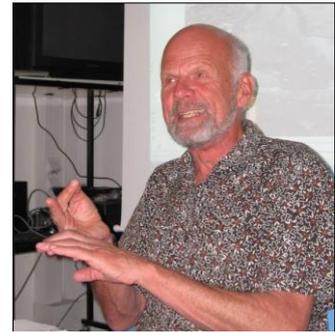


## Disasters: Architects should engage in prevention

There is a big difference between preventing natural disasters and interventions afterwards. Right after a disaster the important task is to save lives, to provide drinking water and food, and to arrange temporary shelters. Only during the next step permanent structures are to be built, but often there is a problem to acquire land and building materials. This was the main message when the Swedish architect Ingemar Sävfors spoke at a seminar in Stockholm in June this year. The meeting was arranged by Architects without Borders Sweden.

Ingemar said that planning for proper land use and for various types of infrastructure is needed, but his experience from working with the Red Cross and other relief organizations is that this type of planning seldom works in practice. Many non-government organizations bring ample resources and competence, but they usually find it difficult to do something useful in a situation where local authorities are defunct or corrupt. Often NGOs act desperately to implement something on the ground that can be shown in TV, elements of buildings or infrastructure that do not function or are out of context.

For these reasons Ingemar thinks that it is better for architects to work in disaster prevention. In this area there is much to do.



*Ingemar Sävfors.*



*Reinforcement of a roadside at risk of being eroded during the floor season. The gabion consists of split bamboo.*

In the seminar Ingemar showed examples of projects he had initiated. Among other things he has developed a gabion, a kind of basket made of bamboo, to be used as a reinforcement of the walls of drainage ditches (see picture). The bamboo stem is split and filled with stones that are kept in place also at times when streams run fast. A gabion may last for many years if the right type of bamboo is chosen. Ingemar has tested his invention in the Philippines.

Another of his ideas is to build houses on “elephant feet” consisting of used car tires combined with ball-shaped concrete blocks on top of a bed of stones (see picture). During an earthquake the elephant foot may move several decimeters without harming the building. The invention has started to be used in Indonesia.

At the seminar Ingemar also showed an elastic corrugated metal roof, which moves during hurricanes, thereby reducing the negative pressure that would otherwise remove the roof.

Since Ingemar graduated as an architect at the end of the 1960s he has devoted most of his life to development issues. He has been working for the Red Cross and other NGOs in Africa, Latin America and South Asia. You may read more about his ideas at <http://www.saevfors.se/>.

*Dick Urban Vestbro*



*“Elephant foot” preventing a building from cracking during an earthquake.*