

## A new approach to sanitation

### Ecological sanitation is a sensible option for tsunami-hit coastal communities

I am sure you will agree that, as reconstruction of tsunami-hit villages gets under way, ecological sanitation should be very seriously considered as an important option. Below I outline some of the reasons.

Ecological sanitation not only provides safe sanitation and protection of the groundwater, but it also provides important fertilizer and soil improvers to establish coastal shelterbelts for protection against erosion, cyclones and tsunamis.

Sanitation is a serious issue throughout the tsunami-affected coastal belt in Tamil Nadu. Fishing communities, as well as agricultural communities and small traders and services, all suffer in this regard. The issue of safe sanitation was already a serious matter prior to the tsunami, but this disaster brings it into stark relief.

One option is to simply provide conventional sanitation in the form of pit latrines and septic tanks in the massive reconstruction phase, which is about to commence.

However, if this is done, some tremendous opportunities for addressing some of the very serious issues affecting coastal communities would have been lost. Furthermore, new problems would have been created.

Some important issues facing coastal communities are:

- poor sanitation
- lack of protection from coastal erosion, cyclones and tsunamis
- poor water supply

- unproductive soils
- poor health due to poor water, sanitation and diet

Many coastal communities are in areas of significant waterlogging and very high water tables. Groundwater is an important resource, but much of it has been affected by salt water intrusion due to the tsunami, though it will most likely recover after significant rains.

During the reconstruction phase, it is likely that conventional sanitation will be promoted and constructed on a scale that has not existed in these communities.

In high water-table areas, water-flush toilets, pit latrines and septic tanks offer the significant threat of faecal pollution of the groundwater. Thus, high concentrations of water-flush toilets will almost certainly pollute the groundwater in many of these settlements, ruining a good resource and threatening the health of the community. In a State where water is so precious, one should seriously consider protecting this resource. As such, in many locations, conventional water-flush toilets may be an inappropriate sanitation choice.

Ecological sanitation offers a far more sustainable option under these conditions. Ecological sanitation:

- protects the groundwater from faecal pollution
- saves water
- comprehensively protects public health
- provides valuable fertilizer and soil improvers for establishing and

increasing the density of coastal vegetation and shelterbelts to protect against coastal erosion, cyclones and tsunamis

- provides valuable fertilizers and soil improvers for vegetable growing, and thereby improves income and nutrition

EcoSolutions offers awareness-raising, workshops and hands-on training in ecological sanitation for children, youth, women, self-help groups, non-governmental organizations and others. We also offer quality control, project management and implementation with the objective of leaving in place high-quality toilets appreciated by the users, together with the skills and knowhow to promote, propagate and sustain a new approach to sanitation, an approach that is truly sustainable and appropriate both now and in the future. 

This letter, dated 19 January 2005 and addressed to Shantha Sheila Nair, Rural Development Secretary, Government of Tamil Nadu, was written by Paul Calvert (paulc@vsnl.com) of EcoSolutions (www.eco-solutions.org)