Housekeeping

Moderator: Nicole Harari (CDE/WOCAT)

- The webinar will run for 1 hour
- The webinar will be recorded

Please pose your questions and comments for the Q&A session here during the webinar here: slido.com - Event code: #120720

Do NOT use the Zoom chat function for questions

- Please mute your microphone and stop your video
- The slides of today’s presentation will be made available on www.wocat.net/library/media/232/ and www.carbonbenefitsproject.org

For follow-up questions or discussions, please contact us:
WOCAT: wocat.cde@unibe.ch
CBP: Eleanor.Milne@ColoState.EDU
Agenda

Welcome remarks
edoardo Zandri (UNEP)

Carbon Benefit Project (CBP) tools
Eleanor Milne (CSU)

World Overview of Conservation Approaches and Technologies (WOCAT)
Tatenda Lemann (CDE/WOCAT)

Linkage WOCAT-CBP
Tatenda Lemann (CDE/WOCAT), Eleanor Milne (CSU), Guhan Dheenadayalan Sivakami (CSU)

Potential of linked tools and future aspirations
Barron Joseph Orr (UNCCD Secretariat)

Q&A

Final remarks
André Kooiman (ISRIC)
Land Management and Climate Change Mitigation

Eleanor Milne, Keith Paustian, Ben Sutton & Mark Easter
The Carbon Benefits Project
Colorado State University
“We must harness the enormous positive potential of our lands and make them part of the climate solution.”

Statement of UNCCD Executive Secretary in response to the IPCC Special Report on Climate Change and Land
Land Management and Climate Change Mitigation

- Land use Change
- Agriculture
- Energy, Transportation, Industry, Waste
Land Management and Climate Change Mitigation

Biomass C Stock Changes

Non-CO₂ GHG Emissions from Burning

Enteric Methane

CH₄ and N₂O from Manure

Soil N₂O Emissions

Soil C Stock Changes

Rice Methane

From 2006 IPCC Guidelines
Mitigating agricultural GHGs

- Increasing uptake and storage of CO$_2$ in biomass and soils
Mitigating agricultural GHGs

- Increasing uptake and storage of CO$_2$ in biomass and soils
- Reducing N$_2$O emissions from soils and manure
Mitigating agricultural GHGs

- Increasing uptake and storage of CO₂ in biomass and soils
- Reducing N₂O emissions from soils and manure
- Reducing CH₄ emissions from soils, livestock and manure
Mitigating agricultural GHGs

- Increasing uptake and storage of CO$_2$ in biomass and soils
- Reducing N$_2$O emissions from soils and manure
- Reducing CH$_4$ emissions from soils, livestock and manure
- Reducing fossil fuel use for operations and production inputs
Land Management and Climate Change Mitigation

- GEF Agencies
- UN Agencies
- Land Managers
- NGOs
- Government Ministries
- Etc.!
Introduction to the Carbon Benefits Project (CBP) tools

www.carbonbenefitsproject.org
Introduction to the Carbon Benefits Project (CBP) tools

Project activities:
- Reduced grazing, protection of rangelands
- Reforestation/Afforestation

Baseline Scenario: Initial Land Use

Project Scenario: Carbon Benefit

Soil Carbon
Woody Carbon
Enteric CH₄
Manure N₂O, CH₄
Biomass Burning (CO₂, N₂O, CH₄, CO, NOx)
Synthetic Fertilizer N₂O
Introduction to the Carbon Benefits Project (CBP) tools

User enters:
Spatial areas where the project is working
Introduction to the Carbon Benefits Project (CBP) tools
Introduction to the Carbon Benefits Project (CBP) tools
Introduction to the Carbon Benefits Project (CBP) tools
WOCAT and the Global SLM database

Tatenda Lemann, Nicole Harari, Rima Mekdaschi Studer

Centre for Development and Environment (CDE), University of Bern, Switzerland
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**CBP:** [Eleanor.Milne@ColoState.EDU](mailto:Eleanor.Milne@ColoState.EDU)
WOCAT and the Global SLM database

Tatenda Lemann, Nicole Harari, Rima Mekdaschi Studer

Centre for Development and Environment (CDE), University of Bern, Switzerland
WOCAT’s mission is to support innovation and decision-making in SLM by:

- Maintain global, open SLM network
- Harmonize and further develop tools and methods with partners
- Provide open access global SLM data repository
- Build capacities at local, regional and national level

Key Numbers:

- 2090 SLM Practices published from 133 countries by 421 users,
  - 1166 SLM Technologies
  - 475 SLM Approaches
  - 443 UNCCD PRAG Practices
- 14 new practices drafted in the past 30 days.
- 88443 visits from 198 different countries since launch in August 2016.
WOCAT and the Global SLM database

Linked Tools, Applications and Databases:

- Carbon Benefits Project Tools
- Global Geo-Informatics Options by Context (GeOC)
- The Land Potential Knowledge System (LandPKS)
- Trends.Earth
- Farmbetter
- Offline Mobile App of the WOCAT Technology and Approach Questionnaires
- WOCAT visualization and analysis tool
WOCAT and the Global SLM database

Fostering concerted action

- Global Soil Partnership
- GEO-LDN Initiative
  
  Task Force Member
- Global Restoration Observatory
  
  Task Force Member
- “4per1000” initiative
  
  Task Force Member
- The United Nations Decade on Ecosystem Restoration
  
  Supporting Partner, Task Force Member
- ...
Linking WOCAT and the CBP Tools

- **Step 1** – Document SLM Technology with WOCAT
- **Step 2** – Import WOCAT data to CBP Tools
- **Step 3** – Carry out a GHG estimation with CBP
- **Step 4** – Upload CBP summary to the WOCAT SLM Database
Linking WOCAT and the CBP Tools
Step 1 – Document SLM Technology with WOCAT

→ Signup for a WOCAT account and login to the WOCAT SLM Database: https://qcat.wocat.net/

1. Familiarize yourself with the paper questionnaire
   Welcome! You are about to compile a new SLM Technology / Approach.

2. Fill in the paper questionnaire
   Fill in the paper questionnaire based on your knowledge and existing documents.

3. Who can help me?
   Identify and contact key resource persons with in-depth knowledge of the SLM Technology / Approach.

4. Collect data in the field
   Gather information through interviews with land users and key resource persons. Take measurements and photos.

5. Create a new entry form
   Create a new SLM Technology / Approach data entry form in the WOCAT SLM database.
Linking WOCAT and the CBP Tools
Step 1 – Document SLM Technology with WOCAT

6. Edit data
   Edit your data, making sure it is complete, clear, and comprehensible.
   Invite editors (WOCAT users) to help you.

7. Submit for review
   Submit your SLM Technology / Approach for review.
   If data is not complete you have to revise it.
   If data is complete the reviewer submits it for publication.

8. Publish
   Your SLM Technology / Approach is approved and published.
   If data is still not complete you have to revise it again.

9. Online
   Congratulations! Your SLM Technology / Approach is now online and accessible worldwide.
Linking WOCAT and the CBP Tools

Step 1 – Document SLM Technology with WOCAT
Linking WOCAT and the CBP Tools

Step 1 – Document SLM Technology with WOCAT

Import WOCAT data to CBP Tools
Linking WOCAT and the CBP Tools

Step 2 – Import WOCAT data to CBP Tools
Linking WOCAT and the CBP Tools
Step 2 – Import WOCAT data to CBP Tools

Add New Project: Import WOCAT Technology

2 View User-Submitted Factors

View Factors

3 View Aggregate Reports

View Aggregate Page
Linking WOCAT and the CBP Tools
Step 2 – Import WOCAT data to CBP Tools

https://cbp.nrel.colostate.edu/Project/CreateWOCAT

Import WOCAT Technology

Select a WOCAT Technology from the list to import as a CBP project.
Linking WOCAT and the CBP Tools
Step 2 – Import WOCAT data to CBP Tools
Linking WOCAT and the CBP Tools
Step 3 – Carry out a GHG estimation with CBP
Linking WOCAT and the CBP Tools

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Linking WOCAT and the CBP Tools

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Step 3 – Carry out a GHG estimation with CBP
Linking WOCAT and the CBP Tools

Step 4 – Link CBP summary with the WOCAT CBP Module

- CBP Module can be added to a WOCAT Technology
- Module fits within the existing design paradigm
- Fully functional with review and edit capabilities
Linking WOCAT and the CBP Tools

Adding a CBP Module in WOCAT

- Two ways to add a CBP Module to a Technology
  - From Add Module
  - From a Technology

[Diagram with options to add modules]
Linking WOCAT and the CBP Tools

Adding a CBP Module in WOCAT

- Two ways to add a CBP Module to a Technology
  - From Add Module
  - From a Technology

Add CCA or CBP Module

You can add a CCA or CBP Module to an existing SLM Technology. If the SLM Technology is not included in the WOCAT SLM Technology database yet, please first add it.

