Picture of terrace in the Loess Plateau

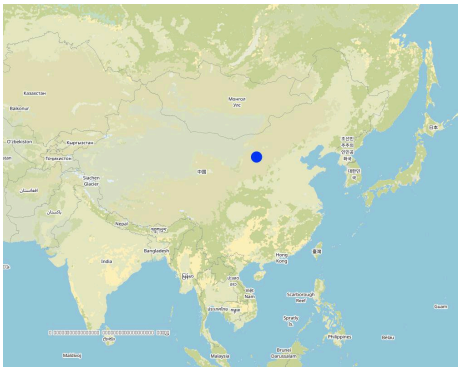
Terrace (China)

DESCRIÇÃO

Terraces are built on a slope land which as a raised bank made up of earth or stone with vertical or sloping sides and an approximately flat top to control soil erosion and preserve and enhance soil fertility.

Aims / objectives: A terrace has a raised bank made up of earth or stone with vertical or sloping sides and a flat top. It can reduce slope angle and length, wrap runoff, increase infiltration and reduce soil loss. Crops can grow well because water increases in the soil. The ground cover is improved. Terraces can be constructed by manual labor or machine. Firstly, surveying the slope hills and determining width of terraces according to the slope angle and soil texture. Secondly, leveling up the slope and constructing the banks. Thirdly, maintaining. The terraces are implemented together by state, local A terrace has a raised bank of earth or stone with vertical or sloping sides and a approximately flat top. It can reduce slope angle and length, retain runoff, increase infiltration and reduce the soil loss. Crops can grow well because water increases in soils. Meanwhile, ground cover is improved. Terrace can be constructed by manual labor or machine. Firstly, determining the width of the field according to the slope angle and soil texture. Secondly, putting the topsoil aside. Thirdly, leveling up the slope and constructing banks. At last, putting the topsoil to the top of the flat surface.

LOCALIZAÇÃO



Localização: Shaanxi, Shanxi, Gansu, Henan, Inner Mongolia, China

Geo-referência de locais selecionados

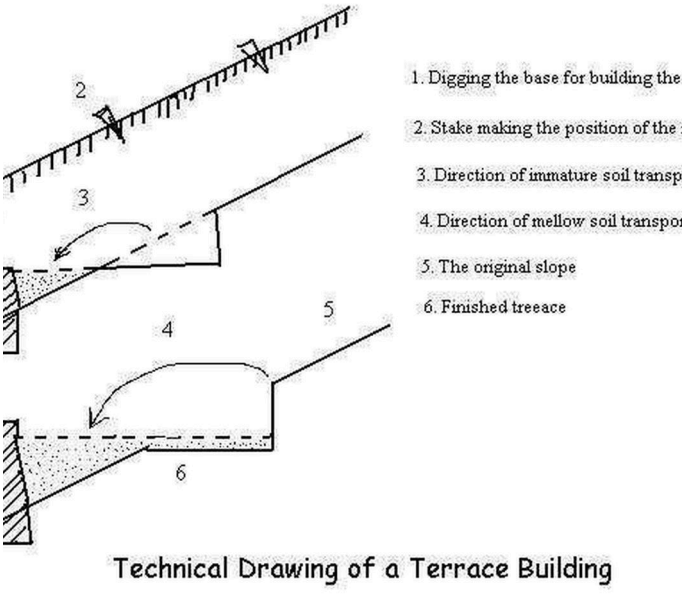
- 109.125, 39.122

Data de início: 1950

Ano de término: n.a.

Tipo de abordagem

- [x] Tradicional/Indígena
- [ ] Iniciativa/inovação local recente
- [ ] Baseado em projeto/programa



Technical drawings of a terrace in the Loess Plateau

Picture of terrace in the Loess Plateau

OBJETIVOS DE APROXIMAÇÃO E AMBIENTE PROPÍCIO

Principais metas / objetivos da abordagem

The Approach focused mainly on SLM with other activities (Increasing crop yield.)

The main objectives of the approach were conserving soil and water on slope land and enhancing soil fertility.

The SLM Approach addressed the following problems: Soil loss and land degradation, lack of fund and technology.

