# Resettlement in Narmada River Basin

# Evolution of Resettlement Policy in India

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### **Abstract**

The present paper examines the problems of resettlement of people affected by a large-scale water resource development project in India. At present there is no resettlement policy at the national level, but the Government of Gujarat has evolved resettlement policies for the Saradar Sarovar Project on the river Narmada. The attempt has been made to look into the policies, strategies and implementation process i.e., efforts made by the state government to resettle the project-affected people in the new habitats. Finally, the paper depicts recommendations and suggestions to strengthen the resettlement process.

## Introduction

India after independence embarked on an ambitious programme of economic development. Nation faced twin problems of unemployment and poverty to begin with. The land was rich with diverse natural resources but was unharnessed. The crucial task was to channelize these resources- land, water, minerals, forests, and sea wealth so as to transform them into productive wealth for the people. India has unique geographic situation where arable land is spread out stretching from Kutch to Brahmputra valley and from Deccan trap to plains of Punjab, while bulk of surface water sources are concentrated in about dozen river basins; and 80% of surface water is available only in monsoon months which flows down the sea if not impounded. Therefore neither water nor land is utilised optimally, depriving the country of their full benefits. The Saradar Sarovar Project (SSP) on river Narmada was conceived keeping these potentials.

The State of Gujarat is facing an acute water crisis. It is imperative to harness water resources but at the same time it is more important to see that people affected by developmental projects derive benefits from the same. The SSP is a recent and most controversial because of past resettlement experiences, environmental consciousness and activism in tribal areas. The construction of the dam is nearing completion. Totally 245 villages will go under submergence, affecting 40,727 families; the total population affected by the project will be 127,446 from all these villages. The project will affect tribal people from three states, viz. Gujarat, Maharashtra and Madhya Pradesh (MP). There was a prolonged interstate water dispute over sharing the benefits of the project, i.e., power and water and resettlement of the affected people. The dispute was resolved by a special tribunal and a resettlement policy emerged in 1979. Since then tremendous effort has undergone to resettle and rehabilitate people in the new settlements. The author is an architect/planner and academician involved with the resettlement of villages.

# Objectives of the Study

The overall objective is to study the resettlement policies designed to help the displaced population of the Narmada basin. So far in India, the Land Acquisition Act of 1894 is the only legal tool that takes care of compensation for displaced people. But lately, Govt. of Gujarat, Govt. of Madhya Pradesh, and Govt. of Maharashtra have evolved resettlement and rehabilitation policy. Hence the attempt is:

- To study and analyse the resettlement policy of Saradar Sarovar Project;
- Evaluate the strategies of the resettlement policy; and
- To evaluate the implementation process

# Saradar Sarovar Project

The river Narmada rises from a holy tank in the midst of a cluster of temples on the Amarkantak plateau of the State of Madhya Pradesh. The Narmada is the fifth longest river of India. It is, however, the longest among the west flowing rivers of the country. The river traverses up to the sea, a distance about 1,312 km, and drains an area of about 95,726 Sq Km. in the three states of Madhya Pradesh, Gujarat, and Maharashtra. The river is largely untapped because of interstate water disputes and annually about 32 MAF (million acre foot) of water on an average flows into the sea from the river.

Narmada is one of the sacred rivers of India, dotted by a number of religious shrines all along its course. It is mighty river with a special place in the country's legend and history. The river valley is inhabited by large tribal people and has developed a rich cultural heritage with significant religious stimulus.

The Saradar Sarovar Project (SSP) is an inter-state multipurpose joint venture of four states-Gujarat, Madhya Pradesh, Maharashtra, and Rajasthan with a terminal major dam on river Narmada. It is the largest water resource development project in India and its magnitude in terms of inputs of resources, coverage, and implications is enormous. Conceived in late forties, planned in fifties and launched in early sixties, the project could not progress due to inter state disputes. The dispute mainly centered around resettlement of affected people and the distribution of the precious waters of Narmada river, all of which were running waste into the sea, causing disastrous floods. The main direct benefits of the project comprise, irrigation of 1.8 million hectares of land in Gujarat, 75,000 hectares in Rajasthan and 3,700 hectares in Maharashtra. The project will generate 1,450 MW of hydropower, which will be shared in the ratio of 57% by M.P., 27% by Maharashtra, and 16% by Gujarat. It will also provide drinking water to 8,125 villages and 135 urban centres in Gujarat for the existing population of 18 million and prospective population of over 30 million by the year 2021.

The project is the lifeline of Gujarat. As about 75% of the command area in Gujarat and Rajasthan is drought prone and it will cater for domestic water supply to Saurashtra and Kutch region and all villages affected by salinity and fluoride in North Gujarat. To comprehend the water problem correctly, we have to recall the three consecutive years of draught in 1985-86-87, which wrecked havoc on economy and rural life of Gujarat and Rajasthan. Thousands had to migrate with cattle in search of pasture and government had to run 'water trains' to sustain bare minimum water supply. Even in the normal year, drinking water problem becomes acute in large towns also. Presently during summer many towns get water once in four days or once in three days- that is very common.



