

Wetland rehabilitation

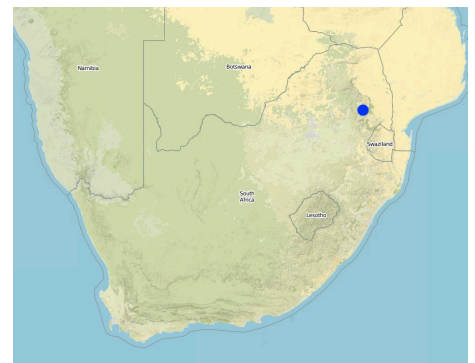
Working for Water Wetland rehabilitation (South Africa)

DESCRIPTION

To improve the quality & quantity of water production and biodiversity in the Blyde River catchment area.

Aims / objectives: Stabilise, landscape and re-vegetate degraded wetlands in the upper Blyde River catchment. The objective was to re-instate the previous water table and vegetation by slowing down run-off through the building of gabions, landfills, reshaping and hydroseeding. Participants: Government funding

LOCATION



Location: Mpumalanga, South Africa

Geo-reference of selected sites

- 30.581, -25.088

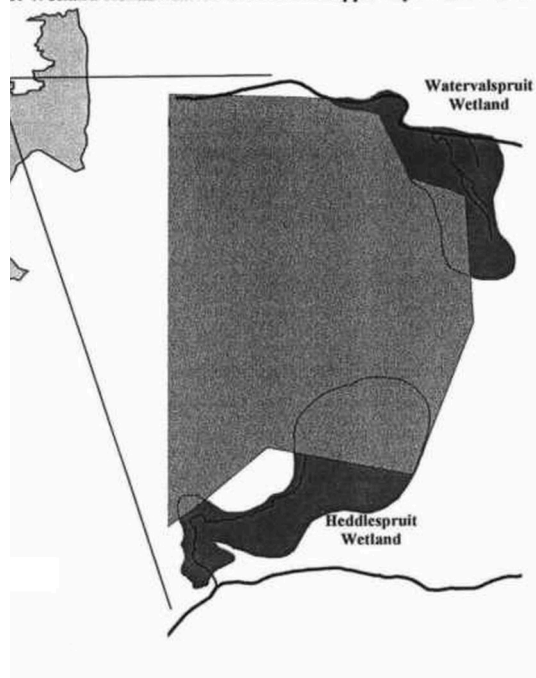
Initiation date: 1999

Year of termination: n.a.

Type of Approach

- ☐ traditional/ indigenous
- ☐ recent local initiative/ innovative
- ☒ project/ programme based

of Wetland Rehabilitation Work in the Upper Blyde River Catchment



Wetland rehabilitation.

APPROACH AIMS AND ENABLING ENVIRONMENT

Main aims / objectives of the approach

The Approach focused mainly on SLM with other activities (Catchment management)

To rehabilitate degraded wetlands in the upper Blyde Rive catchment area To employ jobless people in adjacent local community

The SLM Approach addressed the following problems: Stopping head-cut erosion, landscape old mine trenches, re-vegetate area of bare soil, re-visit burning programme

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: Both sites where work has been done is on conservation land

Conditions hindering the implementation of the Technology/ ies applied under the Approach

- **Social/ cultural/ religious norms and values:** Ignorance of forestry, mining & local communities about the importance of these natural systems Treatment through the SLM Approach: Capacity building & extension work
- **Availability/ access to financial resources and services:** Rehabilitation is an 'extra' workload. Current budget does not allow for this Treatment through the SLM Approach: External funding: Working for Water, Landcare
- **Legal framework (land tenure, land and water use rights):** Powerless to address illegal activities Treatment through the SLM Approach: Inadequate policing
- **Knowledge about SLM, access to technical support:** Not much is known on rehabilitation in this veld type Treatment through the SLM Approach: Use this as an opportunity to build up information

PARTICIPATION AND ROLES OF STAKEHOLDERS INVOLVED

Stakeholders involved in the Approach and their roles

What stakeholders / implementing bodies were involved in the Approach?	Specify stakeholders	Describe roles of stakeholders
local land users/ local communities	Specific ethnic groups: Previously disadvantage communities	Specialist in this field are mainly men
SLM specialists/ agricultural advisers		
national government (planners, decision-makers)	Several government departments; working for water	

Lead agency

Frik Bronkhorst, Anton Linström (Business plan, layout of rehabilitation work), Peter Steyn (landscaping, employment)

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

	none	passive	external support	interactive	self-mobilization	
initiation/ motivation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	survey; Wetland condition survey identified these two wetlands as priorities for rehabilitation work
planning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	consultation; Inputs of various specialists were used to draw up a business plan
implementation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contractor, casual labour; Landscaping contractor was employed to implement business plan
monitoring/ evaluation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	reporting, measurements/observations; Fixed point photography & vegetation transects, water quality tests. Report is available
Research	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Flow chart

