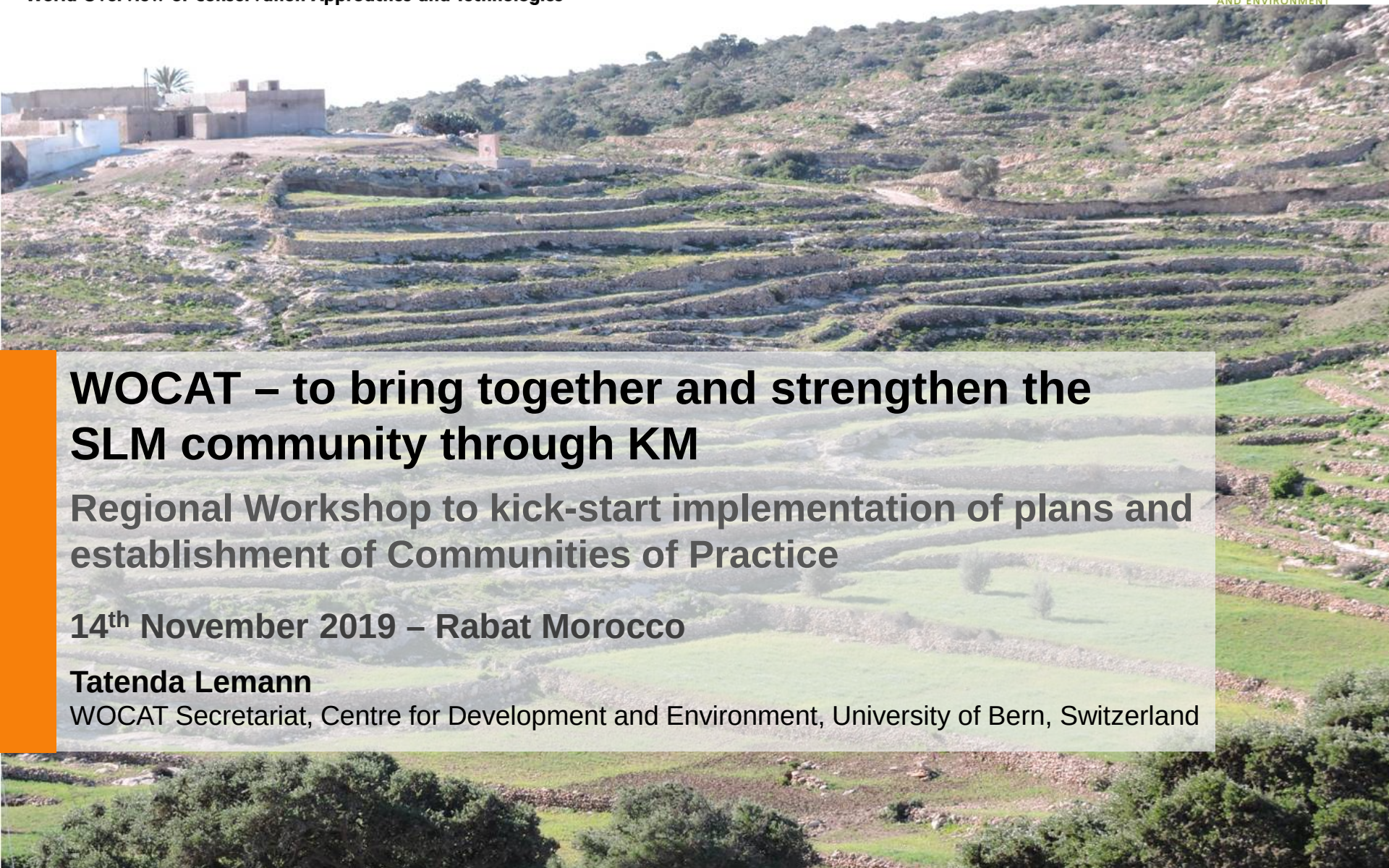
WOCAT

World Overview of Conservation Approaches and Technologies

UNIVERSITÄT BERN

CDE
CENTRE FOR DEVELOPMENT AND ENVIRONMENT



# WOCAT – to bring together and strengthen the SLM community through KM

## Regional Workshop to kick-start implementation of plans and establishment of Communities of Practice

**14th November 2019 – Rabat Morocco**

**Tatenda Lemann**
WOCAT Secretariat, Centre for Development and Environment, University of Bern, Switzerland

# Agenda:

| | |
|---|---|
| -Introduction WOCAT | *Tatenda* |
| -Explore the WOCAT Global Database | *Group* |
| <u>Coffee brake</u> | |
| -Interests and needs in a SLM CoP | *Group* |
| -Wrap up | *Group* |

https://vimeo.com/74616455

# WOCAT is…

…a **global network** of specialists working in the field of **SLM**

…a framework for **Knowledge Management** and **Decision Support** for SLM

# WOCAT's mission

… is to support *innovation and decision-making in SLM*

maintain global, open
**SLM network**

harmonize and
further develop
**tools and methods**
with partners

WOCAT

provide open access
**global SLM data**
**repository**

**build capacities** at
local, regional and
national level

with the **underlying principles** of:

- neutrality
- inclusiveness
- linking local land user to national/ global policy level

# Main target groups

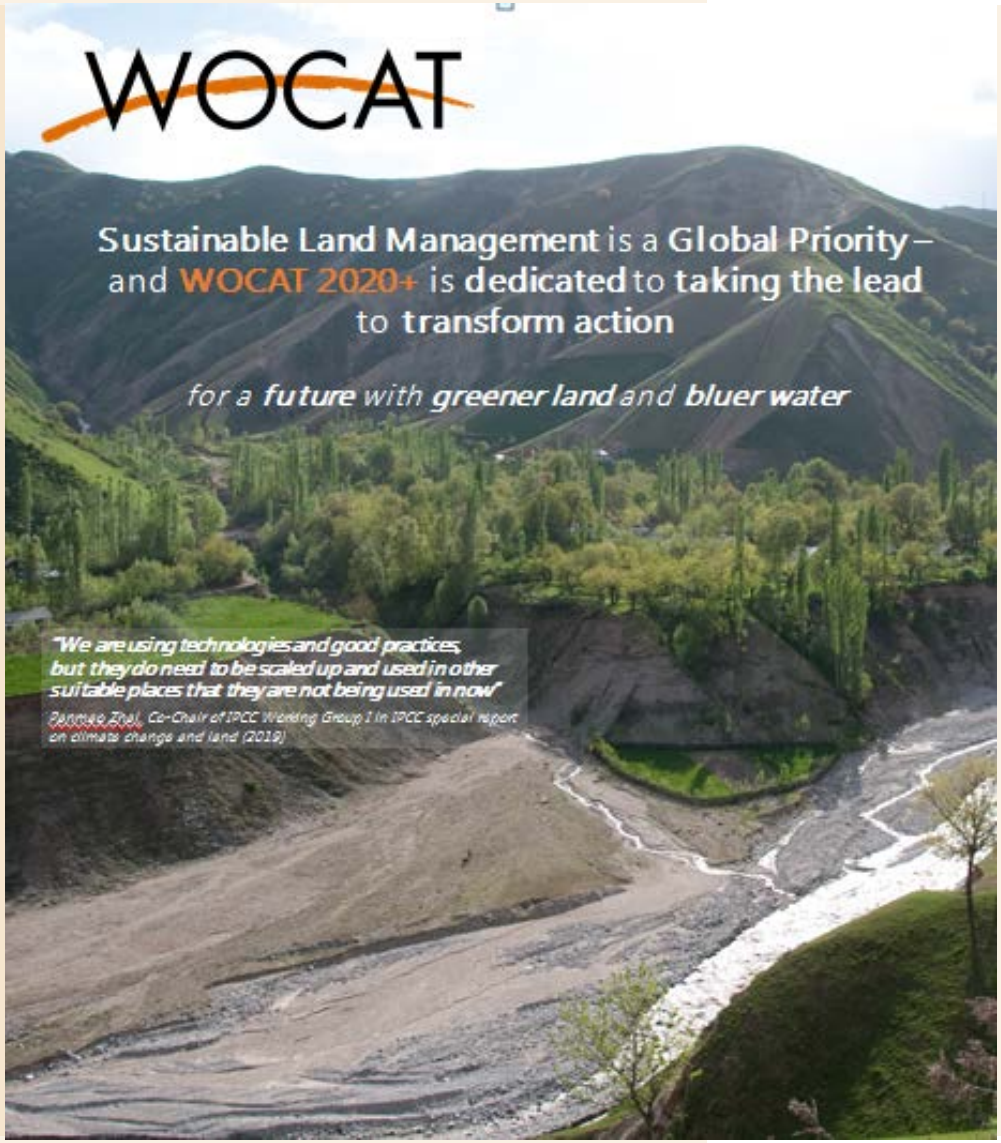
- **SLM specialists at the field level**, incl. technical staff, extension workers, agricultural advisors, project implementers
- **SLM specialists at the (sub-)national level**, incl. planners, project designers, decision makers, and researchers
- **SLM specialists at the regional and global level**, incl. international programme planners, and donors