### The Project Impact

A project of such a magnitude would have profound impact in both the human and natural environment. It is bound to disturb the existing human and natural conditions. In fact, it would create a new eco-system, which not only needs to be identified and understood but also managed. In the SSP most of the affected area lies outside Gujarat. The dam will submerge 19 villages in Gujarat, 33 villages in Maharashtra and 193 villages in MP. All these villages are situated in tribal areas. The state wise break-up of affected villages and number of affected families are given in the following table 1.

Table 1 Break up of affected villages and number of affected families

States	Villages Affected			Families to be rehabilitated including major sons/daughters as per December '94	Population affected
	Full	Partial	Total		
M.P.	1	192	193	33014	89796
Mah.	-	33	33	3113	19650
Gujarat	3	16	19	4600	18000
Total	4	241	245	40727	127446

(Source: Saradar Sarovar Narmada Nigam Ltd., Report on Rehabilitation and Resettlement, Gandhinagar, SSNL, 24-7-1989).

Different categories of project-affected families in three states are given in the following Table 2.

Table 2 Different Category of Project Affected Families

State	Landed farmers	Co- sharer	Encroachers	Major sons	Landless Agricultural Labourers	Other Landless Labourers	Total
Gujarat	647	850	487	2204	392	20	4600
Mah.	1472	-	-	893	748		3113
M.P.	9985	1	-	15018	5776	2235	33014
Total	12104	850	487	18115	6916	2255	40727

(Source: Saradar Sarovar Narmada Nigam Ltd., Report on Rehabilitation and Resettlement, Gandhinagar, SSNL, 24-7-1989).

Thus, the main economic activities in the submergence area are cultivation and agricultural labour. The total area under submergence is given in the Table 3.

Table 3 Submergence Area

		State and	Total		
		Gujarat	Maharashtra	Madhya Pradesh	
1	Cultivated land	1877	1519	7883	11279
2	Forest land	4166	6488	2731	13385
3	Other land including river bed	1069	1592	10208	12869
	Total land	7112	9599	20822	37533

(Source: Saradar Sarovar Narmada Nigam Ltd., Report on Rehabilitation and Resettlement, Gandhinagar, SSNL, 24-7-1989).

#### Land Acquisition Act 1894: Present Policy at the National level

It is evident, to resettle this large number of people without a resettlement policy could be a disaster. In India so far Land Acquisition Act 1894 is the only legal tool used for resettlement. The British enacted the act in 1894 and the same is made enforceable even today. Under this Act, the government can acquire any privately owned land for 'public purpose' and pays compensation in cash against the land it thus acquires. It is applicable for all types of public purposes all over the country such as roads, parks, canals, dams, airports, port and harbour, railway networks etc. It doses not treat tribal as special category.

Land is considered to be private property of the owner. Hence, for the purpose of land acquisition and compensation, it is the individual legal owner of the land who is taken into account. While acquiring land, the government has to deal with the single landowner rather than a family, group, community, or a village as a whole. This makes a difference because, while acquiring land for development purposes, the entire social hierarchy and order of the habitat is affected not just the owner of the land. This subtle aspect is missing in the Land Acquisition Act.

The act provides for cash compensation. It is assumed that with the compensation in the form of cash, the tribal oustees would purchase land elsewhere and get themselves resettled. In several earlier occasions it was found that the amount of compensation was squandered away and the tribal could not resettle. The Act does

not provide any compensation for the loss of employment to the landless labourers, forest produce collectors, forestland cultivators etc. People engaged in non-agricultural activities like fishing are also not entitled to compensation.

The awareness that resettlement policy over and above the 106 years old acquisition act is growing in India during the last few years. Lately some states governments and Gujarat in particular have made efforts to evolve policy.

#### **Interstate Water Dispute and Tribunal Award**

The dispute over the right to submerge an area in the riparian states was referred to a special tribunal, Narmada Water Dispute Tribunal (NWDT) set up by the Government of India on October/6/1969 under the interstate Water Dispute Act, 1956. Accordingly, in 1979 NWDT declared judgement and detailed directions regarding land acquisition, payment of compensation, and resettlement of the affected people. It was for the first time that mandatory guidelines for resettlement were set up. Several features of the Tribunal's award are of special interest. It defines an oustee not just as one whose property would be submerged, but as person who, since at least one year prior to the publication of the notification of the Land Acquisition Act, "has been ordinarily residing or cultivating land or carrying on any trade, occupation, or working for gain in the area likely to be submerged permanently or temporarily." This definition of oustee includes landless labourers and others who would be affected by submergence even if they did not own any land. In defining the family of an oustee the award stipulates that every major son will be treated as a separate family.

The Tribunal directed that Gujarat would bear all the costs, charges, and expenses-including establishment charges for the resettlement of oustee's families from all three affected states. Gujarat was also directed to establish new villages in the command area of the SSP for which it was to acquire necessary lands within two years of decision of the Tribunal. Gujarat was also to acquire and make available one year in advance of submergence, irrigable lands and house sites for resettlement of oustee families from MP and Maharashtra, who were willing to settle in Gujarat.

# Resettlement Policy

The NWDT award was the landmark verdict and the following policy framework has become the guiding principles for all the resettlement and rehabilitation works in the state of Gujarat.