Condições que permitem a implementação da Tecnologia(s) aplicada(s) sob a Abordagem

Condições que dificultam a implementação da Tecnologia(s) aplicada(s) sob a Abordagem

- **Disponibilidade/acesso a recursos e serviços financeiros**: No enough money Treatment through the SLM Approach: The national government partly fund, individual partly invests, local government partly invests.
- **Quadro jurídico (posse de terra, direitos de uso da terra e da água)**: The existing land ownership, land use rights / water rights hindered a little the approach implementation The ownership of the land resources belongs to state and communities, land users can only lease the land for a period of time, they worry about their land would be transferred to others.
- **Conhecimento sobre GST, acesso a suporte técnico**: Poor knowledge for how to reduce the soil loss Treatment through the SLM Approach: Ehancing SWC specialists guidance
- **Outro**: Peasant worry about that they can not own the use right. Treatment through the SLM Approach: The national government advocates whose who invest labors who get the benefits.

PARTICIPAÇÃO E PAPEL DAS PARTES INTERESSADAS ENVOLVIDAS

Partes interessadas envolvidas na abordagem e seus papéis

Que partes interessadas/órgãos de implementação estavam envolvidos na abordagem?	Especifique as partes interessadas	Descreva o papel das partes interessadas
Usuários de terra/comunidades locais	Working land users were mainly men (Men are the main force for field work.) Existing groups of land users Experienced peasant may be involved in introducing the local situations.	Men know much more technical knowledge and skills than women. If a terrace is constructed by machine, men and women are not different. If a terrace is constructed by manual labor, men can do more work.
Especialistas em GST/ consultor agrícola		
Governo nacional (planejadores, responsáveis pelas decisões)		

Envolvimento do usuários de terra/comunidades locais nas diferentes fases da abordagem

	Nenhum	Passivo	Apoio externo	Participativo	Automobilização
Iniciação/motivação	✓				
Planejamento		✓			
Implementação					✓
Monitoramento/avaliação		✓			
Research	✓				

rapid/participatory rural appraisal; The approach is a traditional way to harvest water and wrap soils, SWC applied land users easy to understand and accept it if some subsidy being obtained. interviews/questionnaires; Being involved in the planning. responsibility for minor steps; Being involved in the planning. reporting; No participating.

Fluxograma

Tomada de decisão sobre a seleção da Tecnologia GST

As decisões foram tomadas por

- Somente usuários da terra (iniciativa própria)
- Principalmente usuários da terra, apoiados por especialistas em GST
- todos os atores relevantes, como parte de uma abordagem participativa
- ✓ Principalmente especialistas em GST, após consulta com usuários da terra
- Somente especialistas em GST
- Políticos/líderes

As decisões foram tomadas com base em

- Avaliação de conhecimento bem documentado de GST (tomada de decisão baseada em evidências)
- Resultados de pesquisa
- Experiência pessoal e opiniões (não documentado)

SUPORTE TÉCNICO, REFORÇO DAS CAPACIDADES E GESTÃO DO CONHECIMENTO

As seguintes atividades ou serviços têm sido parte da abordagem

- ✓ Reforço das capacidades/ formação
- ✓ Serviço de consultoria
- ✓ Fortalecimento da instituição (desenvolvimento organizacional)
- ✓ Monitoramento e avaliação
- ✓ Pesquisa

Reforço das capacidades/formação

Foi fornecido treinamento às seguintes partes interessadas

- ✓ Usuários de terra
- Equipe de campo/consultores
- ✓ extensionists/trainers, politicians/decision makers

Tipo de formação

- Em exercício
- ✓ Agricultor para agricultor
- ✓ Áreas de demonstração
- Reuniões públicas
- ✓ Cursos

Assuntos abordados

Teaching them how to design and build terraces on a slope land etc.

Serviço de consultoria

Foi prestado um serviço de consultoria

- ✓ nas áreas dos usuários da terra
- Em centros permanentes

Local government and SWC division.; Key elements: Demonstration, Visiting, Visiting; 1) Advisory service was carried out through: government's existing extension system 2) Advisory service was carried out through: government's existing extension system; Extension staff: mainly government employees 3) Target groups for extension: land users; Activities: Explain and demonstrate

Advisory service is quite adequate to ensure the continuation of land conservation activities; At each government level, there is a SWC division which is in charge of SWC activities including extension.

Fortalecimento institucional

As instituições foram fortalecidas / estabelecidas

- Não
- Sim, pouco
- ✓ Sim, moderadamente
- Sim, significativamente

no seguinte nível

- ✓ Local
- Regional
- Nacional

Descreva instituição, papéis e responsabilidades, membros, etc.

