewhere and future generations. Projects like SSP suit them beautifully.

In the case of the SSP these costs are being passed on, in the immediate context, mostly to the people outside Gujarat. This is injustice doubly compounded.

In addition to the above, we need to stress the ugly fact that much of the water supplied to the urbanites and industries is thrown into rivers and the sea as effluents polluting them, causing severe health problems. The pollution also damages and/or destroys riverine, estuarine and marine productive eco-systems.

Let us accept that urban centres and industries need large supplies of water and that we would need to build large reservoirs of water through dams appropriately sited. But does that necessarily mean we need projects of the size of SSP?

We conend that water is a scarce resource to be most judiciously used. This requires that, following Nature, the same amount of water should be used again and again through recycling.

If the same water is put to use again and again it will obviate the need to build newer and bigger dams at still longer distances every few years. Today the growing towns and cities are looting the people residing in the countryside callously.

SSP like monstrous projects to supply the needs of towns and cities and industries are not really achievements to be proud of. They are the ways of an irresponsible, inefficient, unjust, spendthrift society. More than anything else, it also points to the scientific ignorance of the top brass of the country. Such over-centralised arrangements inevitably lead to political and administrative concentration of power. It binds people into an authoritarian bureaucratic system. More than that, such over-centralised arrangement soon begins to fail due to its top-heavy character because of a number of reasons. When such a structure begins to fail it brings down a whole society which has come to totally depend upon it.

VII

Sardar Sarovar is supposed to produce "1450 m.w. of cheap hydel power." Actually this is only the extent of the installed capacity and firm power generation will be of a much lower order.

Let us assume for the time being that Gujarat and other States do badly need this electricity and it cannot be produced by other means. Still we need to raise certain questions.

It is a worldwide experience that cheap energy supplies lead to their wasteful and excessive use. The rise in oil prices some years back led to a significantly more rational and economic use of oil. If we need more electricity, and if it can be produced only at the cost of environmental destruction and uprooting of peoples and communities, then, surely, it is necessary that it be most economically and judiciously used. This result can be achieved only if the price of electricity is put up by a sufficient measure. The allure of "cheap hydel power" can only result in wasteful, excessive use. This is what one is witness to in the cities and towns of India. Industries are, in fact, encouraged in their inefficient ways by the concessional rates offered to them.

Sardar Sarovar Project and other projects like it would, in fact, further encourage present inefficient, wasteful ways by their policy of "cheap" energy. What we very urgently need is to rationalise and economise the use of currently available electricity. This needs (i) a steep rise in the price of electricity, particularly for commercial and industrial consumers and users of domestic power gadgets, and (ii) a blanket moratorium for a sufficiently long period on new projects to generate electricity.

Water is not a free resource. Neither is it a limitless, inexhaustible resource. In truth, it is not just a natural resource. It is a medium in which and through which life is sustained. Also, the hydrological cycle is one of the basic cycles sustaining Life on earth. Looked at from this perspective 'harnessing" water to produce electricity is a violation which ought to be strictly impermissible.

If then, for the present, we have no other course but to commit such a sacrilege against Nature, we should, at least, be willing to pay adequate price for it. Hydel power should be particularly more expensive and not specially cheap.

Would we go in for SSP in order to generate power were the electricity to be priced at its real value? We suggest that it would not be a viable proposition, and that it would be a right decision not to go ahead with it.

With the increased availability of offshore oil and natural gas power needs could be and should be met out of them in the interim period till science and technology enables us to make use of solar and other sources of energy which are available in abundance and everywhere.

VIII

It will be noticed that we have not brought in the issue of the plight of the oustees or the destruction of environment and the irreparable loss consequent upon that. It is not that these matters are of little importance. In our view they are weighty matters. And yet we have chosen to leave them out so far because those who are opposing SSP on that ground are being made out to be enemies of the people of Gujarat, are made out to be those who would like to sever Gujarat's lifeline. What we have done till now is to examine the claims of the Sardar Sarovar Narmada Nigam and have found them to be false in respect of North Gujarat, Saurashtra and Kutch, the really needy areas.

However, we would like to briefly consider the issues of the resettlement of the oustees and the environmental losses.

Shri Sanat Mehta himself says that 67000 persons from 237 villages are going to be displaced due to SSP. He claims the Nigam to have adopted "an unbiased human approach with the objective of accomplishing complete social and economic restitution for the oustees." He claims that the terms offered to the oustees are very liberal and generous, quite "unprecedented in the history of river valley

projects in India." Shri Mehta further claims that the Nigam having gained an "in-depth understanding and appreciation of all the social, economic and cultural aspects that are needed in the formulation and implementation of a satisfactory rehabilitation programme."

We begin by noting that the right to summarily oust thousands of people is taken for granted and not questioned at all. We think that it is one of the fundamental human rights not to be ousted from one's native habitat and dispossessed of productive assets and entitlements. Ordinary courtsey also requires that willing consent be first, and openly, secured of those who stand to lose all that they have, that they are made partners in the development that is supposed to result from the implementation of the project. For the Nigam they are just poor oustees (what an apt word!) to be rehabilitated, albeit generously.