**Ultimate target group & beneficiaries:**

**land users** and **public** benefitting from more secure ecosystem services

# WOCAT Network

- Established in 1992
- New set-up in 2014 with 8 consortium partners
- New WOCAT 2020+ initiative in preparation



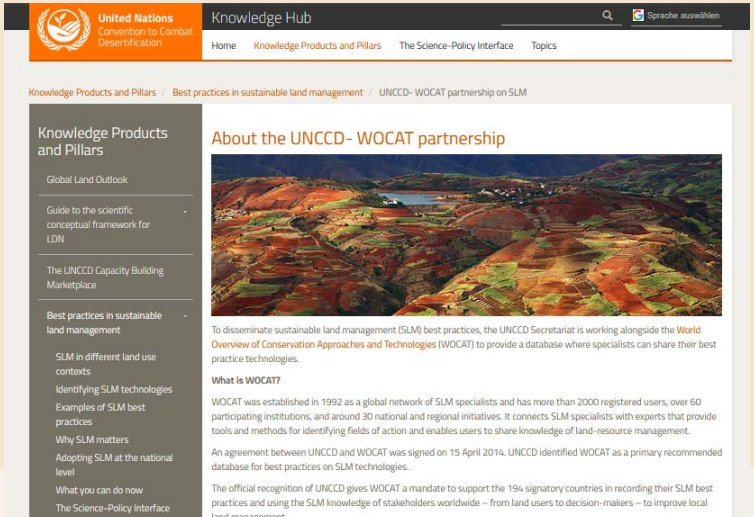
WOCAT
**WOCAT 2020+** aims to be a leading **platform of expertise** and a major transformative force in supporting countries and institutions around the world to **scale up SLM**, **achieve LDN**, and foster **related SDGs** addressed by the three UN conventions.

# UNCCD recognition
## *primary recommended database*

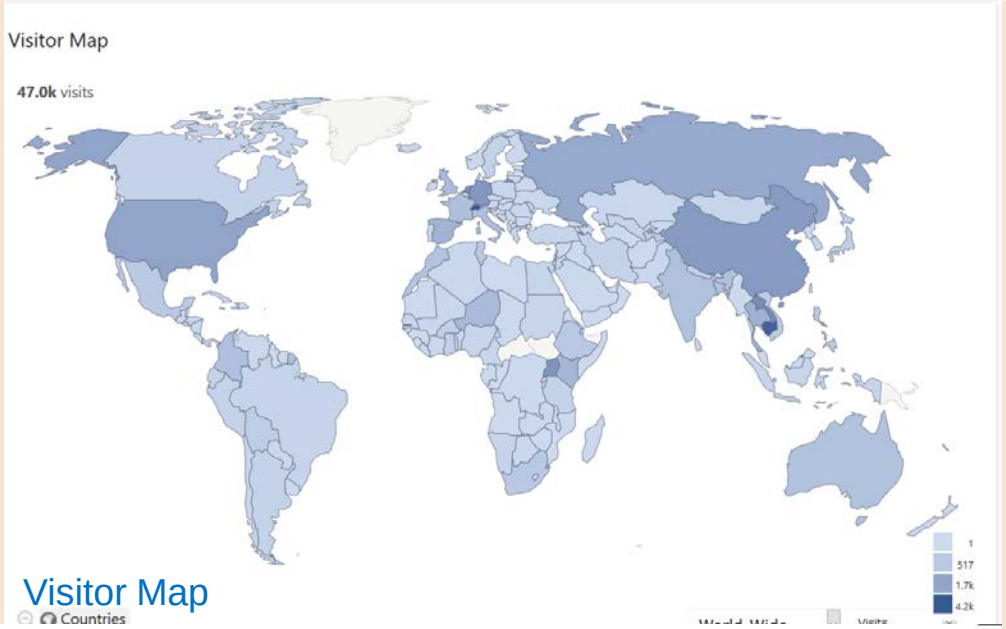
April 2014:

*'Primary recommended database for the SLM best practices reporting'*

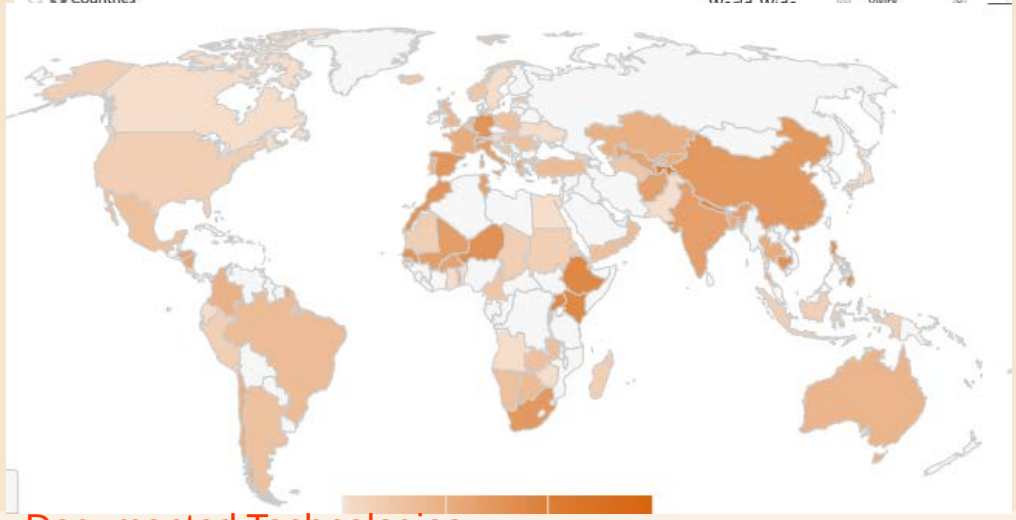
Supporting the 196 members in the reporting of good SLM practices



