

## *Vetiver grass against climate change*



JANUARY 3, 2021 BY MARIO CIRIO

### *Vetiver grass - a versatile plant against the effects of climate change*

Soil erosion and the degradation of entire landscapes were already a problem in antiquity, as can be seen, for example, in the countries and landscapes in the Mediterranean region of Europe.

In our times, this effect is intensified by man-made climate change caused by environmentally harmful influences (cars, factories, etc.) and industrial agriculture (monocultures, factory farming).

### **GLOBAL WARMING CAN HARDLY BE STOPPED**

Today we know that temperatures will continue to rise and the resulting environmental disasters such as droughts, floods, etc. will increase. Therefore alternatives and solutions are urgently sought in order to buffer, prevent and repair this damage. Important approaches to this are the

promotion of **renewable energies** and **ecological agriculture** (called “Conservation Farming”).

## RECUITIVATION OF DEGRADED AREAS AND LANDSCAPES AS PART OF THE SOLUTION

For 50 years there has been an international network for soil and water conservation of rural infrastructures such as canals, roads etc., but also for the creation of urban greenery, such as B. in [arid Lima in Peru](#) .



These conservation and protection measures are based, among other things, on the use of deep-rooted **vetiver**

**grass** . This is planted, for example, as a strip in the contour lines in the fields against the erosion of the soil. At the same time, these densely planted vetiver grass hedges serve to prevent the runoff of rain or irrigation water and to conserve water in the soil. This combination has also become known as the "**vetiver system**". Further information can be found on the [Vetiver Network](#) website .

## ORIGIN AND USES OF VETIVER GRASS

The vetiver grass originally comes from India, where it is also grown because of its deep and broad roots. These roots contain an essential oil that is used in the perfume and soap industries. This benefit was then initially used to spread the vetiver grass in Asia, Africa and via the Caribbean to Latin America. The cultivation of the vetiver grass was then mainly spread in tropical and sub-tropical countries, but is also increasingly used in southern Europe, such as in Italy and Spain.

Technicians from the World Bank in India quickly recognized the benefits of vetiver grass in soil and water conservation. This is a cost-effective, so-called "low-cost" technique that can also easily be used by local farmers. It is very important that the **vetiver grass variety used does not have any germinable seeds** and only reproduces through root division. There is therefore no risk of the vetiver grass multiplying and spreading in an uncontrolled manner!

## FORMATION OF NATIONAL VETIVER NETWORKS

Over the years, national vetiver groups have formed in many countries in the southern hemisphere, such as Australia, South Africa and Vietnam, and together they form the international vetiver network today. This network came relatively late to Latin America and began primarily in Central America and the Caribbean as well as Colombia and Venezuela. From here the vetiver system found its way to Ecuador, Brazil, Chile and [Peru](#) .

## **RED VETIVER PERÚ**

There has been a small network in Peru for about 15 years, mainly with the help of Alois Kennerknecht and his company "ALKE EIRL", which is active in Lima. On the new website of the Peruvian network - [www.vetiver-peru.com](http://www.vetiver-peru.com) there is more information in Spanish about his work and projects.



In order to provide information on the importance of simple and inexpensive conservation methods, such as the vetiver system, in adaptation to climate change, there is a short program description of the Federal Ministry for Economic Cooperation and Development (BMZ) for Bolivia, Ecuador, Colombia and Peru from 2012 to 2013. Political and regional sponsors of this program were the "Comunidad Andina de Naciones (CAN)", the agriculture and environment ministries of the member countries.



## ADAPTATION TO CLIMATE CHANGE IN THE ANDEAN REGION

The Andean region is one of the world's most vulnerable regions due to the effects of climate change. The expected decrease in the availability of drinking water and soil productivity, the increase in crop risks, conflicts over remaining water resources, floods, dry periods, landslides and the disruption of the energy supply due to the melting of the glaciers endanger the economic and social development of the region.

## AGRICULTURE PARTICULARLY BADLY AFFECTED BY CLIMATE CHANGE

Agriculture is one of the sectors most affected by climate change. The agricultural operating systems of poor smallholders in particular suffer from an already detectable increase in extreme climatic events and local changes in the precipitation and temperature curves. The dependence of smallholders on the given natural resources and their limited access to adapted technologies and financial resources hinder an effective conversion of their way of life and economy to the changing natural framework conditions. The institutions and organizations entrusted with the development of the agricultural sector are therefore called upon to develop strategies and instruments that enable smallholders to adapt to the consequences of climate change. "

Now the period of this program from 2012 to 2013 is of course far too short for such an adaptation to climate change in the large and complex Andean region and will probably be more the "ivory towers" (offices of the organizations in the capitals of the countries, universities, etc ...) have served!

But this topic is even more topical and important today, in 2020/2021 than in 2012/13, especially in the rural regions of the Andes! The vetiver system can / should be a natural and "green" measure and technique for soil and water conservation and for the protection of natural resources in the coastal, Andean and Amazon regions of Latin America !!!

**Alois Kennerknecht** - Red Vetiver Perú - <https://vetiver-peru.com/>

**Joachim Böhnert** - Red Vetiver Perú, Red

Latinoamericana del Vetiver and International Vetiver  
Network - [www.vetiver.org](http://www.vetiver.org)