We agree that the terms offered by the Nigam are liberal and generous, thanks to the Tribunal and the World Bank, compared to what used to be offered earlier. But these are terms that are "offered". That is no guarantee that the ousted people will be able to secure them in full measure. The Nigam hardly shows any understanding as to what is needed to really secure these to them. When it takes the stand that the oustees should individually negotiate purchase of land with the landowners in Gujarat (or elsewhere) it is a sure sign that it disregards the "social and cultural aspects" involved in resettlement. The search for land to be allotted to the oustees is being made by bureaucrats. Nowhere are the "beneficiaries" and "oustees" made to work together as "partners", the beneficiaries as communities taking upon themselves the responsibility to act as hosts and to invite the oustees to settle amongst them. There is nowhere a recognition that people to be displaced are organised in communities with all kinds of multiplex ties and their proper and full resettlement requires that they are not treated as atomised individual units. This applies particularly in the case of tribals, the lower castes and the marginal poor. It is only the affluent and the powerful who can resettle themselves as individualised units in an alien habitat without much of a problem. The Nigam nowhere gives due recognition to the fact that tribal people need to be resettled in a habitat similar to their native habitat, nor does it categorically recognise that people from Madhya Pradesh with a distinct language and culture cannot really be resettled in Gujarat in large numbers. It leaves the problem in the lap of the Governments of Maharashtra and Madhya Pradesh and thinks it enough to reimburse the financial cost of the resettlement.

It has become more than clear by now that neither the three concerned governments nor the Nigam, nor the Narmada Control Authority, nor the Government of India have any policy or a well thought out plan regarding resettlement. Everybody cites the liberal and generous terms offered as if that is a plan.

People with conscience need to question the Nigam's seriousness of intent and purpose in the matter of resettlement of the oustees. The people of Gujarat have an added responsibility in that the people that are to be displaced happen to be largely from outside Gujarat.

We have seen that most of the benefits in terms of water are going to central Gujarat which does not really so badly need them. And, moreover, they are dubious benefits in that they are going to damage the lands extensively in the long run. Industrialists stand to gain most. Can one justify uprooting more than sixty thousand people and depriving them of their assets and entitlements for the sake of such limited gains to a category of people who can and should be asked to make their own arrangements? Sardar Sarovar is a project which shall carry the curse of all these people for eternity.

IX

Costs to environment are of three kinds. One is the loss of forests and wild life caused because of the submergence. The second kind of cost is the destructive impact of SSP on riverine and estuarine eco-systems, the danger of reservoir induced seismicity, the micro/macro changes leading to favourable conditions for the spread of diseases, and so on. The third kind of cost is the loss of livelihood of people downstream and upstream caused by the changes in the environment due to the Project.

The costs of these three kinds of losses/ damages have not been computed satisfactorily so far. However, this is the least of our objections. There can be no agreed "scientific" way of computing them; the advocates of the project are likely to compute them in one way and the opponents the other way. Each party will see to it that the benefit-cost ratio turns out in its favour.

We wish to apply the same yardstick as Shri Sanat Mehta : Instead of considering over much the B/C ratio we should really see if the need is urgent and basic, and if it is, and cannot be met in any other way, we should even risk causing damage to the environment. The needs of the common people should have an overriding claim.

Basic and urgent needs of the common people do not warrant Sardar Sarovar Project. It has yet to be convincingly proved that the limited needs of the urban centres of population and industries in the central Gujarat region cannot be met through alternate arrangements. Irrigation benefits are dubious : in fact, by undertaking SSP we shall be damaging the environment on a large scale, uproot people in thousands in order to damage the environment (land, water sources etc.) and uproot the people in the command area in the long run.

It is clear that once we take out the irrigation component of 17.92 lakh hectares or scale it down to, may be, 6-7 lakh hectares of land, which can be said to urgently need irrigation, SSP becomes too costly to be undertaken. It is revealed in its true colours as an white elephant for which the people of Gujarat will continue to pay through their noses for generations to come.

X

Let us recapitulate in order to draw conclusions:

1. North Gujarat, Saurashtra and Kutch are the regions which can be said to face the problem of scarcity of water. But SSP Narmada waters do not reach most of the area in these regions.

2. The major beneficiary of SSP in terms of irrigation is central Gujarat which does not face scarcity of water generally. In fact, the Narmada waters are likely to cause extensive damage to the lands.

3. So far as the need of water for drinking and domestic purposes is concerned there are proven alternative solutions which are decentralised and permanently beneficial. They are effective everywhere. The rainfall in Gujarat is sufficient in this respect.

4. The need for irrigation waters for most crops is of such an order that can be met through comprehensive watershed development programme and local surface and underground storage.

6. Artificial impounding of water in reservoirs is certainly needed to meet the special needs of industries and of the large towns and cities. However, by adopting appropriate policies and putting stringent conditions it is possible (and desirable also)to reduce the annual additional needs to a fraction of the present annual consumption of water. This would obviate the need of SSP like monstrous reservoirs.

7. Prevention of excessive use of groundwater sources, nursing of such sources, keeping them free from pollution and sea ingress is essential. Writing them off and relying on SSP totally for water supply to villages and towns is nothing less than suicidal.

8 Displacement of people is going to be massive. This is totally unjustifiable considering that irrigation benefits are dubious and the central Gujarat area is comparatively well served with water.

9. SSP is a project which will have an extensive destructive impact on environment and, ironically and tragically, its completion will cause extensive damage to the environment in the command area in the not too distant future.

The conclusion is irresistible.

Sardar Sarovar is not the lifeline of Gujarat. It is a halter round the neck of the people of Gujarat leading them to sure ruin for the sake of short-term gains to a small section of the populace. It will make Gujarati people slaves to a monolithic, over-centralised water supply system to such an extent that when the system begins to fail, as it will in the near future, because of different kinds of breakdowns, the Gujarati people and their civilisation will face death and destruction.

Vasant Palshikar
PARISAR
"Yamuna", I.C.S. Colony,
Ganeshkhind Road,
Pune 411 007