# UNCCD recognition
## *primary recommended database*




Visitor Map



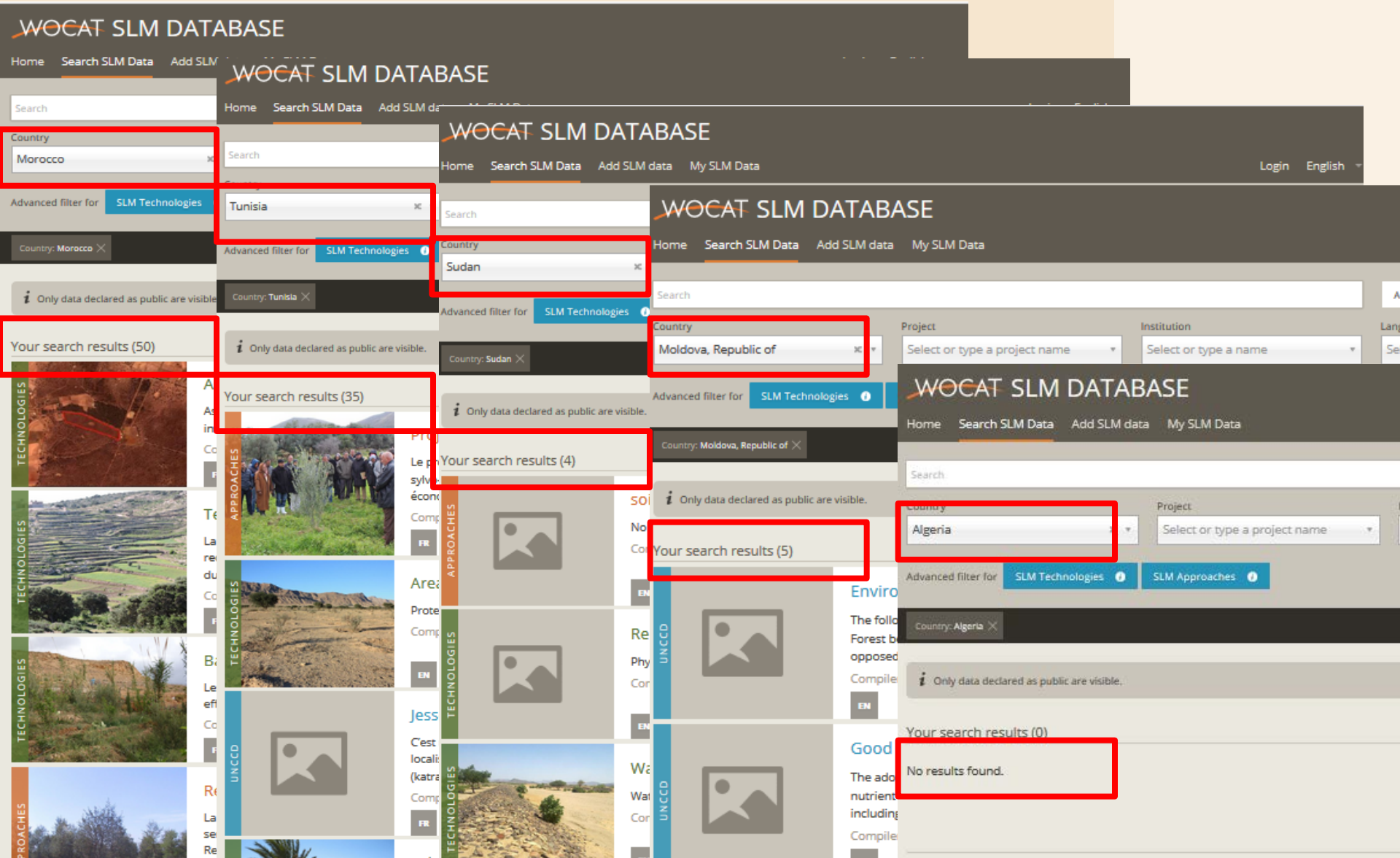
Documented Technologies

### Key Numbers

*(5 Sept. 2019)*

- 1990 SLM Practices published from 131 countries by 402 users.
  - 1082 SLM Technologies
  - 465 SLM Approaches
  - 443 UNCCD PRAIS Practices
- 49 new practices drafted in the past 90 days.
- 60966 visits from 195 different countries since launch in August 2016.

# UNCCD recognition
## *primary recommended database*



# WOCAT's global position

WOCAT was essential in moving away from LD focus towards SLM, **defining SLM and its measures**, now globally used and referenced to

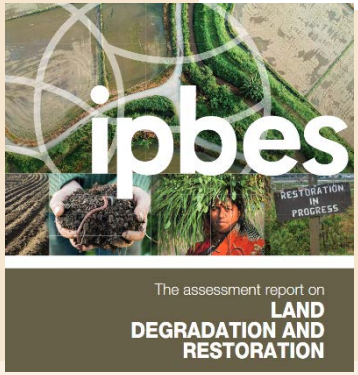
E.g. in UNCCD SPI report: 89 mentions, use of definitions and links to SLM practices in database

E.g. in IPBES LD and restoration assessment, 22 mentions

E.g. EU JRC - World Atlas of Desertification

A detailed catalogue of sustainable land management approaches and technologies is available on the World Overview of Conservation Approaches and Technologies (WOCAT) website: https://qcat.wocat.net/en/wocat/ and in WOCAT publications (e.g., Liniger & Critchley, 2007). In Table 6.1, we present a set of land management strategies or response options illustrating the approaches and technologies outlined above.

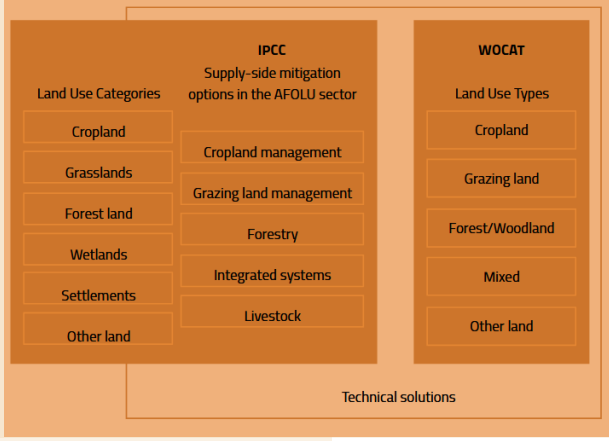
2000). The Sustainable Development Goal Target 15.3 has adopted three indices (CBD, 2016), while UNCCD uses 11 (Orr, 2011), WOCAT uses 57 (Liniger *et al.*, 2008), and GLADA uses 132 (Nachtergaele & Licona-Manzur, 2008).



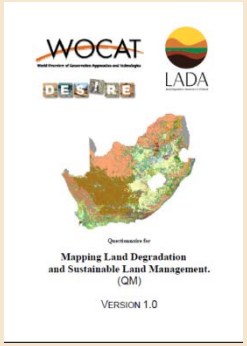
BOX 4:
**Five major land use types definition according to WOCAT (adapted from WOCAT 2002)**

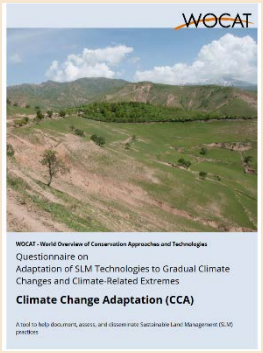
**Cropland**: annual cropping, perennial cropping, tree and shrub cropping.
**Grazing land**: extensive and intensive grazing lands.
**Forest/woodland**: natural forest, forest plantations, other.
**Mixed**: agroforestry (cropland and forest), agro-pastoralism (cropland and grazing land), agro-silvo-pastoralism (cropland, grazing land and forest), silvo-pastoralism (forest and grazing land), other.
**Other land**: mines and extractive industries, settlements, roads, infrastructure network, others (wastelands, deserts, glaciers).