- The main principle of the resettlement policy is that the project-affected families improve or at least regain their standard of living they were enjoying prior to displacement.
- The affected people should be relocated as village units, village section or families in accordance with their preference.
- The affected people should be integrated with host community, village where they have settled.
- The affected people should be provided appropriate compensation, adequate social and physical rehabilitation, infrastructure including community services and facilities.
- There should be active participation of the affected people in planning of their resettlement and rehabilitation.

#### **Strategies for Resettlement**

The families affected by submergence due to SSP are to be resettled as per the policy guidelines laid by the NWDT award. The government strategies regarding resettlement of displaced people can be summarized as follows:

- The affected families shall be persuaded to settle down in Gujarat because the NWDT award gives them a right to have agricultural land in the command area of the SSP.
- Full compensation for the submerging agricultural land as per the provision
  of the Land Acquisition Act 1894, or land for land as desired by the oustee.

- Full compensation for existing house going under submergence.
   Dismantled components of the house and household kits to be transported free of cost to the new habitat.
- Each family will get 2 ha of irrigable land whether it is landowner or agricultural landless labourer. Even encroacher on government and forestland will get this benefit.
- Every major son of the landless oustees, agricultural labourers, encroachers, co-sharers who had attained the age of 18 years on January/1/1987 would be treated as a separate families and entitled to get 2 hectares of land.
- Every displaced family will be provided residential plot of 500 sq m Free of cost.
- Facility for temporary sheltered accommodation at new village site.
- For construction of plinth of houses, grant up to Rs. 10,000 to affected family, above plinth may be built by the oustee.
- Rs. 2,000 for the purchase of new roof tiles instead of transporting the old tiles at new sites.
- A core house of 45 sq m at the cost of Rs.45,000 in lieu of tin shed, plinth and roof tiles will be provided free of cost.
- Every displaced family will also be paid subsistence allowance of Rs.4,500 for the year. The amount is paid in three instalments.
- Resettlement grant of Rs.750 plus escalation in consumer price index at 8% from January 1980. This is given in bulk after the people permanently shift to the new site.
- Rs. 700 grant for purchase of productive assets such as bullocks, cows, sewing machine, trade tools, agricultural implements.
- To make the land fit for cultivation and derive full potential, the land is either being ploughed or a grant of maximum Rs.600 is given for ploughing/tractorising the fields.
- To derive the benefit of 100% electrification, the affected people are given assistance for electrification in their new house and huts in the farms free of cost.
- Reservation of jobs for displaced people and their family members in SSP.
   Over and above, they are to be sympathetically considered for other government jobs.
- To ensure that affected people accrue the benefits of ongoing schemes, the government has created a special social cell.
- Appointment of Grievance Redressal Authority for any complaints regarding land, resettlement and rehabilitation.
- Civic amenities such as, primary school, health centre in each new habitat, percolation tank, drinking water well, vocational training centre, approach roads, internal roads, seed store for 500 families, children's play ground are to be provided at the new habitat.
- All displaced people are covered by insurance: huts and dwelling for Rs. 5,000; contents including own belonging for Rs. 1,000; death for Rs. 6,000; loss of use of two limbs or two eyes or one limb and one eye for Rs. 6,000; loss of use of one limb or one eye for Rs. 3,000; permanent total disablement from injuries other than above for Rs. 6,000

# Actors/Stakeholders in the Resettlement Process of SSP

Since the project started in early fifties, various agencies, govt. organizations, and institutions played vital role in the process of policy formation. The following are the key actors who have been involved actively in the recent time.

#### **State Government of Gujarat (GOG)**

Being the initiator of the SSP is the main stack holder in the project with the task of resettling totally 245 villages, 40,727 families, and 127,446 people affected by the dam.

#### State Government of Madhya Pradesh (MP)

The majority of the affected people by the dam reside in the state of M.P. in 193 villages, comprising of 33,014 families, and 89,796 people. The State of M.P. played active role to pressurize NWDT and the Supreme Court of India for adequate compensation and resettlement of their people in Gujarat State. They also have interest in sharing power and water generated by the SSP.

#### **State Government of Mahashtra**

The SSP will submerge 33 villages, 3,113 families, and 19,650 people altogether in the state of Maharashtra. Like the State of M.P. this state was also party in dispute in sharing the benefits of the project, and resettlement of their people.

#### State of Rajasthan

The state is not affected by submergence but the water scarcity in the state is alarming. The state lies on the international border with Pakistan and most of the area is desert. There is scanty rainfall during monsoon and many villages have no water for drinking or irrigation. This led the state to stake claim in the SSP.

#### Saradar Sarovar Narmada Nigam (SSNL)

The corporation is the apex organization having assigned the task of building the dam and resettlement of the people. The corporation looks after the engineering and finance aspects of the project.

#### Saradar Sarovar Punarvasavat (Resettlement) Agency (SSPA)

Founded by GOG, is an independent body for the implementation of resettlement and rehabilitation (R&R) policy. This body is vested with the powers of the government and is headed by the Chief Minister of Gujarat. The commissioner of SSPA looks after implementation and he is assisted by a General Manager for Resettlement & Development to look after the development needs of the resettlers and a General Manager-Rural Construction who looks after development activities such as infrastructure, irrigation, electricity etc. A displaced family is looked after by GM R&D, while a village is a unit for the GM R&R.

