



Picture of terrace in the Loess Plateau

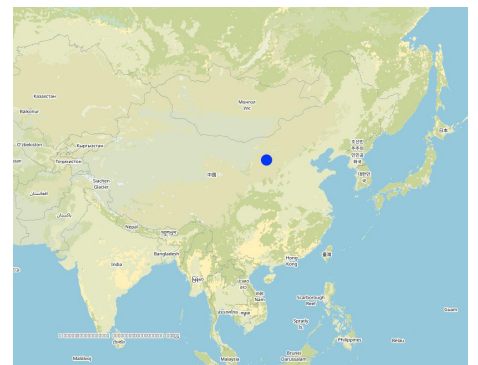
Terrace (China)

DESCRIPCIÓN

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.

LUGAR



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

Georreferencia de sitios seleccionados

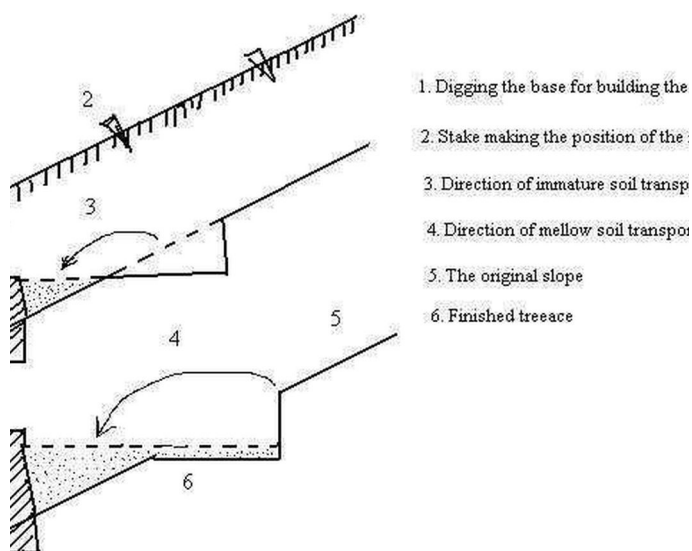
- 109.125, 39.122

Dato de inicio: 1950

Año de conclusión: n.d.

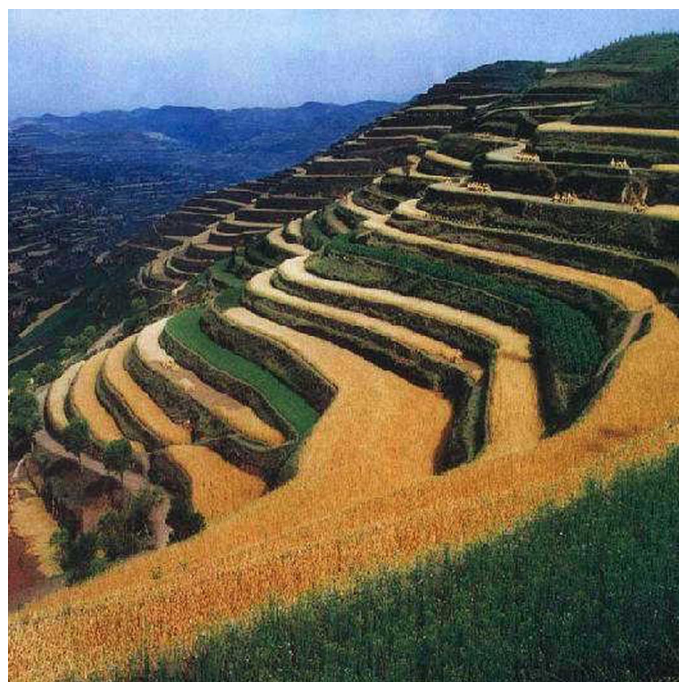
Tipo de Enfoque

- ☒ tradicional/ local
- ☐ iniciativa local reciente/ innovadora
- ☐ proyecto/ basado en un programa



Technical Drawing of a Terrace Building

Technical drawings of a terrace in the Loess Plateau



Picture of terrace in the Loess Plateau

METAS DEL ENFOQUE Y ENTORNO FACILITADOR

Propósitos/ objetivos principales del Enfoque

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.