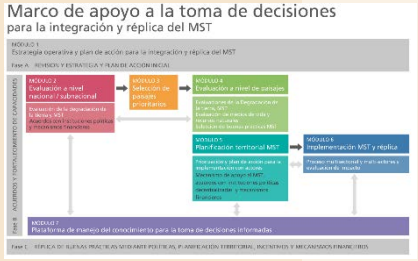
The following figure illustrates different land use types and categories that are documented in the literature and existing data bases and platforms in land use.



# WOCAT tools and methods



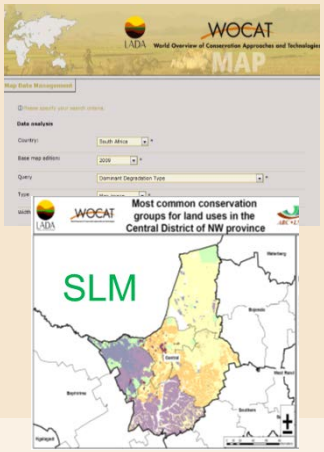

documentation, evaluation and dissemination of good practices

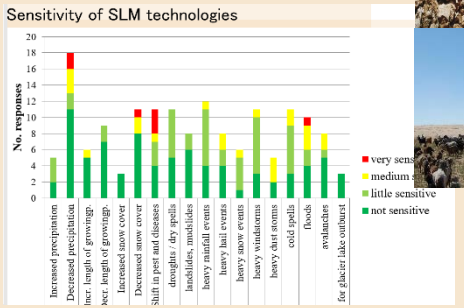
spatial assessment

global issues (climate change)

decision support

**scaling up and adoption of SLM**



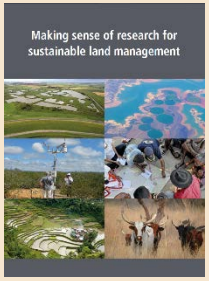



# Solid & easily accessible WOCAT knowledge products

**WOCAT and its partners have produced...**

**… a global online database system** databases on *SLM Technologies*, *SLM Approaches,* and *SLM Mapping* including more than 1000 case studies and maps from over 50 countries.

**… global, regional, national books, factsheets and brochures**: overview books, inventories of practices, guidelines for different users in different formats



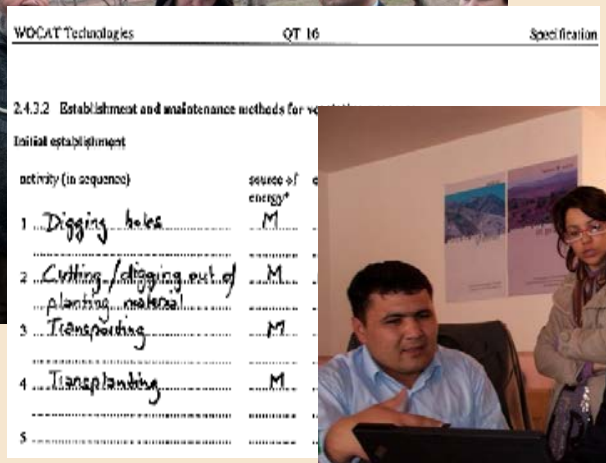
**… SLM videos:** a voice to land users implementing SLM in their fields.
**… Tablet** application: promotion and education

# Questionnaires and Database

## for documentation and evaluation of SLM practices

Questionnaires on SLM Technologies, Approaches & Mapping

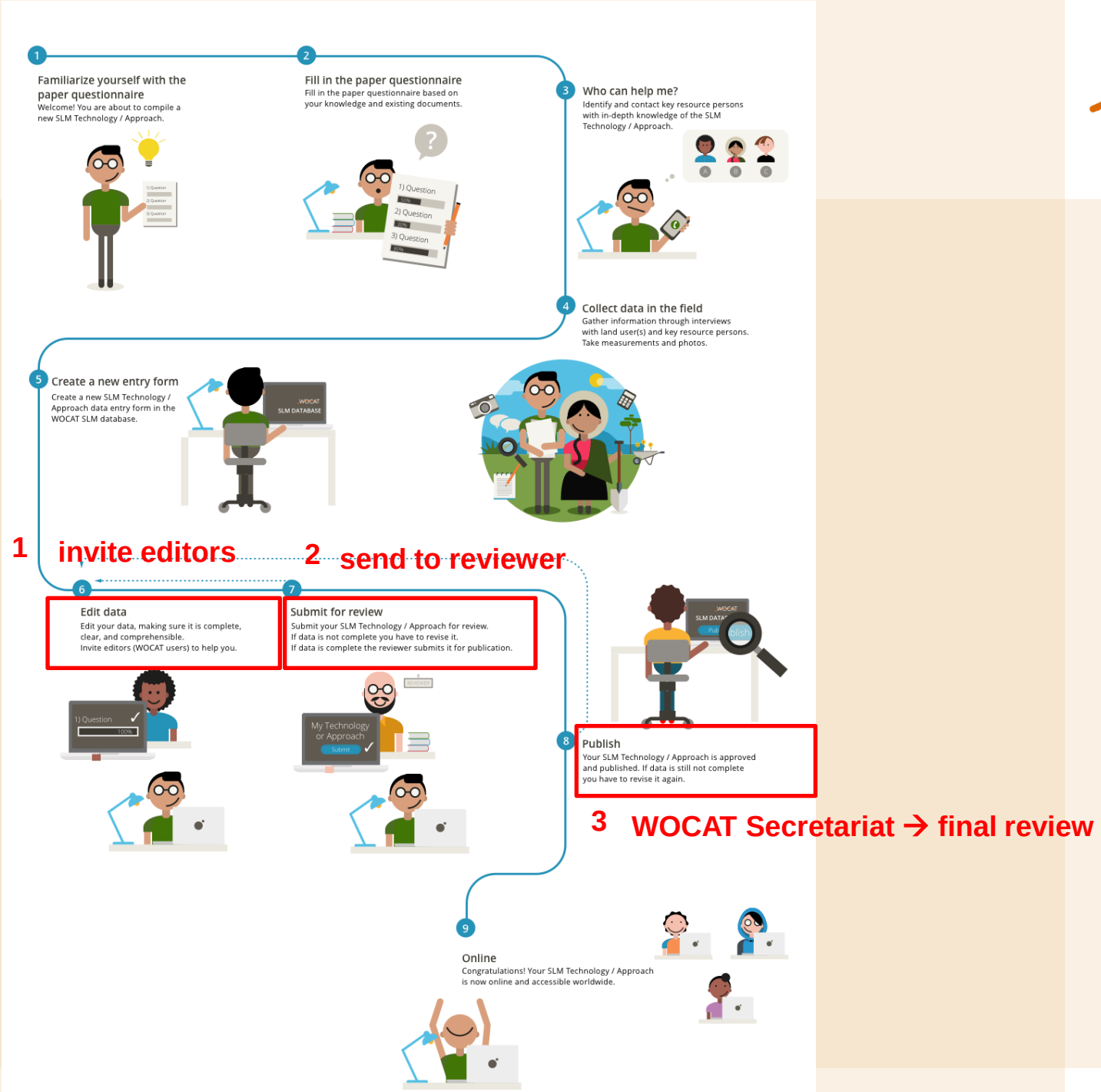
Documenting information *from* and *with* land users