#### Government of India (GOI)

GOI is playing a neutral role in the entire episode but they are concerned with the resettlement of people. There is tremendous pressure from several environmental groups, human rights organizations and international bodies, all against the dam. Hence, they keep watch on the development of the project, resettlement in particular.

#### World Bank & IMF

They were involved in the initial stage. In view of the positive approach of the GOG, the Bank offered financial aid. The Bank insisted that the standard of living of affected families should improve or at least be maintained as it was prior to submergence. It must be admitted that involvement of World Bank did bring the change of approach to the resettlement programme. Later, due to dispute, the GOG decided to keep the Bank out from the project.

#### **Morse Commission**

An independent fact finding mission by the World Bank visited the site and contacted several agencies connected with the project. Due to pressure from the environmental lobby Morse team asked the GOG to make changes in the project. The author met the Morse Team in 1993, and found that they had preconceived ideas and their recommendation were biased. This led to the withdrawal of an important actor-World Bank from the project.

#### **International Labour Organization (ILO)**

ILO convention 107 was adopted in 1957-"Convention Concerning the Protection and Integration of Indigenous and other Tribal and Semi Tribal Population in Independent Countries". India was one of the first countries to ratify ILO 107 in 1958. There are three important things to notice about; first, it affirms the right of tribal people to their traditional lands. Second, it stipulates the causes for which tribal people may be removed: National security, National Economic Development and the health of the tribal population. Third, it provides that tribal people who are displaced shall be provided with lands of quality at least equal to that of the lands previously occupied by them, suitable to provide for them their present needs and future development. The ILO played an indirect role in forming the policy for resettlement as Indian government has to comply with the ILO stipulation.

#### People's Union for Civil Liberties (PUCL)

It is a local unit of the Nation wide Human Rights Organization. This organization plays a "watch dog" and critically examines the resettlement process of SSP. From time to time they visit the new habitats, contact people and assess the situation. They often publicize their views in media and their being there has helped the tribals.

#### Narmada Bachao Andolan (NBA) - Save Narmada Agitation

It is an anti dam organization with one mission – to stop the construction of dam. They are pro-people and have taken path of agitation. They mobilize communities affected by the project, often successful in thwarting government efforts to evacuate settlements. This has hampered the progress of the dam. The involvements of NBA has brought great awareness in the tribal population regarding their rights and have become more vocal than mute observer as it happened in the past. NBA has approached the Supreme Court of India to stop the work of dam.

#### World Commission on Dams (WCD)

An international organization, playing important role to safeguard the environment and people affected by large dams. It is more a "watch dog" role and they monitor and evaluate the water resource projects worldwide. They are not directly involved in SSP but are in position to use international media and pressurize the Indian government on the issue of resettlement.

#### **Non-Government Organizations (NGOs)**

GOG accepted the award of the tribunal and began the construction of the dam. However, by that time there was a widespread emergence of NGOs opposing the dam. The problem became more known and the main point raised was that big dams create lopsided development. They thought that it is big technology, and not the social organization of production. At this juncture a group of environmentalists also opposed the big dams and it was because of this that Gandhian groups believing in the philosophy of small technology got a boost. Today, the NGOs have become alternative agency for development, but there are various types of voluntary agencies. Vishvamata Nirmulan Samiti did some good work in the initial phase (1980-84). Social Service Society has played a significant role in conscientising and organizing tribal oustees and they fought for the legal rights of the tribal oustees. It is only after 1987 that this organization has shifted its stance and taken anti dam position. Yuva Chatra Sangarsh Vahini has consistently fought for the cause of a just and proper rehabilitation. Shri Harivallabh Parikh of Anand Niketan Ashram has strong influence in submerging villages. Shramik Vikas Sansthan has also been involved in rural development programme in the new settlements. Lok Adhikar Sangh though taking an anti-dam stance has played a significant role in bringing the rehabilitation issues to light. However, most of the newly involved NGOs play the role of providing developmental inputs and not that of organizing them. Nehru Organization for Mass Movement, Arch Vahini, Sankat Nirvan Society, Institute for Studies and Transformation, Shivanand Society, Divya Seva, GRISERV, Narmada Development Society, Dipchand Gardi Charitable Trust, Lions Club, Action Group, National Rural Development Group, and Sadvichar Parivar are some such NGOs. All these NGOs have formed their federation named 'Sampoorna Punarvasan'means 'Complete Resettlement'. The evolved resettlement policy speaks about the role all these agencies have played over the period of last 15 years.

#### Centre for Social Studies (CSS), Surat

The GOG and Narmada planning group asked the CSS to conduct studies about rehabilitation of the villages going under submergence. A detailed report was prepared after conducting studies of all the submerging villages. The

recommendations made in the studies were accepted by the GOG and the same were incorporated in the resettlement policy. The CSS is the monitoring agency for the GOG, they have been assigned the task of keeping watch on the implementation of resettlement policy and advise and inform the government from time to time. The CSS thus is one of the key actors having great influence on the resettlement process.

