

**REPORT ON THE VETIVER NETWORK EXHIBITION
AT THE INTERNATIONAL FRESHWATER CONFERENCE,
BONN, GERMANY, 3- 6 DECEMBER 2001**

www.water-2001.de

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Conference Background

Global water problems lead to crises in all parts of the world. One fifth of the world population (1.2 billion people) do not have access to sufficient clean drinking water. At the United Millennium Assembly, the world's heads of state agreed to at least halve this share by 2015. An additional problem is that wastewater from around 2.5 billion people cannot be disposed of hygienically. Polluted drinking water is the number one cause of disease around the world. Climate change, with its increasing floods and droughts, further aggravates these problems. At the same time, poor water supply reinforces poverty and gender inequality.

In connection with all these issues, the question was raised of how good governance, integrated management and new partnerships, capacity building and technology transfer can contribute to solving these problems. Consideration was also given to how additional financial resources - including from the private sector - can be mobilised, especially for poorer countries in order to solve the most serious problems there. The conference also focused on the role of gender in solving water problems.

Conference Objectives

The goal of the conference with the motto "**Water - A Key To Sustainable Development**" was to develop solutions to global water problems, which will be presented and discussed at the World Summit on Sustainable Development in Johannesburg in September 2002.

Thematic Background

Papers will describe feasible solutions on regional, national and local levels for the improvement of water management. They are based on a description of today's situation - state of the art analysis and proposals on what needs to be done to combat present problems referring to a number of success stories and lessons learned. The following themes will be stressed:

- *Innovative Strategies for Water and Sanitation for the Poor: Access and Affordability.*
- *Protecting Ecosystems and Water Resources: Pollution Prevention*
- *Balancing Water Uses: Water for Food and Water for Nature*
- *Trans-Boundary Waters: Sharing Benefits, Lessons Learned*
- *Floods and Droughts: Coping with Climate Changes and Variability*

The Vetiver Network Participation

With an extensive working experience in using the Vetiver System in Brazil, Joe Boehnert on his home visit to Germany proposed that TVN participating in this conference in the form of an Exhibition. Joe believes that proven results from past applications and particularly current research in wastewater treatment would provide a global impact of the VS in alleviating these global problems.

Through Joan Miller, TVN Coordinator, Joe Boehnert contacted Paul Truong requesting information and materials for the Exhibition. As a result Paul Truong prepared a series of seven posters, covering all the five conference themes mentioned above (Poster details below). In addition Paul and his colleague Barbara Hart, an Environmental Consultant, prepared a paper entitled *Vetiver System for Wastewater Treatment* for the Conference. The Pacific Rim Vetiver Network subsequently published this paper as a Technical Bulletin (no. 2001/2).

To provide a more ‘visual impact’, a dry vetiver plant almost 2m tall with extensive roots, was prepared and airfreighted from Portugal by Mike Pease, EMVN Coordinator and Sandy Robertson, a vetiver supplier.

The preparation of this Exhibition was funded by TVN and exhibition fees by Joe Boehnert.

Poster Information

Recognising the implication that when properly applied and managed VS is ideally suited to provide a practical and low cost solutions to water quality improvement, Paul Truong with the collaboration of his colleagues in Australia, China and Vietnam prepared the following seven posters. The information presented here includes results of past applications as well as from current research funded by the Wallace Genetic Foundation via TVN. Full posters can be seen on www.vetiver.org.

1. Introduction to the Vetiver System by Paul Truong.

Introducing various applications of the VS including Soil and Water Conservation in Agricultural Lands, Infrastructure Protection, Environmental Protection, Mine and Quarry Rehabilitation and landscaping.

2. Unique Features of Vetiver Grass by Paul Truong

Presenting the unique features of vetiver grass including its deep and extensive root system, stiff and erect stems, highly tolerant to adverse soil and climatic variations and heavy metal toxicities,

3. Vetiver System for Wastewater Treatment by Paul Truong and Barbara Hart

Dealing with the disposal of contaminated water and effluent from domestic and industrial wastewater, hydroponic module for septic effluent treatment and application in computer model.

4. Vetiver System for Agrochemical Pollution Control by Paul Truong, Frank Mason, David Waters and Rachael Cull.

Providing practical solution in trapping agrochemicals in runoff water in sugar cane and cotton farms and wetland to decontaminate polluted water.

5. *Vetiver System for water quality Improvement in Acid Sulfate Soils* by Paul Truong, Geoff Carlin, Freeman Cook and Evan Thomas.

Providing an effective soil erosion control method to prevent the introduction of acid sulfate materials into the aquatic environment, which would affect the survival of both aquatic flora and fauna, particularly on sugarcane farms of the tropical and subtropical regions.

6. *Vetiver System for Landfill Leachate Control* by Paul Truong, Hanping Xia and Liyu Xu.

Presenting the proven solution to control the spreading and contamination of leachate from both fresh and old landfill in Australia and China.

7. *Vetiver System for Algal Bloom Control*

Introducing a new and most promising and practical solution as well to control algal bloom in waterways and ponds, particularly from dams containing wastewater from industrial plants and intensive animal farms in Australia and Vietnam.

The Exhibition

Due to the exorbitantly expensive fees for an exhibition booth, Joe Boehnert managed to convince the conference organiser for our Exhibition to be shown along the corridor for a lesser fee. As a result probably more people will see our display !!!



Joe Boehnert (left) explained to visitors from Ethiopia (centre) and Germany how VS trapped agrochemicals runoff from farmlands.

Outcomes

This was a so-called "top-level" conference with over 1000 participants with representatives from 135 countries, including 50 ministers - as well as international organisations and associations.

It was an excellent opportunity for The Vetiver Network to participate in this conference and to present VS as a solution to a number of the water problems. Several contacts were made to a number of people from Africa, Latin-America, Turkey and a team leader from a GTZ project for environmental protection in Indonesia, who are very interested in vetiver systems.



Two visitors from Indonesia are impressed with the wide range of VS applications in wastewater treatment.