Entering data in questionnaire

Entering data in database

Data available online

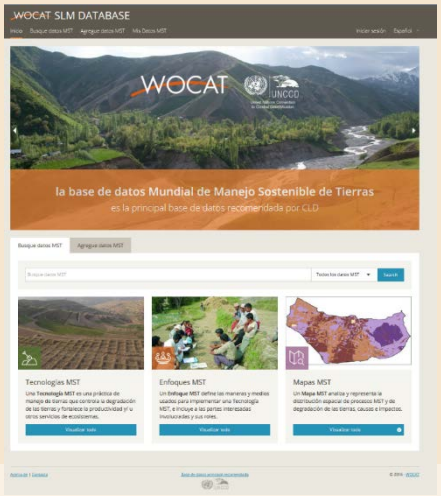

1
Familiarize yourself with the paper questionnaire
Welcome! You are about to compile a new SLM Technology / Approach.
2
Fill in the paper questionnaire
Fill in the paper questionnaire based on your knowledge and existing documents.
1) Question
2) Question
3) Question
3
Who can help me?
Identify and 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 user(s) 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.
WOCAT
SLM DATABASE
1 invite editors
2 send to reviewer
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.
1) Question
100%
My Technology or Approach
Submit
8
Publish
Your SLM Technology / Approach is approved and published. If data is still not complete you have to revise it again.
3 WOCAT Secretariat → final review
9
Online
Congratulations! Your SLM Technology / Approach is now online and accessible worldwide.

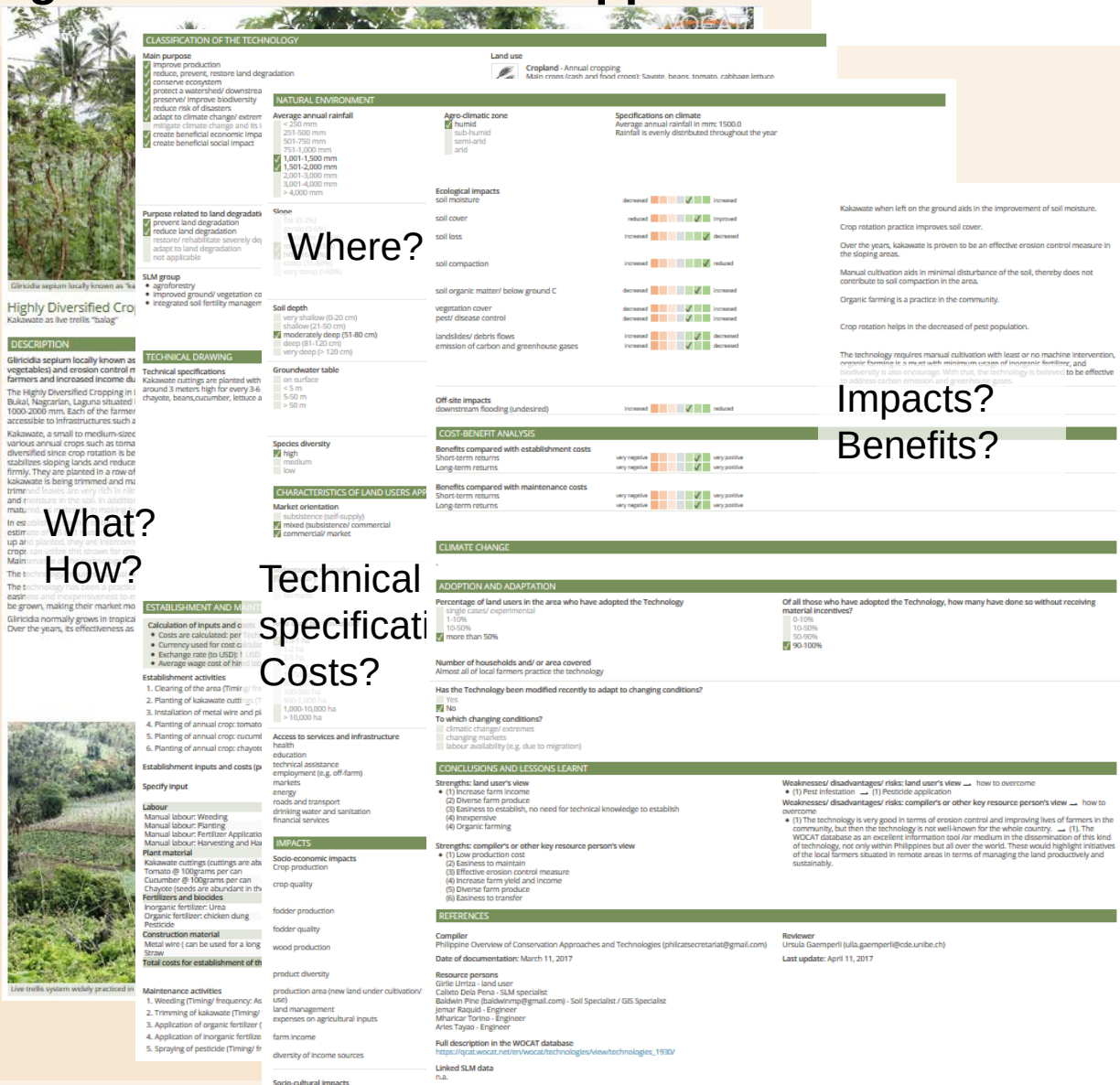
# Standardized tools & harmonized products

## key for Knowledge Management and Decision Support

### SLM Technology / Approach Summary

- Automatically generated
- In all languages
- Used for best practices compilations; learning materials for extension services etc.



# SLM Technology

**WOCAT Definition:**

« ***agronomic***, ***vegetative***, ***structural*** *and/or* ***management measures*** *that* ***prevent*** *and* ***control land degradation*** *and* ***enhance productivity*** *in the field* »

# SLM Technologies: examples



No-till technology



Terrasse



Stabilisation de terrasses en bordure d'oued avec des peupliers



Le système d'Agroforesterie pour la protection des terres et l'amélioration des revenus des exploitants dans les zones montagneuses

# Criteria for identification & delineation of a Technology

An SLM Technology should cover a **homogeneous set** of **natural** (bio-physical) and **human** (socio-economic) **conditions**, hence should not be applied to dissimilar  e.g.:

- climatic zones  (humid, subhumid, semi-arid, arid)
- land use types (cropland, grazing land, forest, etc.)
- slope categories
- or conditions of land tenure
- …

# Who should fill the questionnaires?

A team of **SLM specialists** – including land users – with different backgrounds and experience, who are familiar with the details of the technology/ approach (technical, financial, socio-economic)

… making use of existing documents and seek advice from other SLM specialists and land users as much as possible.

→ If you intend to fill the questionnaire from the desk, there is a tendency to fill the questionnaire according to our preconceptions which are not always correct.