#### Narmada Planning Group (NPG)

The NPG was formed by GOG so that the planning could be made more systematic. The NPG have involved experts of several subjects, engineering and social sciences, and have requested them to offer advice and service to them. Research institutions and various universities are given different study projects, to conduct social, economic and anthropological studies. The recommendations of the respective reports were incorporated in the planning of the projects. Even today, this process of incorporating recommendation is going on. The report on the issue of resettlement and rehabilitation was prepared by a team of social anthropologists, planners, and economists, which has influenced the drafting of resettlement policy. It has happened for the first time in India that expert social scientists in large numbers, and of different subjects, have involved in the planning of an irrigation project.

#### Narmada Water Dispute Tribunal (NWDT)

The NWDT played a major role in shaping the resettlement policy of the SSP. The NWDT was chaired by the sitting judge of the Supreme Court of India, with complete help of technical experts and panels made exhaustive and detailed study of various alternatives for making best beneficial use of Narmada waters in interest of the country in general and riparian states in particular. It gave a comprehensive award in 1979, which is considered as landmark award. The Tribunal was indeed much ahead of its time in prescribing a liberal and complete package of land for land and all other living amenities for resettlement of the displaced. While entrusting the responsibility of constructing the interstate SSP to the GOG, the award has also prescribed various regulatory and administrative authorities so as to ensure smooth implementation and effective compliance of all provisions of the award, under GOI's stewardship and participation of all the four states. This award was accepted and notified by the GOI in December 1979, giving it a status of finality and binding to all parties, as mandated by article 262 of the Indian Constitution and the Interstate Water Dispute Act of 1956.

#### Narmada Control Authority (NCA)

The NCA was established by the GOI at the national level as fall out of NWDT award. The main purpose of NCA is to keep an eye on the problem of resettlement and rehabilitation. The NCA conducts periodic visits and collects information on resettlement, which is passed on to the GOI.

#### The Ministry of Environment

The Ministry has had stake in the resettlement. The Ministry refused to give any forestland for the new habitats and insisted that aforestation should go paripassu with the construction of dam equivalent to the forest area getting submerged. The Ministry is well aware of the environmental issues and closely monitor the impact of dam on flora and fauna. Moreover, tribals use forest products for their livelihood and hence the Ministry insists GOG to undertake social forestry, village forestry, forestry of fallow land in and around new habitats.

#### **Grievance Redressal Authority (GRA)**

The Supreme Court of India has been very much involved into the disputes of the project and many other litigations filed by environmental groups opposing the dam. Lately, the Supreme Court has taken a view that the GOG was trying to put implementation mechanism in place for the resettlement and rehabilitation of oustees and there was need for strict monitoring and overseeing. It then appointed the GRA under the chairmanship of a retired Supreme Court judge. In future, the court's decision based on the GRA's recommendation would be binding on all parties. The GRA visits resettlement sites to get the first hand information and hear to grievances if any of the displaced people.

#### **National Commission of Scheduled Castes and Schedule Tribes**

The commission works towards upliftment of the tribal people. The Commission is actively involved in the resettlement of people due to the fact that the majority of the displaced belong to these scheduled castes and tribes. The Commission has lately

taken the role of advocate and they represent and fight for the betterment of these communities.

#### Department of Archaeology

In the case of SSP, where some of the archaeological sites may be submerged, the



NWDT stipulated that the entire relocation, conservation and protection should be implemented carefully by the GOG. Hence a detailed archaeological and anthropological study of the entire region has been conducted. The Narmada basin has two ancient temples which go under submergence. The government is building these temples on higher

plateau as per the direction of the Department of Archaeology. For the continuation of the SSP, the clearance from them is essential.

#### Actors at Village Level

The people in submerging villages have played vital role in the entire episode. The village Punchayat (local government at village level) is most active unit and the president is the key actor in decision-making. The people normally will follow the leader and his word is final in the village. The various castes in the village have their own leader-a cast leader, and he often decides what is good for his caste and community. In selecting new habitats caste leaders have been playing important role. Often in a village some people are branded as the village intellectuals, they are the one who often go to the urban areas for business or other purpose and know the "outside world" and they are called "Dayas" in colloquial term. Their opinion is often sought in the time of crisis and it is found that they have been playing important role in mobilizing people in the community. Similarly, a priest of the village temple has greater influence on the entire community and he wields power over the people. All these people are active in the resettlement process and government always tries to take them into confidence by having their participation in the decision-making. Without their cooperation the resettlement work is not possible.

# Design and Implementation of the Resettlement Policy

The government of Gujarat, after NWDT award, started to implement the project. In the initial phase in 1990, the villages nearer to the dam site were shifted to new habitats. This was the beginning of the implementation of the policy. The construction of the dam was depending upon the evacuation of the submerging villages. Faster the resettlement, speedier was the construction of the dam. As mentioned earlier various NGOs working against the project mobilized the people and thwarted the progress. This resulted into revision of the policy and become more liberal benefiting the displaced people. After 1992, people accepted the policy and resettlement work progressed further.

As per today, out of total 40,727 families, refer Table 1; SSPA has resettled 19,684 families on the newly built 180 habitats. Earlier SSPA was building the habitats, but now the work is assigned to various NGOs and it is faster and more efficient. The author visited some of these sites recently to get the response of the people, and it is found that people, by and large, are satisfied and have improved their income and living standard over the last 10 years.