Add new SLM Technology.

1. Select a Technology
   Search and select a Technology to which you would like to add a module.

   CBP Test 6

2. Select a Module
   - Climate Change Adaptation Module
     Questionnaire on Adaptation of SLM Technologies to Gradual Climate Changes and Climate-Related Extremes
   - Carbon Benefits Project (CBP) Summary Module
     Summary PDF from the Carbon Benefits Project (CBP) Assessment

3. Create Module
1. Select a Technology
   ✓

2. Select a module
   Select a module which you would like to add to the Technology.

   - Climate Change Adaptation Module
   - Questionnaire on Adaptation of SLM Technologies to Gradual Climate Changes and Climate-Related Extremes
   - Carbon Benefits Project (CBP) Summary Module
     - Summary PDF from the Carbon Benefits Project (CBP) Assessment

3. Create the module
   Create
Linking WOCAT and the CBP Tools

Sections of the CBP Module

- Sections can be edited in Draft mode
- Section 1 collects General Information
- Section 2 collects the CBP Summary PDF file
Linking WOCAT and the CBP Tools

Section 1

- Section 1.1
  - Technology Name and Country (read-only)

1.1 Name of the SLM Technology (hereafter referred to as the Technology) as per Core Questionnaire on SLM Technologies Question QT Core 1.1

Name:
TestCreatePOST

Locally used name:

Country:
India
Linking WOCAT and the CBP Tools

Section 1

• Section 1.2
  • Resource Persons(s), Project(s) and Institution(s)
Linking WOCAT and the CBP Tools

Section 1

• Section 1.3
  • Data Use Approval

1.3 Conditions regarding the use of data documented through WOCAT

When was the Carbon Benefits Project (CBP) Assessment compiled?

Pick a date

The compiler and key resource person(s) accept the conditions regarding the use of data documented through WOCAT:

- Yes
- No

Note: If you do not accept the conditions regarding the use of data documented through WOCAT your data will not be accepted by the WOCAT secretariat and it will not be published.
Linking WOCAT and the CBP Tools
Section 2

- Section 2.1
- CBP Summary PDF file (drag & drop)
- Description of the assessment results
Linking WOCAT and the CBP Tools

Review Process

• Once Submitted, WOCAT Secretariat & CBP Team (Eleanor & Mark) will review the CBP Summary

• After Review, CBP module will be made Public

Draft version

The Carbon Benefits Project (CBP) Summary Module data entry form is saved as a draft. The compiler is responsible for this data entry and can invite editors (WOCAT users) to help create it. Once the data entry is complete the compiler can submit it for review.

Submit

All edits have been made, the data entry is complete, and the Carbon Benefits Project (CBP) Summary Module is ready to be submitted. After submission a reviewer is selected.

Edit

Start editing the questionnaire.

Delete

Delete this Carbon Benefits Project (CBP) Summary Module. As a member of the WOCAT secretariat, you can delete this Carbon Benefits Project (CBP) Summary Module.

Manage editors

WOCAT users can be invited to work on a Carbon Benefits Project (CBP) Summary Module as editors. Editors can edit the Carbon Benefits Project (CBP) Summary Module, but they cannot submit it for review or invite other editors.

Invited editors:

There are no editors invited to this questionnaire.
Linking WOCAT and the CBP Tools
Appearance of the CBP Module

Closed Area Management in Abagerima Learning Watershed [Ethiopia]

Closed area management is an area within a watershed into which human and livestock access is limited, and the area is left for natural recovery of vegetation and soil. Management relates to activities by the community to ensure such protection and to support regeneration, such as constructing drainage and retention...

Compiler: Melese Bilihign  10/25/2018 10 a.m.
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- Q&A

- Final remarks
  - André Kooiman (ISRIC)
Managing soils for a sustainable future – a toolset

Monday, 7th December 2020, 13:00-14:00 CET