# SLM Approach

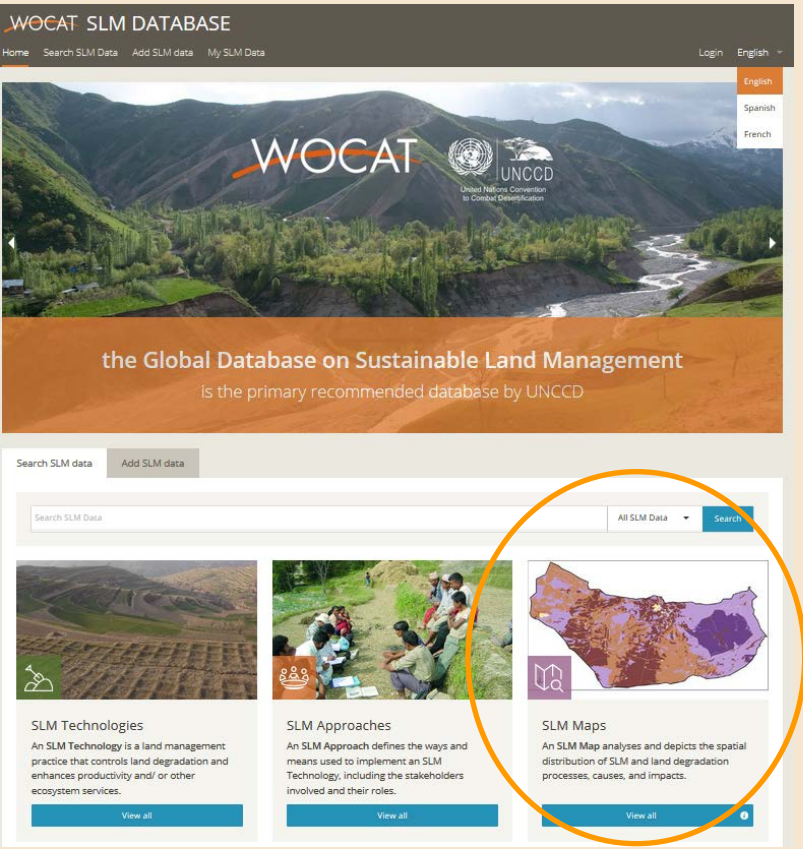
## WOCAT Definition:

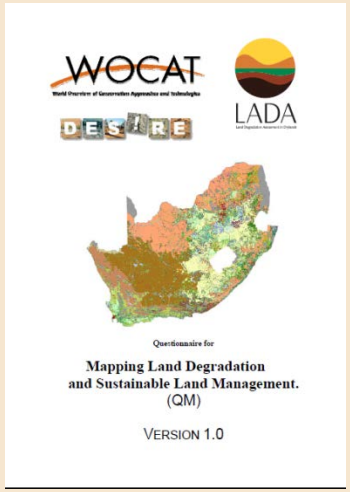
« ***ways*** *and* ***means of support*** *that* ***help introduce***, ***implement***, ***adapt*** *and* ***apply SLM technologies*** *on the ground;* ***provide*** *an* ***enabling environment*** »

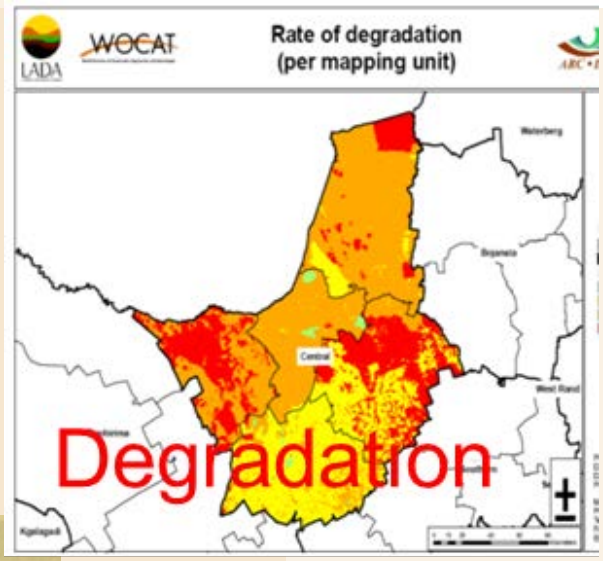
J. Thomas / FAO

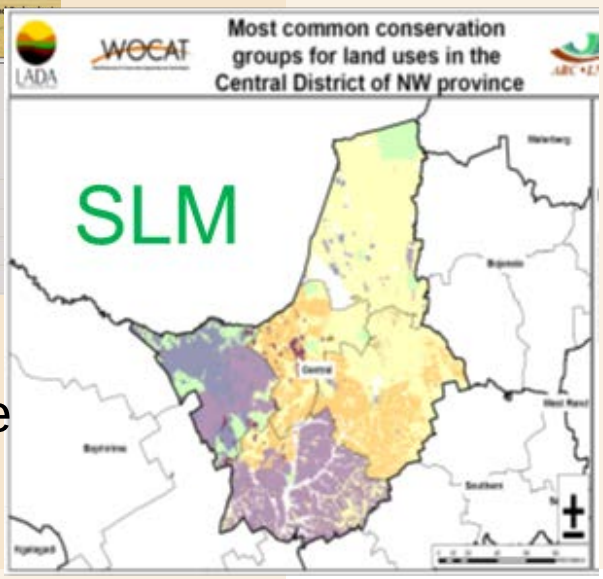
# SLM Approach: examples

# MAPPING LD & SLM






**Monitoring SDG:**

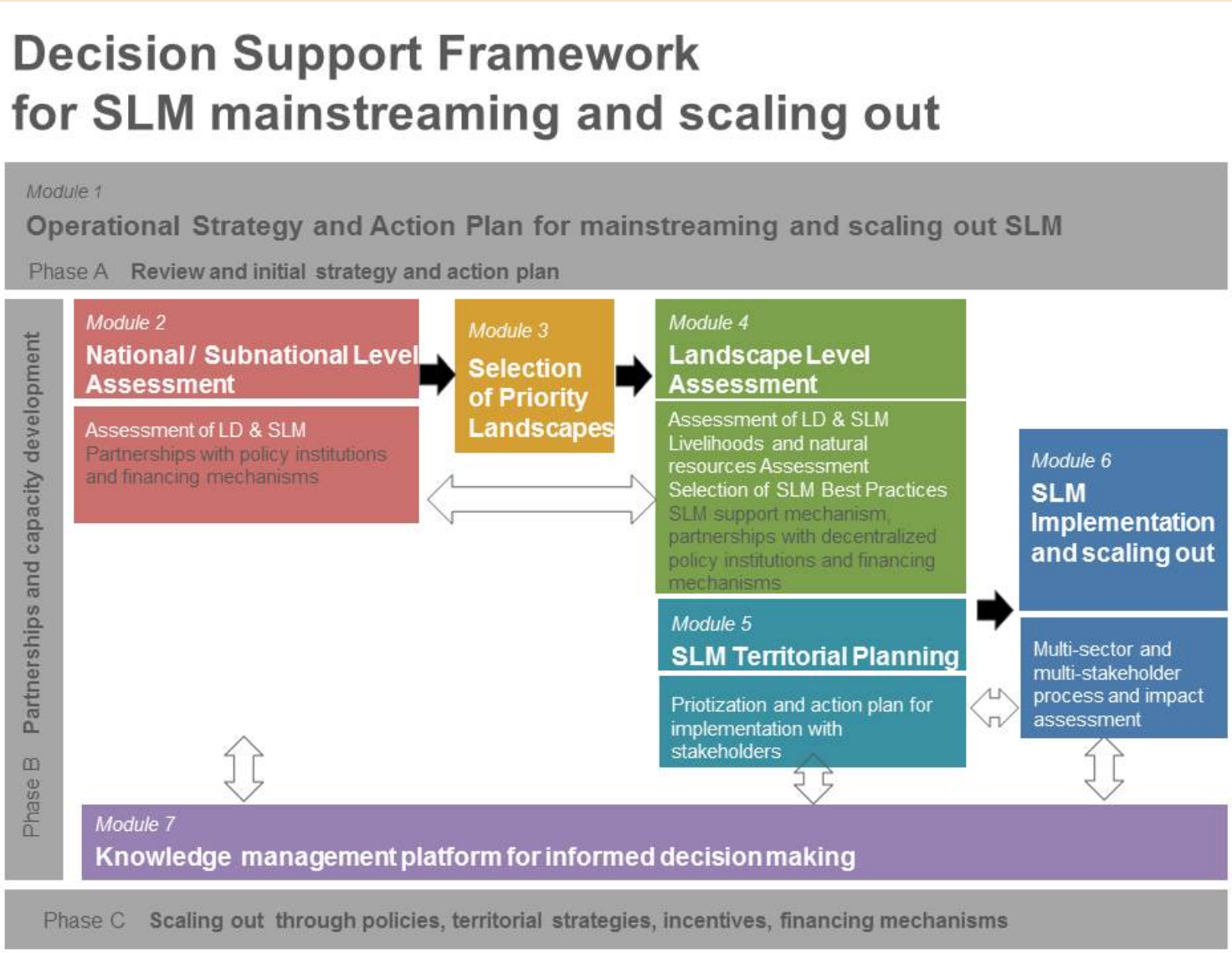
**<u>Target 2.4</u>** (area under productive and sustainable agriculture) **&**