People's Participation in Selection of New Habitats It was well realized from the beginning that participation of people is most essential in decision

making. When people feel they are part of the process, programme has better chance of success. But if people are not involved, the programme fails and people will criticize the government and the beaurocracy.

It is worth noting that in case of Ukai Dam Project in 1960, there was no involvement of the people. SSPA from the day one wanted that people be involved in selecting the site and village planning. Special buses took people to the new habitat sites and they visited various places before coming to the final choice. The village heads called frequent meetings where all the people gathered and the following scenario emerged.

- In some cases, the entire village decided to resettle in a new place en masse
- In few villages people decided to separate on caste line as some liked site A
  and some liked site B. There was no consensus, hence they split and made
  choices suited to them.
- In some cases, individual family decided to go on their own. They did not bother about their caste and village. These were joint families with many members and decided to separate and settle on site they felt most beneficial.

It is interesting to note that people changed their mind several times during this process of selecting the site. They had to decide on two things (1) land for residential plot and (2) land for agriculture. The SSP understood their problem and took very sympathetic stand. They helped people to revisit alternative sites by arranging special bus transport and gave them ample time to make decision. This was a complex human problem and there was no hurry in this process. The SSPA respected all the three options and have been carrying out the resettlement as per the wish of the people.

There are also cases that after resettling in the new habitat, families felt that they have made a mistake, and wanted to go another site. The SSPA has accepted such changes and made arrangements accordingly. Resettlement is long progress, it does not happen just by shifting to the new place. Some time people felt comfortable only after three or four years. During this process, oustees are allowed to cultivate land at both the old and the new places. In this transitional phase one would find husband at new place and wife at old place, or father at new place and son at old place. This process is going on. There is a long way to go as 50 % of the families are yet to be resettled. But SSPA has successfully involved people to participate in this important aspect of selecting land for residence and cultivation. The entire future of resettlers depends up on this decision.

#### Land

The policy related to land, i.e., 2 hectares of agricultural land to each family is well received by the people. As mentioned earlier this benefit is being given to landed farmer, landless labourer, co-sharers, and encroachers as well of the submerging villages. Moreover, adult sons in all these families are treated as a separate family unit gave boost to the acceptance. Generally a tribal family has 4 to 5 children, and as a result there are several families having 2 or 3 major sons. So there are cases where a family got more than 2 hectares of agricultural land. One case in the new habitat 'Khandha' is worth noting, where a landless labourer had seven sons and hence in the new habitat his family received 16 hectares of agricultural land, and on top of it the family got 8 residential plots of 500 sq m each, i.e., 4,000 sq m He was a landless labourer in the old village, but now in the new habitat he is a landlord. There are several cases like this but the underline fact is that the land policy is very liberal and it has helped the displaced people. It should be noted that this agricultural land is located in the prime command area of the project, hence when the reservoir starts retaining water this will be the most fertile land in the country. It has been also noted that all the landless labourers, encroachers were the first people to accept the evacuation. Because they had nothing in the old village neither house nor agricultural land, and they were gaining benefits by the resettlement. When they shifted, there was nobody to work in farms in the old village that compelled landed farmers to shift eventually.

#### **Housing in the New Habitats**

The SSPA has offered free residential plot of 500 sq m measuring  $18.3 \text{ m} \times 24.45 \text{ m}$ . For the construction of house there were two options, either to go for ready-made

core house provided by the SSPA or build house by themselves. Depending upon the family size, socio economic conditions, availability of labour and the over gains from the package, people made their choices.

#### Self help Housing

Those who wanted to build their own houses are given the following benefits.

- If family is not willing to accept the core house, and want to build on their own, they are given sum of Rs. 45,000 equivalent to the cost of a core
- Temporary sheltered accommodation built by the SSPA so that they can live here and build the house using the material of old house. The free transport of the material of the old house to the new habitat is provided by SSPA.
- Grant of Rs. 10,000 to build up to the plinth of the house. Above plinth people can use their material of the old site and complete the house.
- Roof tiles equivalent to roof area of the house or 85 sq m whichever is less free of cost.

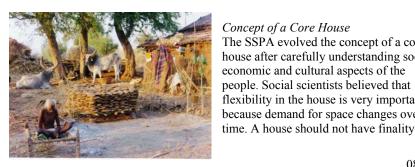
People opt to build their own house because they have big joint family moreover, they enjoyed big house in the old village. They have availability of labour in the family. For them 45 sq m core house is too small and by accepting self-help house they are saving money even after completing the house. The saving they want to utilize for developing agriculture and other trade. It is found that 45% people accepted self-help. They wanted to create same space and volume as it was in the old house. Majority of them have built the exact replica of the house they were living in earlier. While researching it is revealed that culturally and psychologically their behavioural pattern was tuned to the old 'space', and did not want to disturb the



spatial ecology of their living. By creating the same environment again. they psychologically got solace as if they did not shift their habitat at all. In several cases author found that families planted the same trees, at the same location around the house and waiting to grow so that it will add to the semblance of old habitat.