Condiciones que facilitan la implementación de la/s Tecnología/s aplicadas bajo el Enfoque

Condiciones que impiden la implementación de la/s Tecnología/s aplicadas bajo el Enfoque

- **Disponibilidad/ acceso a recursos y servicios financieros** : No enough money Treatment through the SLM Approach: The national government partly fund, individual partly invests, local government partly invests.
- **Marco de trabajo legal (tenencia de tierra, derechos de uso de tierra y agua)**: 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.
- **Conocimiento de MST, acceso a apoyo técnico**: Poor knowledge for how to reduce the soil loss Treatment through the SLM Approach: Enhancing SWC specialists guidance
- **Otros**: Peasant worry about that they can not own the use right. Treatment through the SLM Approach: The national government advocates those who invest labors who get the benefits.

PARTICIPACIÓN Y ROLES DE LAS PARTES INTERESADAS INVOLUCRADAS

Partes interesadas involucradas en el Enfoque y sus roles

¿Qué partes interesadas/ entidades implementadoras estuvieron involucradas en el Enfoque?	Especifique las partes interesadas	Describa los roles de las partes interesadas
usuarios locales de tierras/ comunidades locales	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 MST/consejeros agrícolas		
gobierno nacional (planificadores, autoridades)		

Involucramiento de los usuarios locales de tierras/ comunidades locales en las distintas fases del Enfoque

	ninguno	pasivo	apoyo externo	interactivo	auto-movilización	
iniciación/ motivación	☒	☐	☐	☐	☐	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.
planificación	☐	☒	☐	☐	☐	interviews/questionnaires; Being involved in the planning.
implementación	☐	☐	☐	☒	☐	responsibility for minor steps; Being involved in the planning.
monitoreo y evaluación	☐	☒	☐	☐	☐	reporting; No participating.
Research	☒	☐	☐	☐	☐	

Flujograma

La toma de decisiones en la selección de Tecnología MST

Las decisiones fueron tomadas por

- ☐ solamente usuarios de tierras (autoiniciativa)
- ☐ principalmente usuarios de tierras con el apoyo de especialistas MST
- ☐ todos los actores relevantes, como parte de un enfoque participativo
- ☒ principalmente por especialistas MST en consulta con usuarios de tierras
- ☐ solo por especialistas MST
- ☐ por políticos/ líderes

La toma de decisiones se basa en

- ☐ la evaluación de conocimiento MST bien documentado (la toma de decisiones se basa en evidencia)
- ☐ hallazgos de investigaciones
- ☐ la experiencia personal y opiniones (no documentadas)

APOYO TÉCNICO, FORTALECIMIENTO INSTITUCIONAL Y GESTIÓN DEL CONOCIMIENTO

Las siguientes actividades o servicios fueron parte del enfoque

- ☒ Construcción de capacidades / capacitación
- ☒ Servicio de asesoría
- ☒ Fortalecimiento institucional (desarrollo institucional)
- ☒ Monitoreo y evaluación
- ☒ Investigación

Construcción de capacidades/ capacitación

Se proporcionó capacitación a las siguientes partes interesadas

- ☒ usuarios de tierras
- ☐ personal de campo/ consejeros
- ☒ extensionists/trainers, politicians/decision makers

Forma de capacitación

- ☐ en el contexto de trabajo de agricultor a agricultor
- ☒ áreas de demostración
- ☐ reuniones públicas
- ☒ cursos

Temas avanzados

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

Servicio de asesoría

Se proporcionó servicio de asesoría

- ☒ en los campos de los usuarios de tierras
- ☐ en 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.