**<u>Target 15.3</u>** (land degradation neutrality)

# Integrating knowledge in a Decision Support process

WOCAT

Food and Agriculture Organization of the United Nations



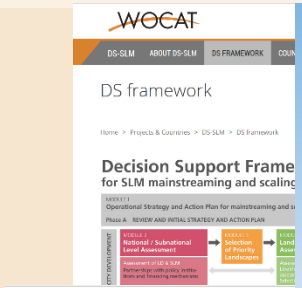

**GEF/FAO project in 15 countries**

**WOCAT as implementing partner**

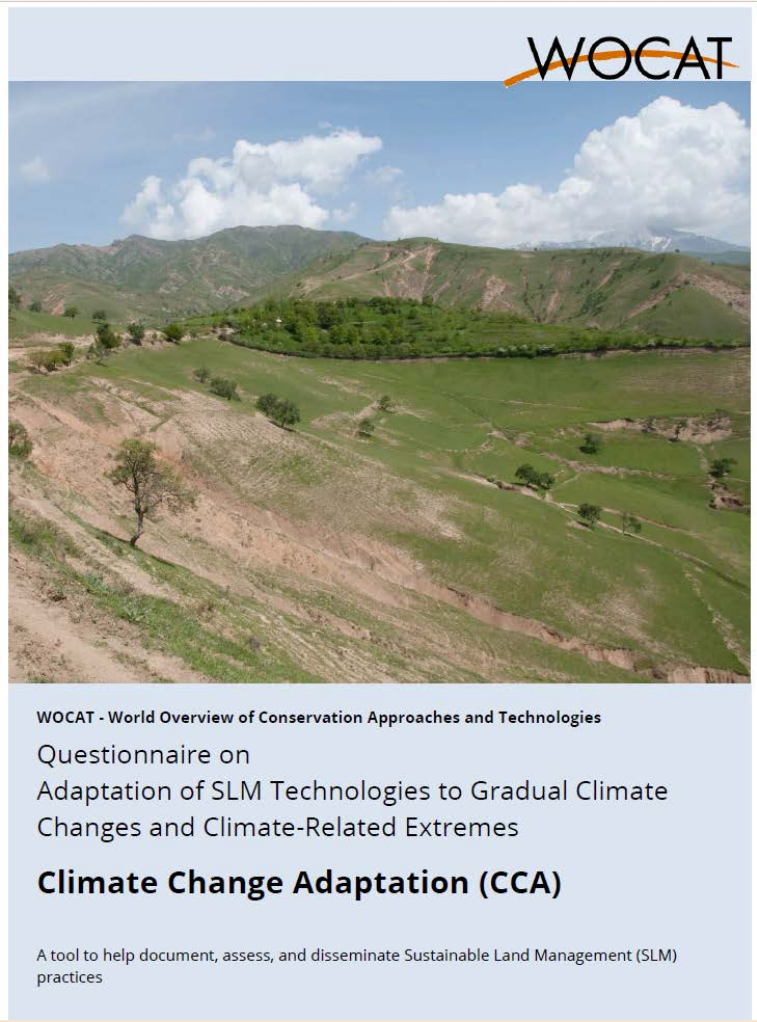
# DS tools in new WOCAT website

- available online
- user-friendly guidance through DS process
- new guidelines and manuals
- different entry points
- different levels

- 2019 New Mainstreaming tool



# Associated modules




assess whether SLM Technologies are or can be further adapted to gradual climate changes and climate-related extremes.

assess land management / LM practices interrelations and their sum of impacts on ESS (mainly runoff)

# Link between WOCAT and the Carbon Benefit Project (CBP) Tools

- ✓ A new version of **WOCAT** Questionnaire on SLM Technologies is online → with more drop down answers (adapted from IPCC) which can be linked with the CBP tools (www.carbonbenefitsproject.org)
- ✓ The **API** of the WOCAT database will be linked with the CBP simple- and detailed assessment → **Until the end of 2019**
- ✓ **Approx. 60%** of the questions in the CBP Tool (Simple Assessment) can be answered automatically with the import of SLM Technology data from the WOCAT database.
- ✓ It allows WOCAT users to import a WOCAT SLM Technology entry into the CBP system to carry out a **GHG assessment** of their Technology.
- ✓ This makes a very **powerful tool kit** reducing the burden on users and will ultimately provide a database of GHG friendly land management technologies available globally.

# Link between WOCAT and the Carbon Benefit Project (CBP)

*How to use the linkage?*

as of 2020

1.


Fill in the WOCAT questionnaire on SLM Technologies

2. Automatic data transfer from WOCAT to CBP

3.


Answer the remaining questions of the CBP tools (approx. 60% filled with data from WOCAT)

4. Automatic integration of the GHG assessment into the WOCAT output

TL, 2019

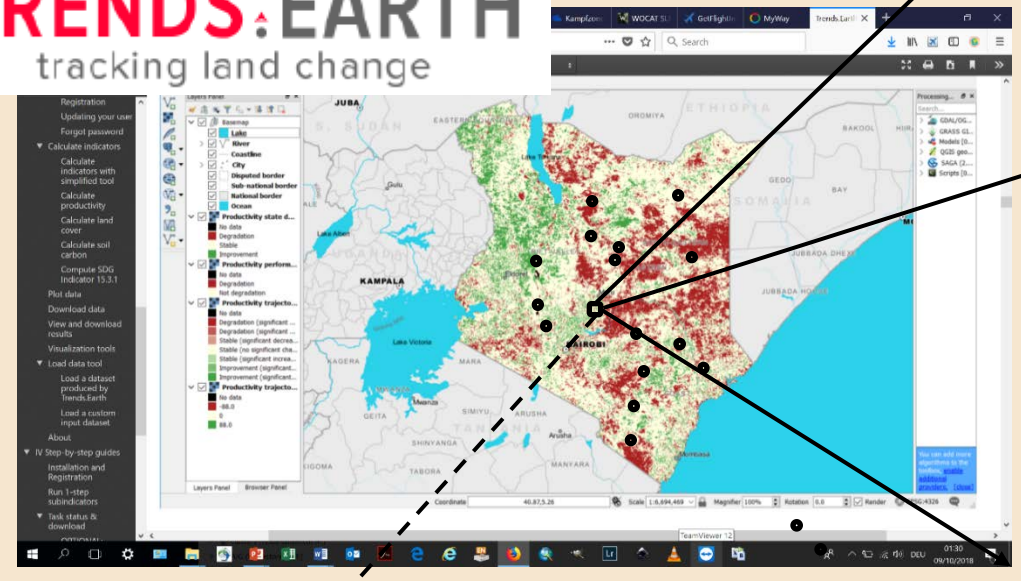
# Tools 4 LDN: Monitoring LDN linking local / national / global

