

## **DRY TOILET WORKSHOPS IN MEXICO: AN EXAMPLE OF LOCAL AUTONOMOUS ACTIONS**

César Añorve, Mexico

During the past eighteen years the activities of César Añorve and his small team of collaborators have been self-financing thanks to the production of urine diverting toilet bowls and urinals in a small workshop, where they have developed a simple system of low-cost production which has become the economic motor of the project. The formula is simple: the bowl (= toilet seat-riser) producing workshop is an economic mini-cycle which generates jobs and furthermore puts another cycle in motion: local labor which is required for the construction of dry toilets. Every bowl produced generates work for a bricklayer and a helper during a little over a week. As opposed to prefabricated systems this formula causes more actors to participate economically, as happens in the construction of popular housing in Mexico and in Latin America.

The bowl workshops are completely autonomous; each one reveals the unique idiosyncrasy of the people who manage them. They don't have to pay royalties or copyrights. Another benefit of these workshops is that they function with minimal infrastructure, they do not depend on electrical energy and they consume very little water. Some have been installed in a house, others under the shade of a tree. These bowl workshops symbolize the dikes necessary to protect the local economy from being menaced by the paralyzing gigantism of industrial globalized society.

This project has inspired actions in various areas of Mexico and even in other countries. In fact, the replicability of the project has been a factor of civic mobilization which has enriched the discussion surrounding the use of water in cities. Various examples exist in Mexico of small workshops which based on his practical proposal, unchain a series of local actions to spread the concept of ecological sanitation.

Don "Jerónimo's" work in his workshop in San Luis Beltrán, Oaxaca, was the starting point for the State government to propel the installation of dry toilets in this state. José Luis Valois' work in his workshop has extended the project to the Mérida region in Yucatán. The workshop of the group Sendero Verde has spread the dry toilets in the Huichapan zone in the state of Hidalgo. The itinerant workshop of the Center for Agriculture and Fisheries in Dolores Hidalgo, Guanajuato, facilitates the construction of dry toilets in various campesino communities. Most recently the local workshop setup in Ciudad Juárez, Chihuahua has grown to meet the dry toilet demands of several communities in Ciudad Juarez as well as being involved in exchanges with dry toilet builders on the other side of the border in El Paso, Texas.

Like these, many other workshops have been installed with the support of César Añorve who supplies the molds and gives technical assistance and educational materials: technical descriptions, manuals, posters and a bibliography on the subject. Moreover, for those who are interested in replicating the project, he provides tools for generating their own income and becoming specialists in dry toilets and other techniques, such as reed bed systems and rainwater collection in ferrocement cisterns.

Several workshops have been installed in other countries including: Uganda, South Africa, Peru, and Ecuador where the Pestalozzi Educational Foundation (through the

Centro de Investigaciones Ciudad in Quito) first promoted dry systems in Ecuador which have since led to the installation of dry systems in many homes.