Fortalecimiento institucional

Se fortalecieron/ establecieron instituciones

- ☐ no
- ☐ sí, un poco
- ☒ sí, moderadamente
- ☐ sí, mucho

en el siguiente nivel

- ☒ local
- ☐ regional
- ☐ nacional

Describe la institución, los roles y las responsabilidades, miembros, etc.

Tipo de apoyo

- ☒ financiero
- ☐ construcción de capacidades/ entrenamiento
- ☐ equipo

Detalles adicionales

Monitoreo y evaluación

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

Investigación

La investigación trató los siguientes temas

- ☐ sociología
☒ economía/ marketing
☒ ecología
☒ tecnología
- Research was carried out both on station and on-farm

FINANCIAMIENTO Y APOYO MATERIAL EXTERNO

Presupuesto anual en dólares americanos para el componente MST

- ☐ < 2,000
☐ 2,000-10,000
☐ 10,000-100,000
☐ 100,000-1,000,000
☐ > 1,000,000
- Approach costs were met by the following donors: government (national - fund): 100.0%

Precise annual budget: n.d.

Los siguientes servicios o incentivos fueron proporcionados a los usuarios de las tierras

- ☒ Apoyo financiero/material proporcionado a los usuarios de tierras
☒ Subsidios para insumos específicos
☒ Crédito
☐ Otros incentivos o instrumentos

Apoyo financiero/material proporcionado a los usuarios de tierras

	parcialmente financiado	totalmente financiado
equipo: maquinaria	☐	☒
equipo: maquinaria: herramientas hand tools	☐	☒
agrícola: semillas	☐	☒
agrícola: semillas: fertilizantes	☐	☒
seedlings and biocides	☐	☒
community infrastructure	☐	☒

El trabajo de los usuarios de las tierras fue

- ☐ voluntario?
☐ comida por trabajo?
☒ pagado en efectivo?
☐ recompensado con otro tipo de apoyo material?

Crédito

Condiciones: Interest rate charged: 0.5% Interest was lower than market rate.

Proveedores de crédito: n.d.

Destinatarios del crédito: n.d.

ANÁLISIS DE IMPACTO Y COMENTARIOS DE CONCLUSIÓN

Impactos del Enfoque

	No	Sí, un poco	Sí, moderadamente	Sí, mucho
¿El Enfoque ayudó a los usuarios de tierras a implementar y mantener Tecnologías MST? Subsoiling and applying more manure and compost.	☐	☐	☒	☐
¿El Enfoque mejoró cuestiones de tenencia de tierra/ derechos de usuarios que obstaculizaron la implementación de la Tecnologías MST? 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.	☐	☐	☒	☐

Motivación principal del usuario de la tierra para implementar MST

☒ n.d.

Sostenibilidad de las actividades del Enfoque

¿Pueden los usuarios de tierras sostener lo que se implementó mediante el Enfoque (sin apoyo externo)?

☒ no
☐ sí
☐ incierto

CONCLUSIONES Y LECCIONES APRENDIDAS

Fortalezas: perspectiva del usuario de tierras

- increase in production
- Easier to till

Fortalezas: punto de vista del compilador o de otra persona recurso clave

- 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.)

Debilidades/ desventajas/ riesgos: perspectiva del usuario de tierras cómo sobreponerse

- Cost much.

Debilidades/ desventajas/ riesgos: punto de vista del compilador o de otra persona recurso clave cómo sobreponerse

- Decrease in production in the first 1-2 year(s) Fertilizing plenty of manure.
- The ridge of the terrace is possible to be destroyed by storms and rats Repairing and maintaining in time.

REFERENCIAS

Compilador

Meili WEN

Editors

Revisado por

David Streiff
Joana Eichenberger

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Personas de referencia

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Descripción completa en la base de datos de WOCAT

https://qcat.wocat.net/es/wocat/approaches/view/approaches_2394/

Datos MST vinculados

n.d.

La documentación fue facilitada por

Institución

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

Proyecto

- n.d.

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