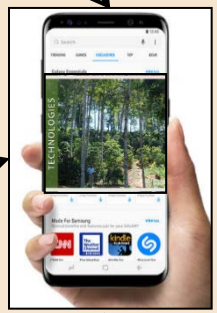
(2) Local

WOCAT — Carbon Benefits Project

(1) National

TRENDS.EARTH
tracking land change



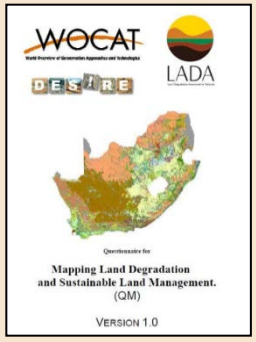


(3) Local

LandPKS

(4) Local - Landscape

*Add. Data e.g. Collect Earth (FAO)*




(5) National-Landscape

*LADA-WOCAT mapping combined with data from (1), (2), (3), (4),…*

# Other linkages / modules (planned or under development)

- ✓ Linkage with other Mobile Apps like SQAPP (www.isqaper-is.eu) or FarmBetter (www.farmbetter.io)
- ✓ Offline Mobile App of the WOACT Technology Questionnaire (DS-SLM Thailand)
- ✓ Linkage with GeOC
- ✓ New project on SLM criteria and indicators for innovative financing mechanisms and private sector investment
- ✓ Visualization of WOCAT database..

# *To remember : WOCAT offers…*

…a global open Network of sustainable land management experts and practitioners

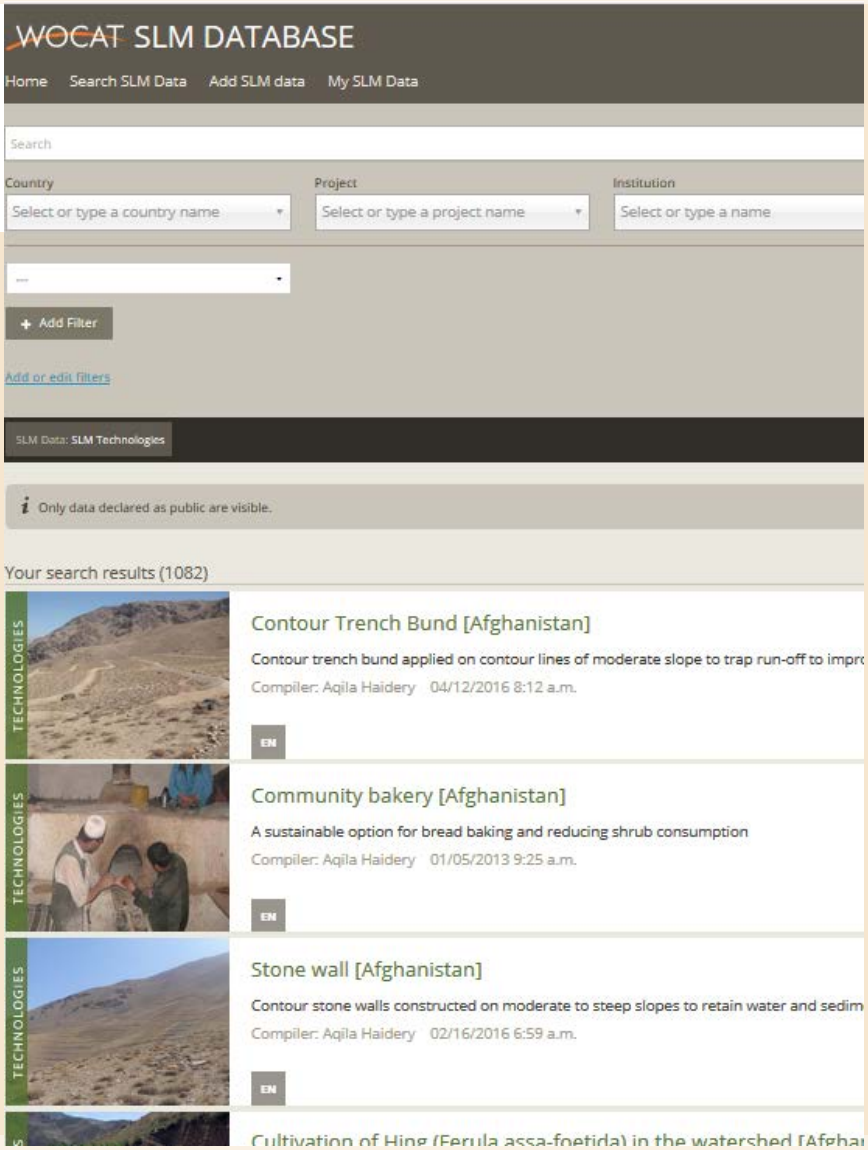
…a series of standardized tools and methods for KM and DS in SLM

…an open access global knowledge base with good practices in SLM, LD and SLM maps, different books, guidelines, etc.

…support for projects and institutions to build their capacity in the assessment of land degradation and the evaluation of potential SLM solutions at different levels

*WOCAT is not an institution that is implementing its own projects but is there to assist stakeholders if there is a need and an interest*

# Exercise on WOCAT Database




**https://qcat.wocat.net**

# Interests and needs in a SLM CoP

*What elements to develop (Wenger-Trayner, 2015):*

*Wenger-Trayner (2015)*

**Domain** the definition of the area of shared inquiry and the key issues

**Community** the relationships among members an the sense of belonging

**Practice** the body of knowledge, methods, stories, cases, tools, documents

? For the Group work: **Which stakeholder group do you belong to** ?

# Interests and needs in a SLM CoP

## Task 1: Domain

- ❑ Discuss within your stakeholder group the **Domain** of one or different SLM CoP (15min)

  e.g. **scale** (global, regional, national) or
  **specific conditions** (climatic zones, land use types, land tenur, other)

  →*Please use one card for each point*

- ❑ Present your specifications of the SLM CoP (each group 2min)

*Wenger-Trayner (2015)*

# Interests and needs in a SLM CoP

## Task 2: Community

- Discuss within your stakeholder group what you expect from a **Community** of Practices (15min)

  e.g. Physical exchange?
  Learning routs with other countries?
  Trainings and capacity building?
  Online exchange on good practices?
  Thematic working groups?
  Other?

  → *Please use one card for each point*

- Present your expectations of the SLM CoP (each group 2min)

*Wenger-Trayner (2015)*

# Interests and needs in a SLM CoP

## Task 3: Practice

- ❑ Discuss within your stakeholder group the role of the new **WOCAT 2020+** initiative in a SLM CoP

*Wenger-Trayner (2015)*

→*Please write **core elements** on green cards and **gaps** on yellow cards*

- ❑ Final Plenary Discussion and further procedure (each group 2min)

# find WOCAT on:

World Overview of Conservation Approaches and Technologies

**www.wocat.net**

**qcat.wocat.net**

**www.facebook.com/wocatnet**

**thank you!**

tatenda.lemann@cde.unibe.ch