The families who opt for self-help are normally big with father, mother and married sons and have built one

room per family. In other words, if there are two married sons than there are three rooms in the house. They live together but kitchen is separate. In the room itself they construct a half partition wall to delineate separate kitchen area. Normally, the houses are between 100 sq m to 125 sq m in area. The veranda is provided in the front of the house and mostly they are kept open. Veranda is covered with tin sheets on roof resting on wooden pillars or brick piers. Some houses have closed veranda with straw/reeds partition. There are few windows or no windows in many houses. Windows are small in size ranging from 3.0 sq m to 4.0 sq m, a few ventilators made of pre cast concrete units but the ventilation is almost nil. Houses are very dark inside. For keeping cattle outside in daytime, some have made separate shed as shown in the adjoining photograph. A cattle is kept inside the house in night due to fear that it might get stolen. There is no toilet in the house, but lately there is demand from the people to build w.c. and SSPA has agreed to provide the same in all the houses.



The SSPA evolved the concept of a core house after carefully understanding social, economic and cultural aspects of the people. Social scientists believed that flexibility in the house is very important because demand for space changes over a

about it but protean in character. It should be in position to change, adopt, modify as the situation arise in the family. Anthropologists pointed out that 'out door' living is very important in tribal communities, mainly due to cultural habits and climate. Hot climate does not allow people to remain in door and they spend most of the time doing household chorus out side the house. The concept of core was the result of this realization.

Hence, families not wanting self-help house are given free ready core house of 45 sq



m measuring  $5.0 \text{ m} \times 9.0 \text{m}$  at the cost of Rs. 45,000. The core house comprises of a room, veranda, and open area at the back. Two core houses are built with a common wall in between to lower the cost. The walls of the house are made with R.C.C. hollow blocks or bricks, roof with CGI sheets and covered with tiles, flooring mostly out of cow dung or mud. The doors

windows are fabricated out of mild steel angles flats and 20 gauge m.s. sheets. The columns in veranda are made of 200mm hume pipe and lintels over doors/windows are 40mm thick kotah stone.

The author visited several habitats having core houses built by the SSPA. It seems people have accepted the houses as it is and very little changes they made to



the house. Only change visible is extension of the veranda shaded by tin, Mangalore tiles often covered with dry reeds or grass to keep the cattle. Sides of the veranda and cattle sheds are covered with brick walls or bamboo. At places, back of the house is also extended and converted into kitchen, closed by sidewalls made of brick masonry. Small circular ventilators with pre-cast concrete units are constructed in the side of veranda

and kitchen. Windows are kept shut always. Inhabitants complain of being hot inside, still they do not prefer windows. When enquired they say that 'it used to be their way in original habitat'. It should be noted that the 'sense of space' and 'sense of home' is deeply rooted in tribal people and they will not experiment with it.

*Use of the Space inside the House* 

- Room space is used for storage of field, farm produce.
- Veranda is used for sitting; sleeping and other house hold activities in daytime.
- Families with small babies have put up swing made of ropes in veranda.

Use of the Space outside the House

- For sitting in the daytime, as they feel hot inside, they sit under the tree shade
- For growing vegetables, for their personal use.
- Some people grow wheat, cereals and other grins as they have large space vacant on the residential plot.

Paintings of birds, flowers etc. are seen on the doors and windows in almost all the houses. They do it themselves or get it done by a painter who visits the village once or twice a month at a cost of Rs. 100 per door. This shows that tribal people have a strong urge to personalize the space and give identity to the house.



#### **Rehabilitation Efforts**

Resettlement is physical, while rehabilitation is more economic and social process. SSPA has involved several NGOs in this task and their effort is showing the positives results. Almost all 180 new habitats have been

adopted by the NGOs for various development programmes. The following programmes are going on very satisfactorily.

- Providing drinking water facilities in the new habitats by laying pipelines and installing hand pumps.
- Planning and constructing children parks with play equipments.
- Constructing primary schools and kindergartens.
- Establishing dispensaries, health centres, and organizing human health camps specially for women, children and old people. The emphasis is on creating awareness and acceptance of the economic value of human health.
- Water drainage projects and building culverts.
- Development of agricultural land, crop demonstration, etc.
- Afforestation projects around the habitats.
- Introducing lift irrigation schemes and other water retaining devices.
- Organizing various training classes for preparing jam, jelly, tomato catchup and tailoring, especially for women to create opportunities for selfemployment.
- Encouraging residents to save money by investing small amounts in banks and small savings scheme of the government.
- Organizing training for security guards, car/truck and tractor driving.
- Introducing youth activities, and persuading them to refrain from alcohol and other vices.



- Cattle care programmes, vaccination, and making them aware of the cattle diseases.
- Training programmes in areas of productive farming, hand pump repairs, tractor/car repairs so that people become self sufficient in the village.
- Night schools for illiterates; women, youth and adults.

All these programmes are designed to help people and make them self-sufficient. The NGOs have been putting their best efforts to make it successful.

## Observations and Recommendations

It is interesting to note the gender bias in the resettlement policy. In tribal community very few women own property or have land in their name. It is the adult male who is considered to be the head of the family. The NWDT defines family to include husband, wife, minor children and other persons dependent on the head of the family. But legally there is no provision for a woman who is the head of the family, or single woman or a widow with minor children. The award stipulates that every major son will be treated as a separate family but a major daughter is not counted as a separate family.

