

India: Women, water, and transport in arid areas (IFRTD)

These case studies are being compiled to draw lessons from the experience of a wide range of organizations. They are considered as works in progress and will be updated periodically. Comments on the cases are welcomed, as are suggestions on additional cases which could be included in the series.

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MAPPING INTERPLAY OF WOMEN, WATER, & TRANSPORTATION IN ARID AREAS

The background to this study is the existing involvement of SEWA in the lives of the women of the rural and drought-prone district of Banaskantha, northern Gujarat. It is an arid, land-locked region with 1375 villages and five towns. It derives its name from the Banas River, which runs down from the mountains in the north, although in fact it is dry for most of the year. It then floods the villages which border the deserts during the monsoon season. The study assesses the existing relationships between women, water and transportation in that District, and makes suggestions for improvements to the present very difficult circumstances.

The authors' findings in this study derive from knowledge drawn from SEWA's existing presence, informal discussions with women and a participatory evaluation writing workshop. The women of the area guided the evolution and writing of the study through their involvement at each stage.

An effort was made to include women from villages with as many different water and transport-related facilities as possible, as well as those lacking such facilities.

In Banaskantha District women hold the primary responsibility for providing water for domestic and other (Agricultural, industrial) uses. The study sought to examine how this is affected by the availability and utility of transport facilities, linked ultimately to the potential for the economic and social development of the women of the District.

The authors summarize their major findings as follows:

The most striking feature that emerged from the research is the extraordinary amount of time and energy that the women expend to collect and transport water from the source to the home. Secondly, the primary means of transporting water is headloading. In addition, many villages continually face an acute shortage of potable water. Lack of access to safe drinking water, the effects of headloading on women's health, lack of access to adequate transport facilities and the burden of women's household responsibilities all have a detrimental effect on women's income earning abilities. The general welfare of the family suffers as a result.

The main occupations in the District are agriculture and dairy production. 58 per cent of the population are cultivators while 19 per cent are agricultural laborers, but owing to the drought, agriculture is sporadic and the rate of migration in search of work is high. Most of the women are self-employed, surviving on wages earned from whatever they can find throughout the year. Salt workers and gum collectors are amongst the poorest and most transport deprived.

There is a pipeline to some villages in the District since the early 1980s, but water supplied by the pipeline is irregular and even in the pipeline areas the need for potable water is still high. SEWA has been active in the District designing and implementing projects that either develop or revive existing local water resources. The main beneficiaries will be the water collectors - women.

Treated as an economic input, transportation takes on added value in Banaskantha where basic necessities such as food, water and medical care are either scarce and/or inaccessible to the rural population. Most

families must travel out of their village to the taluka center to buy food, fuel etc. Water is collected and transported from a remote common source as homes are not equipped with running water. Villagers also travel long distances each day to reach their income-earning activities, be it wage labor, gum collecting or salt farming (the latter two categories suffering particular health and social/domestic problems brought about by the harshness of their work and working environment, compounded by severe lack of access to transport other than walking, as detailed in the study).

The only formally regulated transport facilities (set routes and fares) are the buses operated by the State Transport Corporation (STC). The people of Bamaskantha rely heavily on informal facilities for their travel needs, such as privately owned jeeps, chhakdas (motorized carts), trucks, bicycles, animal-drawn carts and the most used walking. The chhakda is the most used mode of transport after walking,

While the STC aims to provide transport facilities which enable the public to participate in social, economic and political activities, and a special effort is made in the rural areas (95 per cent of villages in Gujarat have a bus service), the bus service is still inadequate. It is affordable to many villagers, but they usually have to walk to the nearest main road or district center (several kilometers) to catch a bus, and they are infrequent, often making one journey out in the early morning and not returning until night-time. This means that if the women use the bus to collect food, for access to medical care or to collect raw materials for income-earning (e.g. embroidery), they may lose a whole day's work and therefore income. The alternative is to walk long distances or use private (more expensive and much less safe) transport. The buses remain empty and villagers are forced to pay more for transport. More frequent and more convenient bus routes would be the best alternative, and women have demanded such a better service. What they have not been told by the STC is that their elected village leader (sarpanch) has the right to request a new route or timetable, and many women don't believe the sarpanch or the Corporation would listen to them anyway. In the few instances where the women have approached the ST Corporation to demand a better service the results have been negligible. Women have been told by Corporation officers to come back with their requests in writing, knowing that most of them are illiterate.

Thus women are denied direct access to any transport planning activity.

Privately-owned vehicles come under the sole jurisdiction of the owner and few if any women have the means to purchase their own vehicles.

The authors report that the women who participated in this study are deeply involved in all aspects of running their homes and caring for their families. They understand how best to provide for their needs, yet deeply-rooted gender constructions deny women access to the decision-making processes. Their involvement in the transport planning process might bring about changes benefiting not only these women, but the entire village as well.

The effects of transport deprivation on the women can be summarized as:

- Valuable time wasted on shopping for household necessities
- Women often unable to collect rations
- Women are forced to walk long distances in severe heat, often headloading Women are. forced to rely on private transport which can be very costly and unsafe
- Women cannot access timely medical care
- Time and energy taken away from household income-generating activities
- Difficult to participate in important inter-village socioeconomic activities.

Headloading is a particular issue for women transporting water and other resources. The consequences of this are:

- It limits the amount of water women can transport at one time
- Women are forced to make several daily trips to the water source
- Women lose valuable time and energy in collecting water
- Household duties and children can be neglected
- Women suffer chronic backache, foot pains and fatigue

- Skin and other types of diseases caused by lack of sanitation
- Young girls' growth and development stunted

It should also be remembered that when the water levels are low women spend much time and energy pulling the water up from the well. They may also have to wait in a queue at a standpost.

The women expressed that they would like pipelines carrying water to their homes, but the authors state that this is a distant possibility indeed. More effective harvesting of roof rainwater was also discussed, this- has been used effectively in other parts of Gujarat, and SEWA has planned to build underwater storage tanks for the harvested water in two of the villages in Banaskantha. This will help to provide relief for water shortages and from headloading to the home.

Animal carts were also discussed, to carry water from source to home. This could provide part of the solution, but there are immediate problems of cost and the poor quality of the roads, meaning slow progress and spillages.

Conclusion

Transport deprivation forces women to spend long hours and waste valuable time in traveling to buy necessities and to collect water. Head loading has compounded effects on the health of the women which in turn detracts from the attention women can give to their homes, children and income-earning activities. The welfare of the entire community is thus affected, and this must be brought to the attention of men and village leaders.

Both adequate transport and adequate water facilities are essential to the rural population of Banaskantha; work has been done but women's specific needs must be taken into account during transport planning activities. They are major economic players not given proper attention by STC and others. An integrated approach must be taken; transportation is an important component of many other issues that affect women's lives, such as food security, empowerment through employment and access to medical care.

Other fruitful areas of enquiry would be the relationship between water, transportation and housing construction and transport used in rural migration. Transport is a key component for sustainable economic development among rural populations.

(Source: "Mapping Interplay of Women, Water, & Transportation in Arid Areas" By Poorni Bid, Reema Nanavaty and Neeta Patel *Case study presented at*