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
- ☒ SWC specialists

Form of training

- ☒ on-the-job
- ☐ farmer-to-farmer
- ☒ demonstration areas
- ☐ public meetings
- ☐ courses

Subjects covered

Rehabilitation and importance of the wetland ecosystem in water management

Advisory service

Advisory service was provided

- ☐ on land users' fields
- ☒ at permanent centres

Name of method used for advisory service: Mpumalanga Wetland Project, Mpumalanga Parks Board; Key elements: Capacity building among land users, Wetland conservation, Wetland rehabilitation; 1) Advisory service was carried out through: government's existing extension system. Extension staff: mainly government employees 2) Target groups for extension: land user

Advisory service is quite adequate to ensure the continuation of land conservation activities; Got the expertise and gained much from this activity to contribute

Institution strengthening

Institutions have been strengthened / established

- ☐ no
- ☒ yes, a little
- ☐ yes, moderately
- ☐ yes, greatly

at the following level

- ☒ local
- ☐ regional
- ☐ national

Describe institution, roles and responsibilities, members, etc.

Type of support

- ☐ financial
- ☒ capacity building/ training
- ☐ equipment

Further details

Monitoring and evaluation

bio-physical aspects were regular monitored through measurements technical aspects were regular monitored through measurements There were no changes in the Approach as a result of monitoring and evaluation

Research

Research treated the following topics

<input type="checkbox"/> sociology	Vegetation transects to monitor dynamics, fixed point photographs, water quality tests
<input type="checkbox"/> economics / marketing	
<input checked="" type="checkbox"/> ecology	Research was carried out both on station and on-farm
<input type="checkbox"/> technology	

FINANCING AND EXTERNAL MATERIAL SUPPORT

Annual budget in USD for the SLM component

<input type="checkbox"/> < 2,000	Approach costs were met by the
<input type="checkbox"/> 2,000-10,000	following donors: government
<input checked="" type="checkbox"/> 10,000-100,000	(national): 100.0%
<input type="checkbox"/> 100,000-1,000,000	
<input type="checkbox"/> > 1,000,000	

Precise annual budget: n.a.

The following services or incentives have been provided to land users

<input type="checkbox"/> Financial/ material support provided to land users
<input type="checkbox"/> Subsidies for specific inputs
<input type="checkbox"/> Credit
<input type="checkbox"/> 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?

Too early to comment Project has only just finished

No
Yes, little
Yes, moderately
Yes, greatly

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

CONCLUSIONS AND LESSONS LEARNT

Strengths: land user's view

Strengths: compiler's or other key resource person's view

- Job creation (How to sustain/ enhance this strength: Governmental funding)
- Working for water principle (How to sustain/ enhance this strength: Governmental funding)
- Opportunity to be exposed to the practical side of wetland rehabilitation (How to sustain/ enhance this strength: Rehabilitation of others wetlands and monitoring the present situation)
- Contribute towards the natural hydrological regime of the catchment (How to sustain/ enhance this strength: Monitoring)
- Opportunity for land users to combine ideas and to improve relationships (How to sustain/ enhance this strength: Work towards a better environment)

Weaknesses/ disadvantages/ risks: land user's view how to overcome

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

- No action from a steering committee Get steering committee up and going
- Lack of practical experiences on wetland rehabilitation Get more experiences

REFERENCES

Compiler

Unknown User

Editors

Reviewer

Fabian Ottiger

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Resource persons

Frik Bronkhorst - SLM specialist

Anton Landström - SLM specialist

Full description in the WOCAT database

https://qcat.wocat.net/en/wocat/approaches/view/approaches_2414/

Linked SLM data

Technologies: Wetland rehabilitation https://qcat.wocat.net/en/wocat/technologies/view/technologies_1377/

Technologies: Pitting to restore degraded catchment of Mount Fletcher Dam

https://qcat.wocat.net/en/wocat/technologies/view/technologies_3377/

Technologies: Pitting to restore degraded catchment of Mount Fletcher Dam

https://qcat.wocat.net/en/wocat/technologies/view/technologies_3377/

Technologies: Wetlands https://qcat.wocat.net/en/wocat/technologies/view/technologies_5926/

Technologies: Wetland rehabilitation https://qcat.wocat.net/en/wocat/technologies/view/technologies_1377/

Technologies: Pitting to restore degraded catchment of Mount Fletcher Dam

https://qcat.wocat.net/en/wocat/technologies/view/technologies_3377/

Technologies: Wetland in the Stabé River https://qcat.wocat.net/en/wocat/technologies/view/technologies_5996/

Technologies: Pitting to restore degraded catchment of Mount Fletcher Dam

https://qcat.wocat.net/en/wocat/technologies/view/technologies_3377/

Documentation was facilitated by

Institution

- n.a.

Project

- n.a.

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