Each state in India needs development and resettlement is the main issue they face. In lieu of a national resettlement policy, each state has piecemeal approach to the resettlement policy. There is urgent need to form national policy to which rehabilitation efforts can be undertaken with a degree of uniformity. There can be variation depending upon the culture, socio-economic, and geographic situation but some minimum should be stipulated.

Integration of the new habitat with the host village is very important. In many cases host village view the new entrants as threat and oppose to share available facilities and resources with them. Government should make efforts to explain the situation to the people of the host village and prepare them to help. At places many displaced people have bitter experience with their hosts resulting into harassment and isolation.

It is good that every family is getting agriculture land in the new habitat but it is a fact that everyone cannot do agriculture, especially those who were engaged in other trade. It requires managerial skill, knowledge, and finance to operate. The reservoir is not ready yet and the agriculture depends on the vagaries of monsoon. So far tribal were doing subsistence farming but that will not take them further in changing situation. It is important that people are properly trained to cultivate land, other wise with failure of crop they will be forced to take other jobs.

Although women form a large population of the displaced, very little or no attention is paid to them by both the authorities and the displaced male population. The women are responsible to collect food, fuel, fodder and water and taking cattle for grazing. When shifted to new site, they will have to relearn and adjust to the new ecology, which can be very stressful. In the present case there is a dearth of grazing land and afforestation needs to be intensified.

Education is very important aspects of the development. Tribal community has little awareness regarding family planning, health and sanitation and all these are linked to education.

The following are suggestions to improve the settlement design and planning.

- In some village, the principles of site planning are missing, the landform, and natural gradients, respecting natural features such as trees, water bodies, street network and climate. Interweaving these aspects in correct relationship will add to the quality of environment.
- It is important to understand the life style of the people. Mere physical form does not make house, it should integrate with the behavioural patterns of the people. It is observed that whenever people build self-help houses, they have set their environment better than the core houses. Because they understood their needs correctly and were designed with a particular concept of space and behaviour. But in the case of core house, people are still struggling to adjust and modification is yet to come.
- People should be made aware of the importance of light and ventilation for keeping good health. In the absence of awareness, they keep doors windows shut, maintain dark spaces inside. This is detrimental to health.
   People should be educated to change this attitude and proper windows with safety measures should be installed.
- In almost all the cases, cattle is more important to the tribal and they keep them in the house at night, where as they themselves sleep out. This fact requires rethinking of the design altogether.
- In several houses, people have shifted the kitchen outside at the back. This
  is mainly due to the smoke generated by the fireplace, and the shortage of
  storage space. There is movement to install smokeless fireplace and it
  should be strengthened further.
- The tribal prefer outdoor living, may it be sleeping, cooking, cleaning
  grains or doing any household chorus. It is good that there is great
  flexibility in the core house, but still it requires the outdoor component
  more specifically addressed in design, by providing bigger veranda and
  planting trees surrounding the house.
- There should be proper climatic consideration while preparing the site plan, i.e., orientation of the house as per the solar movement, wind direction. It is good to have sunlight in the morning but afternoon is too hot and it should be better if southwest side is blank.
- Community spaces should be used, otherwise it is no man's land and can soon become a garbage yard. In some villages, the open space is not properly attended and maintained, devoid of proper definition, lack of good trees, and inappropriate location. The sense of belonging is very important.

- Site plans are silent as regards to landscape and tree plantation. Some of the
  approach roads are barren, need concentrated efforts by people to convert
  them into green. Internal streets also require trees to create micro-climatic
  effects.
- The road network is peculiar with a same width 7.5m in the entire village.
   It could have been designed with concepts of loops and cul-de-sac to minimize the network.
- There is very little or at places no grazing land for cattle. People complain about this and have resorted to stall feeding, which is not their method of feeding. It adds to the work to bring fodder and create storage in the house.
- NGOs have taken up training work, but there is a need for full-fledged training institute to impart skills to the youth. NGOs efforts are village based, small scale and have limitations of staff and resources, probably not sufficient for the fast changing scenario in the region.
- Women in the villages have learnt and developed the skills to prepare dry fruits, pickles etc. but there is no provision for marketing these products in urban area.

## Conclusion

India has the dubious distinction among all the countries of the world, of having displaced the highest number of people due to the construction of man-made reservoirs. It has been established that from only ten selected river valley development projects, an estimated 910,000 persons have been displaced in the post independence era. The magnitude of forced relocations of the population can be imagined considering that over 1,500 major dams are being built in the country.

Generally resettlement policies are created by the governments, most often as knee-jerk reactions to the dissatisfaction of people. In the absence of a comprehensive national policy, this pattern of governments offering too little too late until they are forced to make further concessions- by which time it is too late again- is bound to go on. Where there is no public pressure, when the affected population is too backward or when there are no outside groups with sufficient concern and political clout, government may be able to- and has been able to- get away by offering very little. Consequently our efforts should not exclusively to build up pressure, we must strive to evolve a policy, which will eliminate the need for repeatedly building up pressure.

There is an urgent need to study and document the problems of resettled people. A post occupancy evaluation of the new habitats will be most appropriate. The social scientists, planners, architects and administrators have done very little work so far to evaluate the resettlement schemes. The Saradar Sarovar Narmada Project is now being implemented, and lesions, experiences of the resettlement planning will be of great value in the future.

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