

Community Mobilization for the Control of
Ravine Erosion with Vetiver Technology in
the Democratic Republic of the Congo

Alain Ndona, Paul Truong and Dale Rachmeler
ICV 4 Caracas, Venezuela
October 2006

Introduction

Urban erosion issues in the DRC

1. Rural exodus to urban areas to find employment
2. Lack of appropriate infrastructure in residential quarters such as roads, drains, sewerage system, garbage collection
3. Lack of government funding to address these problems
4. Add to this very high rainfall over 9-10 months a year, in many cases sandy soils and hilly environments

There is a huge need to find affordable, durable and easily maintained solutions

In the western half of the Democratic Republic of the Congo, poverty is extremely low, less than \$100 per family per year.

Positive social benefits are seen by communities only if we talked about income generation, food security and livelihood improvements such as road stabilization to better access markets



Kinshasa home on the edge of huge ravine protected with only several meters of vetiver hedge

The project site

Innovative Resources Management
Democratic Republic of the Congo

CLIFS Kikwit Vetiver Erosion Demonstration Site



Community mobilization in the DRC

- Introduce the plant
- Create nurseries
- Implement demonstrations
- Create demand for vetiver plants
- Mobilize communities to be innovative



Vetiver nursery owned by a womens association in Kikwit

Kikwit City

1. 92² km in size, 500 km east of Kinshasa, 5° S. Latitude, 450 meters in altitude, 1500 mm of rainfall in 8 months
2. Population: 1 + million inhabitants
3. On the banks of the Kwilu River, sandy soils
4. Ravines have been there for 30 years, in 2004 there were a total of 194 ravine systems within the city, some more than 50 m deep

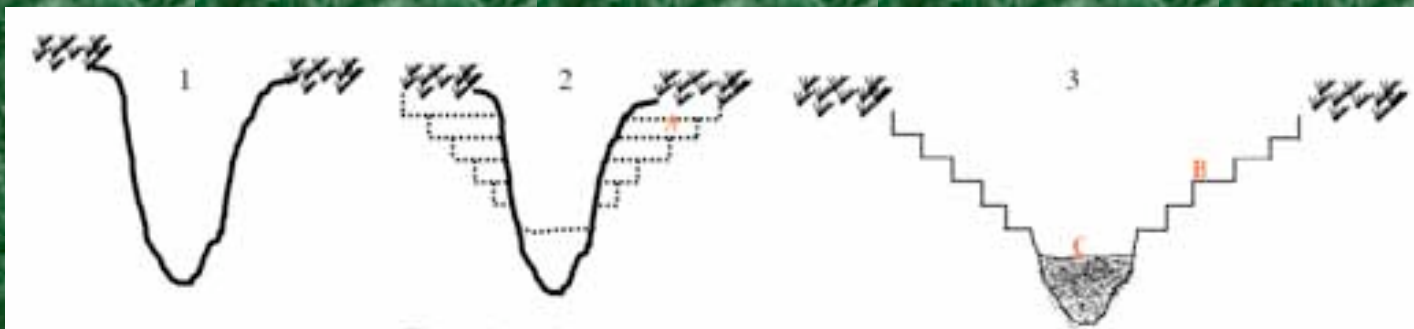
Choice of the site

One ravine, with three heads, that was threatening the central hospital, the main Catholic church and the central market

It covered 2 hectares and was an average of 20 meters deep



Mobilizing the community



The slope was too steep so we had to bench terrace the ravine walls

Community mobilization in the DRC



Community volunteers preparing landscape



Beginning to make the benches

Community mobilization in the DRC



Preparing plants



Planting hedges



Community mobilization in the DRC



Panorama of entire site after planting



Two months after planting



Four months after planting

Seven months
later after the
end of the
rains, the
drains work
and erosion
has
completely
stopped



Key elements



Introduce the idea
Provide training



Key elements



Get plants growing in
a local nursery
properly planted





Key elements

Get some expert
advice

(Who is that fellow
with the glasses next
to Alain?)

Key elements

Follow up and correct any mistakes

Get the press to cover the event

Select new sites to work on

Instill community spirit that they have
a solution that is low cost, long term
and easy to do

The Vetiver demonstration
in Kikwit DRC was a
revolution in the making

Hope plus a solution
empowers people who
have given up

What did it cost?

1. 120 people living along the ravine provided labor
2. The local nurseries started the year before sold their plants to the project
3. The work took 18 days, cost \$8000
4. The CLIFS project provides TA and transport
5. Total area covered 20,000 square meters
6. That is US \$0.40 per square meter treated

Conclusion



It works because the community did it!