



CONSOLID TOPICAL
CONSOLID UK

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UNITED NATIONS THE YEAR OF FRESH WATER 2003 (2)

How the CONSOLEED SYSTEM can contribute to secure fresh water ponds and prevent pollution of valuable ground water resources.

Last month we discussed the possibilities of the CONSOLID SYSTEM in contributing to the water protection which is so eminent and important for the future of life on our planet. You can find warning articles in all media. "THE ECONOMIST" (July 19th 2003) published a survey which is of special competence in viewing the serious situation of the world. A lot of noise is made about WATER which covers 75% of the globe, but from all the water only 1% is fresh water and upon this 1% depends on safe life on the land. Therefore, whatever can be done to secure or even increase the available quantity of fresh, sweet water will be a very positive contribution to the future of mankind. Study articles in the media and think about your own contribution. With the help of the CONSOLID SYSTEM you are able to realise in your country the collection and storage of rain water as a safe resource of fresh water or in the field of erosion control to avoid that fresh water is polluted by those soil particles it eats away from the fertile crust of land. Some ideas will be discussed on the following pages.

Check the situation in your country:

- Are flooding an issue? Do parts of your country are temporary flooded? You have the possibility to form artificial islands in the area by digging artificial ponds or lakes to get sufficient material to construct artificial islands, where human beings but also animals can find shelter if too much water floods their environment.
- Is drought an issue? There are many countries where occurs drought every year or even over a number of years. In such cases the collection of rainwater in artificial ponds or lakes may secure for a longer period enough water to keep animals and plants alive and provide enough water for the human beings. If such reservoirs are big enough, they even offer the possibility of growing fish and in this way contribute to the shortage in food and allow fighting against poverty. It is also possible to cover the pond with a carpet of water plants to keep the water cool for the fishes and to harvest plants for your livestock.

2003 has shown that disastrous drought or heavy floods in 2002, which is even possible in regions like Middle Europe. How important it would have been if last year their dikes and dams had been resistant enough to avoid their damage and softening by the water flood, which led to their collapse and huge flooded areas? But how important would it have been if they had had access to collected water in ponds around their agricultural land to avoid the heavy damages of the drought by watering their crops. Mankind is responsible for many problems, also that of the water resources, but has also the possibility and power to do something against it by:

- Using as much as possible of the meteor (rain) water where it can substitute the cleanfresh water from springs or wells;
- Contribute to the problems of nature by returning land as far as possible to nature by securing vegetation, where the growth of plants was damaged. Dense vegetation and especially forests hold water back and secure a sound water household.
- Erosion control secures this vegetation and repairs the damages human beings have done to nature.

All these actions are intertwined, and therefore it is so important to think about all possibilities of contributing to an improvement in the water management.

The CONSOLID SYSTEM gives possibilities in this respect and it is your imagination asked how to make use with these possibilities in your area - you will find many opportunities...

In the last Monthly Letter 7-2003 we already discussed the many possibilities the CONSOLID SYSTEM offers - if you look around in your own country or region you will find plenty of possibilities to make use of these advantages of the system. You read every day in the newspapers about floods around the world, washing away in thousands and ten thousands the habitat of human beings, killing their animals, destroying their belongings - we appear to be helpless against these whims of nature.

THIS NEED NOT BE - the helplessness is often only due to a lack of the right preparatory work, i.e. the prevention of reduction of the above-mentioned damages. We know about the sensitivity of soils against water and the extreme softening effect if too much water attacks the stability. With the CONSOLID SYSTEM this physical property can be substantially improved. Preventing erosion secures that dikes and dams will not be washed away, that artificial islands will remain stable when surrounded by the next flood, and the artificial takes built during the construction of the islands will contribute to fighting hunger.

Take the Netherlands as a very impressive example: great parts of their country lies below the sea level, but they have built dikes and dams and secured in this way farming land and a safe place for the people to life in. This can be achieved with even better results in many parts of the world where floods attack the living conditions, such as in many countries in Africa and Asia as well as in America and even Europe. The CONSOLID SYSTEM makes it today much easier to get a successful protection network against floods and at the same time a possible assistance in times of drought. More than 50% of human beings live in houses built with in-situ soils. Water is to these houses the same threat as for any other earthwork - it softens the soil bricks and lets the houses collapse if they are flooded long enough. This can be prevented: properly treated

soil allows the production of high-quality soil bricks that resist the softening effect of water, because when properly treated with the CONSOLID SYSTEM, the soil becomes impervious.

This gives the local people the possibility of producing with simple machinery equipment their own air-dried soil bricks, build their houses as they like them and get stable dwellings which will keep them at the site and prevent their emigration to the overcrowded cities.

Such work will also create local jobs for brick making as well as masonry work.

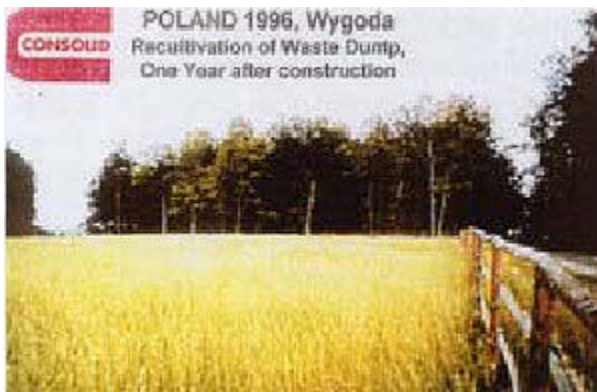
Dwelling on water and how to manage it and to save it as far as possible, you also have to think about water pollution.

Land erosion is one source of pollution, but much more dangerous for the future is the pollution of the environment with the daily trash the people produce and which is thrown away without any responsibility somewhere into the environment.

It is one of our most important responsibilities to draw the attention of our potential customers to the proper fighting against land pollution by trash, and it is also an excellent way to contributing to a betterment of the water resources.

Trash has to be processed or even collected at landfills, but not in the way that it continues there to pollute the environment and especially the ground water. We can substantially contribute also in this respect by constructing landfills where the bottom layer, when properly treated, is fully impervious so that no effluents can get into the ground water and pollute it. Treated soil will also allow covering such landfills in a way that even surface water cannot penetrate and leach polluting effluents.

Such closed landfills only need on top of the treated and compacted top layer a little fertile soil to allow the vegetation to grow on it and close the wound in the nature. See in this respect photos of such a landfill in Poland, before treatment and after it was closed and recultivated. Such tight closed landfills will produce gas, which can be used for cooking and heating over many years.



A wild disposal area was closed with soil material, treated with CONSOLID + SOLIDRY Next month we will discuss the pre-treatment of soils as another very impressive way to use the CONSOLID SYSTEM with stockpiled material.