Tipo de apoio

- ✓ Financeiro
- Reforço das capacidades/ formação
- Equipamento

Mais detalhes

Monitoramento e avaliação

bio-physical aspects were regular monitored by 0 through measurements; indicators: None technical aspects were regular monitored by 0 through measurements; indicators: None socio-cultural aspects were ad hoc monitored by 0 through observations; indicators: None economic / production aspects were regular monitored by 0 through measurements; indicators: None area treated aspects were regular monitored by 0 through measurements; indicators: None no. of land users involved aspects were ad hoc monitored by 0 through measurements; indicators: None management of Approach aspects were ad hoc monitored by 0 through observations; indicators: None There were few changes in the Approach as a result of monitoring and evaluation: None

Pesquisa

As pesquisas trataram dos seguintes tópicos

- [ ] Sociologia
- [x] Economia/Marketing
- [x] Ecologia
- [x] Tecnologia

Research was carried out both on station and on-farm

FINANCIAMENTO E APOIO MATERIAL EXTERNO

Orçamento anual em USD para o componente GST

- [ ] < 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: government (national - fund): 100.0%

Os seguintes serviços ou incentivos foram fornecidos aos usuários de terras

- [x] Apoio financeiro/material concedido aos usuários da terra
- [x] Subsídios para insumos específicos
- [x] Crédito
- [ ] Outros incentivos ou instrumentos

Apoio financeiro/material concedido aos usuários da terra

	Parcialmente financiado	Totalmente financiado
Equipamento: Maquinário		✓
Equipamento: Maquinário: Ferramentas hand tools		✓
Agrícola: Sementes		✓
Agrícola: Sementes: Fertilizantes		✓
seedlings and biocides		✓
community infrastructure		✓

A mão-de-obra dos usuários da terra foi

- [ ] Voluntário
- [ ] Comida por trabalho
- [x] Pago em dinheiro
- [ ] Recompensado com outras formas de apoio material

Crédito

Condições: Interest rate charged: 0.5% Interest was lower than market rate.
Fornecedores de crédito: n.a.
Receptores de crédito: n.a.

ANÁLISE DE IMPACTOS E DECLARAÇÕES FINAIS

Impactos da abordagem

	Não	Sim, pouco	Sim, moderadamente	Sim, significativamente
A abordagem auxiliou os usuários da terra a implementar e manter as tecnologias de GST? Subsoiling and applying more manure and compost.				✓
A abordagem melhorou as questões de posse de terra/diretos do usuário que inibiam a implementação das tecnologias de GST? Persuading them to accept The problem is likely to be overcome in the near future. The relationship between land ownership and use rights can be properly dealt with by government and managers.			✓	
Did other land users / projects adopt the Approach? According to the local situation, pits and check dam etc. also adopted in the approach.			✓	

Principal motivação dos usuários da terra para implementar a GST

Atividades de sustentabilidade de abordagem

☑ n.a.

Os usuários da terra podem sustentar o que foi implementado através da Abordagem (sem apoio externo)?

☑ Não
☐ Sim
☐ Incerto

CONCLUSÕES E EXPERIÊNCIAS ADQUIRIDAS

Pontos fortes: visão do usuário de terra

- increase in production
- Easier to till

Pontos fortes: a visão do/a compilador/a ou de outra pessoa capacitada

- Reduction of the slope angle (How to sustain/ enhance this strength: Raising terrace bank.)
- reduction of the slope length (How to sustain/ enhance this strength: Protecting terrace banks by planting trees or others.)
- Harvest of the runoff and increase in infiltration (How to sustain/ enhance this strength: Protecting the banks)
- increase in soil fertility and organic matter (How to sustain/ enhance this strength: Applying manure and fertilizer)
- improvement of ground cover (How to sustain/ enhance this strength: no till with mulching.)

Pontos fracos/desvantagens/riscos: visão do usuário de terracomo superar

- Cost much.

Pontos fracos/desvantagens/riscos: a visão do/a compilador/a ou de outra pessoa capacitadacomo superar

- Decrease in production in the first1-2 year(s) Fertilizering plenty of manure.
- The ridge of the terrace is possible to be destroyed by storms and rats Repairing and maintaining in time.

REFERÊNCIAS

Compilador/a
Meili WEN

Editores

Revisor
David Streiff
Joana Eichenberger

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Pessoas capacitadas
Meili WEN (baoyuan@bnu.edu.cn) - Especialista em GST
Baoyuan Liu (baoyuan@bnu.edu.cn0) - Especialista em GST

Descrição completa no banco de dados do WOCAT
https://qcat.wocat.net/pt/wocat/approaches/view/approaches_2394/

Dados GST vinculados
n.a.

A documentação foi facilitada por

Instituição

- Department of Resources and Environmental Science, Beijing Normal University (Department of Resources and Environmental Science, Beijing Normal University) - China

Projeto

- n.a.

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