

# Teaching by example — promoting hygiene and sanitation in primary schools

by Maria Sörensson

**According to a recent study, school can make you sick. But the poor water-supply and sanitation conditions in many Indian primary schools have spurred on some determined staff to work with the children to find innovative solutions, and educate the community.**

A 1992 STUDY of 22 public primary schools in the city of Madras, and in villages nearby, indicated that school staff and children have a useful role to play in the promotion of improved water-supply and sanitary conditions in schools. The findings suggest that attending school poses a significant health risk for children; they also highlight just how important it is for teachers to be highly motivated, with positive attitudes towards establishing adequate water-supply and sanitation conditions and hygiene behaviour in the school environment.

This article highlights both the issues which have an impact on water supply and sanitation conditions in the 22 schools, and those key issues which

influenced the attitudes and approaches of the teachers. The International Water and Sanitation Centre hopes that these findings will be tested in a number of schools, and thus confirm their usefulness both as general lessons for others to learn from, and as starting points for programme improvement.

## The schools

Ten of the 22 schools lie in the poorer areas of the city, while 12 are in neighbouring villages. They are all co-educational, and there are almost as many female as male teachers. The staff usually includes a dean, teachers, a cook, a cleaner, and a watchman. The usual teacher/children ratio is 1:70, and the total number of children in the schools

ranges from 75 to 1400. The introduction of the noon-meal programme in Tamil Nadu, combined with the growth in population, has resulted in a rapid rise in the numbers attending primary school in the state.

The building of schools, classrooms, and water-supply and sanitation facilities has not kept pace with the increase in numbers. As many as 70 children often sit together in one classroom, and one latrine can serve up to 700. In a few schools, the lack of adequate classroom space means that the children have to sit in the compound. The rural schools — which are open all day — are more crowded than their urban neighbours. The schools are often in need of repair, with cracked walls and unstable roofs.

The schools studied are governed either by the Municipality of Madras, or the *panchayat* (village council). Most authorities do not have any contact with the schools and have not visited them for a considerable time, and only a few civil servants have met with staff to discuss each school's activities and conditions, and to plan for the future. The teachers maintain that they



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receive very limited financial support from the authorities. It was not clear whether the schools' funding is based on the number of pupils, or if each school receives a fixed amount.

## Water supply and sanitation

The quality and quantity of the water in the schools is a great problem, as it is for all the people of Madras. In most parts of the city, the water is contaminated and unsafe to drink. Unless there is enough water for people to wash their hands, and drinking-water is boiled or filtered, the shortage and impurities of the water can lead to a high incidence of infectious diseases. These range from diarrhoea, which is particularly dangerous when transmitted to younger siblings, to diseases such as cholera and hepatitis A and B, which pose a serious public-health risk to all age-groups.

The study found that, in most schools, drinking-water is neither

that the children have been asked to bring in their own drinking-water.

## Teachers, children, and community

All the teachers in the Madras area have had training in hygiene and environmental sanitation; and more than half have received supplementary training at the Institute for Public Health.

The children interviewed for the study are aware of the relationship between poor water and sanitation conditions, and poor health. They can cite various reasons why one gets diarrhoea, and are aware of how to prevent it. They all succeeded in drawing a picture depicting one correct, and one poor, sanitary situation. In a few schools, the children are responsible for cleaning their classroom and the school compound. Some children also participate in outreach activities, such as promoting hygiene and sanitation in their neighbourhood.

of which are used and well-maintained by staff and children. The staff also take care of garbage disposal and drainage. One school has turned its compound into a garden, looked after jointly by the watchman and the children.

In the 19 remaining schools, some or all of the children defecate in the open, and the water supply is limited (in one school, water is only available for two hours in the morning). The children in these schools cannot practise what they learn from their books — a sad irony, as hygiene education is compulsory in all Madras primary schools, and the teachers agree on its importance as a curriculum subject. So, why are the water-supply, sanitation, and hygiene conditions markedly better in those three schools? What makes them special?

## Teachers' attitudes

The study found that the teachers in the three 'promising' schools share a common belief in the crucial importance of teaching children about water, sanitation, and hygiene. They are dedicated to incorporating these issues into everyday school activities, and they try different ways of improving conditions and practices. This positive attitude strongly influences the other staff and the children. Although teachers from the other 19 schools received similar training, and work under the same basic conditions — such as a tiny budget and inadequate staffing levels — they do not actively promote better sanitation conditions in their schools. Finding out what influenced the attitude of the more enthusiastic teachers would be interesting in order to stimulate similar thinking among other teachers.



