Self teaching (South Africa)

**DESCRIPTION**

Learning how to use vetiver grass as a vegetative conservation barrier through instructions from a booklet and hands-on practical experience.

Aims / objectives: The manager of the farm was given a book and video on vetiver grass by the Mazda group from UK. His objective was to teach himself to improve his conservation system. Already he had a number of conservation strategies, including terracing, minimum tillage, mulching and strip-cropping, but he felt there was a need to better his system. Through self-teaching he gave himself an opportunity to do so. There had been some vetiver plants on the farm for 40 years, and it held the soil in place where it grew. This vetiver grew into huge clumps comprising many splits (tillers). The book demonstrated how vetiver could be dug up, split and planted in a continuous barrier hedge for soil and water conservation. In other words, the book offered the possibility of improving on what was already there. The approach therefore was to take ideas from a book, testing those ideas and see how they worked in practice. The approach has developed further by the farmer spreading his message to neighbours, some of whom have copied the system after visiting his farm and seeing the results for themselves. While the original handbook had been aimed especially at Indian farmers, subsequent to the successful experience of this particular farmer, a locally focussed handbook has been recently prepared in English and Zulu by the South African Vetiver Network.

**LOCATION**

Location: Lower Tugela District, South Africa, Kwa-Zulu Natal, South Africa

Geo-reference of selected sites
- 31.203, -29.455

Initiation date: 1989

Year of termination: n.a.

Type of Approach
- traditional/indigenous
- recent local initiative/innovative project/programme based
Slips of vetiver grass are planted according to instructions in the booklet (William Critchley)

Spacing between slips is 10–15 cm apart at the time of planting. This should form a dense barrier but gapping-up may be necessary in subsequent seasons. (William Critchley)

**APPRAOCH AIMS AND ENABLING ENVIRONMENT**

**Main aims / objectives of the approach**
The Approach focused on SLM only

test and try a new method by self-teaching and gaining hands-on experience

The SLM Approach addressed the following problems: lack of knowledge about alternative conservation technologies, need for a new and cheap supplement to existing forms of soil and water conservation within sugar cane, that could be tested and tried by the farmer himself without need for outside advice.

**Conditions enabling the implementation of the Technology/ies applied under the Approach**
- **Legal framework (land tenure, land and water use rights):** The existing land ownership, land use rights / water rights greatly helped the approach implementation: Made own decision and started to implement immediately

**Conditions hindering the implementation of the Technology/ies applied under the Approach**
- **Availability/ access to financial resources and services:** Need to find a cheap supplement to existing SWC in sugar cane Treatment through the SLM Approach: Discovery of vetiver grass barrier hedge technology described in a booklet

**PARTICIPATION AND ROLES OF STAKEHOLDERS INVOLVED**

**Stakeholders involved in the Approach and their roles**

<table>
<thead>
<tr>
<th>What stakeholders / implementing bodies were involved in the Approach?</th>
<th>Specify stakeholders</th>
<th>Describe roles of stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>local land users/ local communities</td>
<td>Working land users were mainly men (Also women, the men are used for more physical work (harder))</td>
<td></td>
</tr>
</tbody>
</table>

**Involvement of local land users/ local communities in the different phases of the Approach**

<table>
<thead>
<tr>
<th>Phase</th>
<th>Support</th>
<th>Initiative</th>
<th>Self mobilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>initiation/ motivation</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>planning</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>implementation</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>monitoring/ evaluation</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

looking for ideas
reading and thinking through the possibilities
paying farm labourers to plant the grass
observation
not applicable

Decision-making on the selection of SLM Technology

- Decisions were taken by:
  -✓ land users alone (self-initiative)
  - mainly land users, supported by SLM specialists
  - all relevant actors, as part of a participatory approach
  - mainly SLM specialists, following consultation with land users
  - SLM specialists alone
  - politicians/ leaders

- Decisions were made based on:
  -✓ evaluation of well-documented SLM knowledge (evidence-based decision-making)
  - research findings
  - personal experience and opinions (undocumented)

TECHNICAL SUPPORT, CAPACITY BUILDING, AND KNOWLEDGE MANAGEMENT

The following activities or services have been part of the approach

✓ Capacity building/ training
  - Advisory service
  - Institution strengthening (organizational development)
✓ Monitoring and evaluation
  - Research

Capacity building/ training

- Training was provided to the following stakeholders
  -✓ land users
  - field staff/ advisers

- Form of training
  - on-the-job
  - farmer-to-farmer
  - demonstration areas
  - public meetings
  - courses
  -✓ self-taught, hands-on experience

- Subjects covered

Monitoring and evaluation

Bio-physical aspects were regular monitored by land users through observations; indicators: vetiver performance technical aspects were ad hoc monitored by land users through observations economic / production aspects were ad hoc monitored by land users through observations area treated aspects were regular monitored by land users through measurements no. of land users involved aspects were ad hoc monitored by land users through observations There were no changes in the Approach as a result of monitoring and evaluation There were no changes in the Technology as a result of monitoring and evaluation

FINANCING AND EXTERNAL MATERIAL SUPPORT

- Annual budget in USD for the SLM component
  -< 2,000
  - 2,000-10,000
  - 10,000-100,000
  - 100,000-1,000,000
  - > 1,000,000
  - Precise annual budget: n.a.

Approach costs were met by the following donors: other (farmer itself): 100.0%

The following services or incentives have been provided to land users

- Financial/ material support provided to land users
- Subsidies for specific inputs
- Credit
- Other incentives or instruments

IMPACT ANALYSIS AND CONCLUDING STATEMENTS

Impacts of the Approach
Did the Approach help land users to implement and maintain SLM Technologies?
Land users can continue without support and at least a modest spontaneous expansion of adoption is expected.

Did other land users / projects adopt the Approach?
Three neighbouring farmers have adopted the technology through their observations

Main motivation of land users to implement SLM
✓ n.a.

Sustainability of Approach activities
Can the land users sustain what has been implemented through the Approach (without external support)?
- no
- ✓ yes
- uncertain

Land users can continue without support and at least a modest spontaneous expansion of adoption is expected.

CONCLUSIONS AND LESSONS LEARNED

Strengths: land user's view
- Neighbours can easily see and copy (How to sustain/ enhance this strength: Farmer-to-farmer visits could be promoted through self-help groups and associations.)
- A very cheap method of extension/knowledge transfer (How to sustain/ enhance this strength: Produce and disseminate booklets and information on the internet more widely.)

Strengths: compiler's or other key resource person's view
- A technical system devised from a handbook and experience rather than needing a project or intensive visits from extension agents (How to sustain/ enhance this strength: Make sure such handbooks are spread and available in local languages.)

Weaknesses/ disadvantages/ risks: land user's view → how to overcome
- Not everyone has access to such teaching material or is literate
  → Spread literature and information more widely and in local languages both in written form and on the radio.

Weaknesses/ disadvantages/ risks: compiler's or other key resource person's view → how to overcome

REFERENCES

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Full description in the WOCAT database
https://qcat.wocat.net/en/wocat/approaches/view/approaches_2611/

Linked SLM data

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Project
- Book project: where the land is greener - Case Studies and Analysis of Soil and Water Conservation Initiatives Worldwide (where the land is greener)

Key references