Neil Cooper/Panos Pictures

*You're never too young to learn — pre-school lessons in hygiene in Tamil Nadu.*

boiled nor filtered. It is usually kept in a special vessel, which is covered with a wooden plank or an aluminium lid. The children take water out with a mug, which they all share. Usually, there is no special ladle to fill the mug. Children who dip the communal mug into the vessel have to put their fingers into the water which, in the absence of good handwashing facilities for use after visiting the latrine will, in many cases, cause bacteriological contamination. If there are no water vessels, the pupils take water directly from a tap or a pump, using either their hands or a communal mug. In a few schools, the quality of the water supply is so poor

There are very few public and private latrines in the communities surrounding both the rural and the urban schools. Some adults use the school's latrines, while others enter the school compound to defecate; both options offer some degree of privacy. In certain areas, there is often an acute lack of water, and the women attempt to use the school's water-supply facilities.

## 'Promising' schools

Of the 22 schools investigated, three can be described as 'promising' in the context of their water and sanitation conditions. They have functioning water-supply facilities and latrines, all

## Initiating activities and finding solutions

In each 'promising school', one teacher — or the dean — has been responsible for taking the initiative to improve conditions by ensuring that operation and maintenance is taken care of, and that adults in the local community cannot misuse the water and sanitation facilities; a few individuals have encouraged the rest of the staff both to play an active part, and to take the initiative both in improving conditions, and in hygiene education. The staff worked as teams; the teachers co-ordinated their activities with the cleaners; and all team members advised each other. The result of this team approach was that the teachers felt that they were being

supported in trying to promote good hygiene and sanitation practices.

A major characteristic of the teachers' approach in these schools is their continual search for alternative ways of improving the sanitary conditions without spending a lot of money.

## Education in its broadest sense

The children who attend the three schools that came out best in the study clean up, and do repairs. In this way they learn to respect the work of the cleaners and the cooks. This positive attitude is strengthened by the way in which the teachers relate to their non-teaching colleagues. In India, there is often a strong, religion-based resistance to dealing with anything that is considered dirty, and those who handle dirt are looked down on. Breaking down these traditional attitudes is a very positive lesson for the children, and it encourages them both to respect cleaners, and to modify their own washing and toiletry habits.

The communities to which these three schools belong lack proper water-supply and sanitation facilities. To prevent the people from using the school facilities — which were not designed for a multitude of users — and to promote good practices, the teachers invite local families to join in special events such as a Water Day, and other occasions where the children take part in teaching them about hygiene. The schools also have a more direct method: they have put up fences with a gate and lock, and/or employ a watchman, who stops anyone entering the school compound.

## Lessons for all

The teachers who have succeeded in improving their school's environmental hygiene conditions and practices are strongly motivated, and possess a pioneering attitude to improving water-supply and sanitation conditions and hygiene education. They take advice from other staff members, such as those responsible for cleaning the latrines, on how to improve cleaning and maintenance. Through this practical teamworking, the teachers also receive the support and encouragement they need to carry out their own initiatives for improving water-supply and sanitation conditions, and can motivate their pupils to put their hygiene knowledge into practice.

In contrast, many of the teaching staff at the other schools talked of the lack of support they received both



Sean Sprague/Panos Pictures

*Where one latrine serves up to 700 schoolchildren, trespassers are unwelcome!*

within the school, from the authorities, the Institute of Public Health — and the parents — as a major constraint in their efforts to improve conditions.

Adequate, if basic, water-supply and sanitation facilities (that work) in school are a precondition for any teacher who wants both to develop lessons in practical hygiene, and to ensure that his or her pupils learn how to use and appreciate the facilities. As described earlier, in each of the three most promising schools the teachers have found ways to manage operation and maintenance and to involve the children in hygiene activities, although the problems in all 22 schools are largely the same. The main difference is that the teachers in the three innovative schools have looked for simple solutions using the existing capacities and resources within the school.

What can motivate teachers to initiate this type of action deserves further investigation; the findings could encourage teachers in many more schools to actively involve children, their colleagues, and local people in water-supply and sanitation improve-

ment and hygiene education initiatives. It may give a crucial entry point: teachers' attitudes and actions — rather than textbook lessons — may well be the key to improving school conditions.

Also, it would be worthwhile enlarging the review to see if the lessons learned in Madras are more widely applicable, and could be used to promote practical improvements within schools. This, in turn, may bring about a change in teachers' training programmes to include motivational factors and attitude building.

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The issues raised in this article will be looked at again — and in a wider variety of contexts — in the January 1996 issue of *Waterlines*.