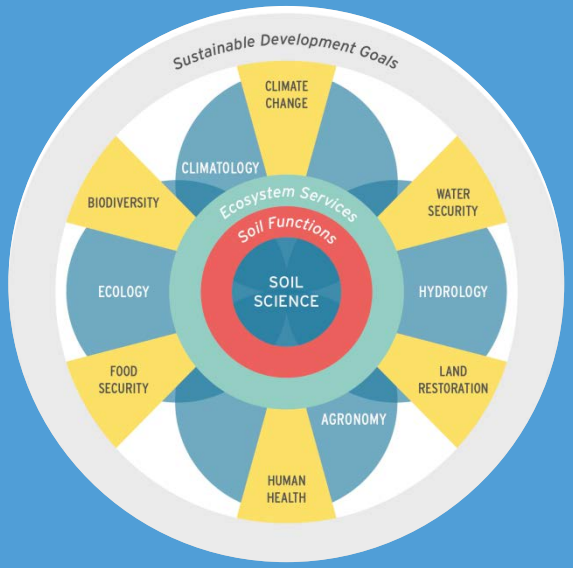
Farmers as stewards of the land to reach the Sustainable Development Goals:

Insights from workshop in South Africa on Conservation Agriculture

Saskia Keesstra

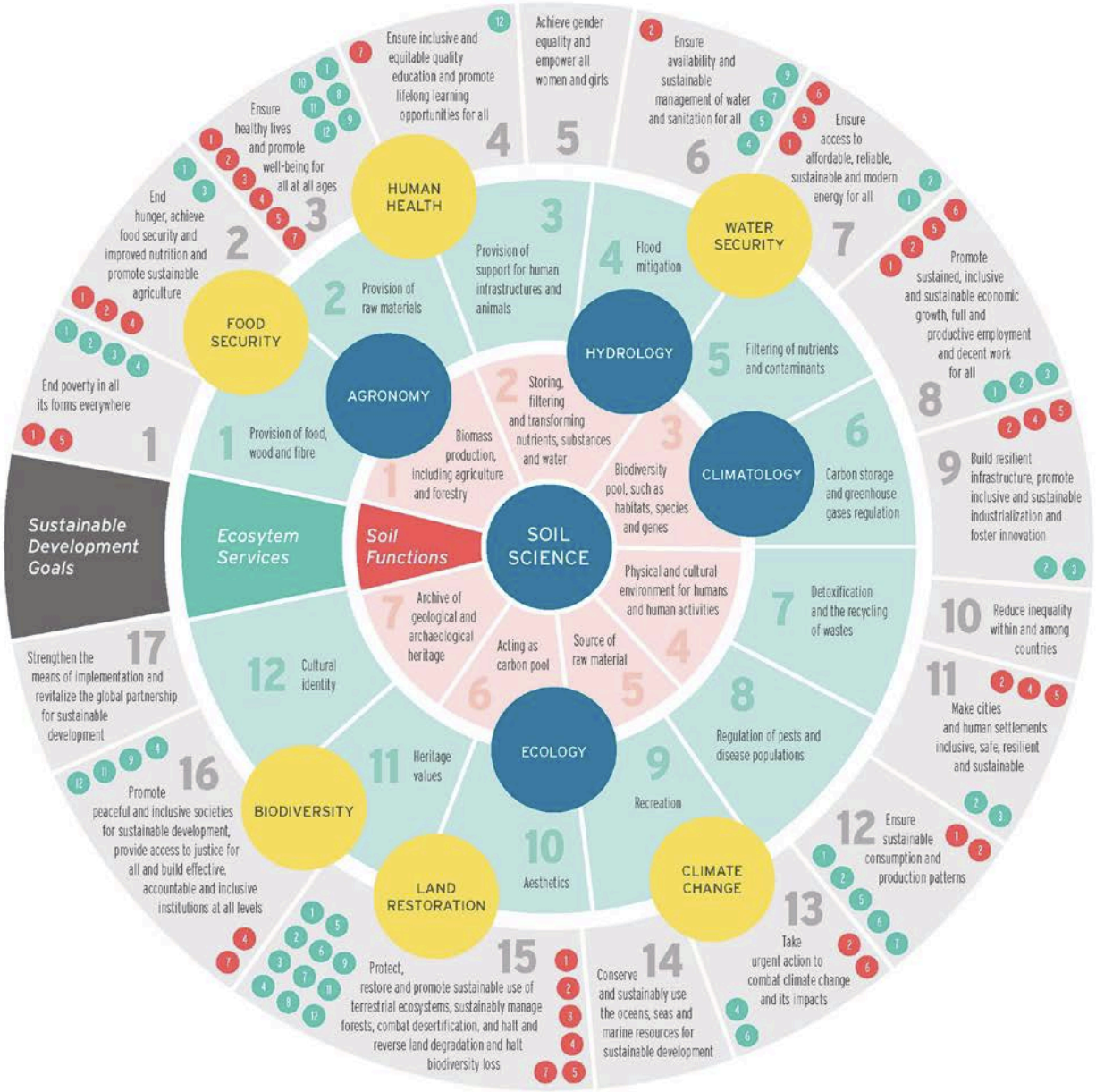


WAGENINGEN UR
For quality of life

SUSTAINABLE DEVELOPMENT GOALS:

1 UNIVERSAL AGENDA, 17 GOALS

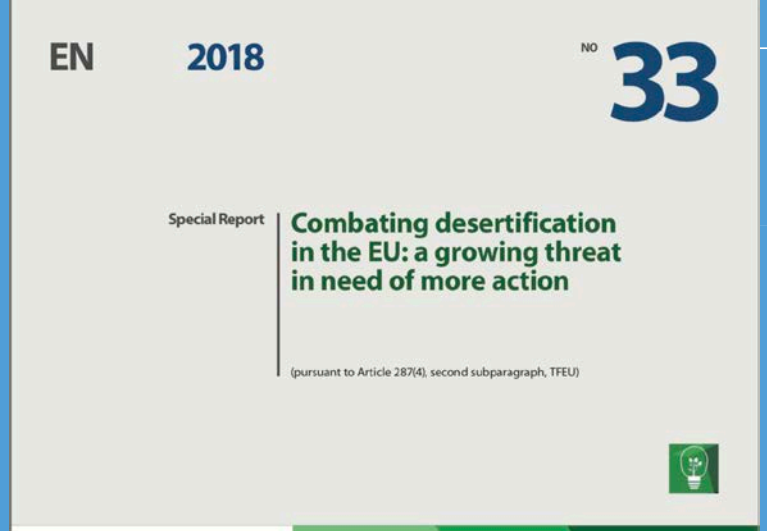
BUT:

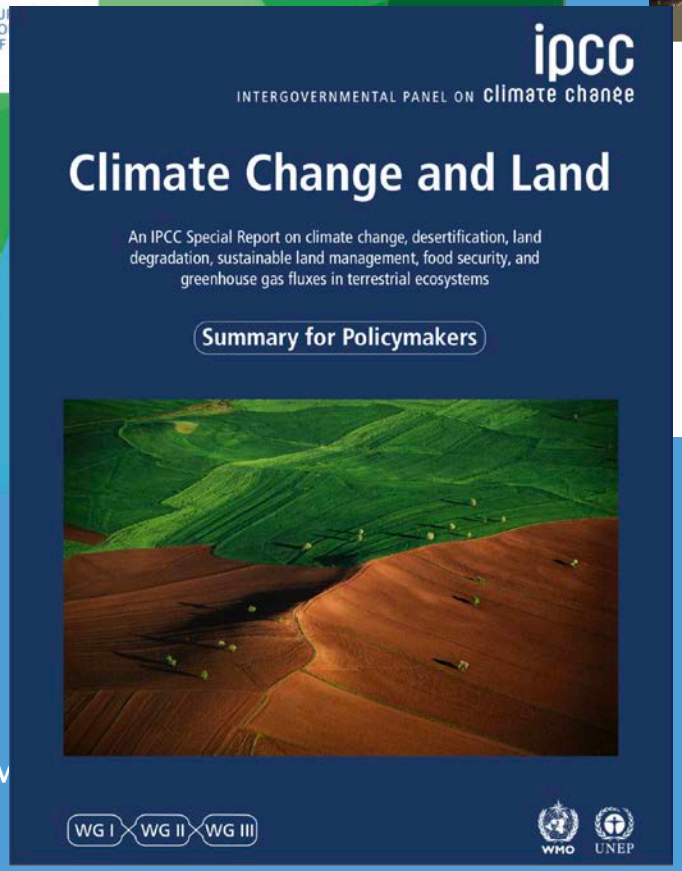


FORUM paper: The significance of soils and soil science towards realization of the UN sustainable development goals (SDGs)

Keesstra, S.D., Bouma, J., Wallinga, J., Tittonell, P., Smith, P., Cerdà A., Montanarella, L., Quinton, J., Pachepsky, Y., van der Putten, W.H, Bardgett, R.D, Moolenaar, S., Mol, G., Fresco, L.O.

odem breed





The assessment report on

LAND DEGRADATION AND RESTORATION

SUMMARY FOR POLICYMAKERS

▶**Land is a Critical Resource, IPCC report says it is under pressure from humans and climate change, but it is part of the solution.**

2030 is tomorrow!

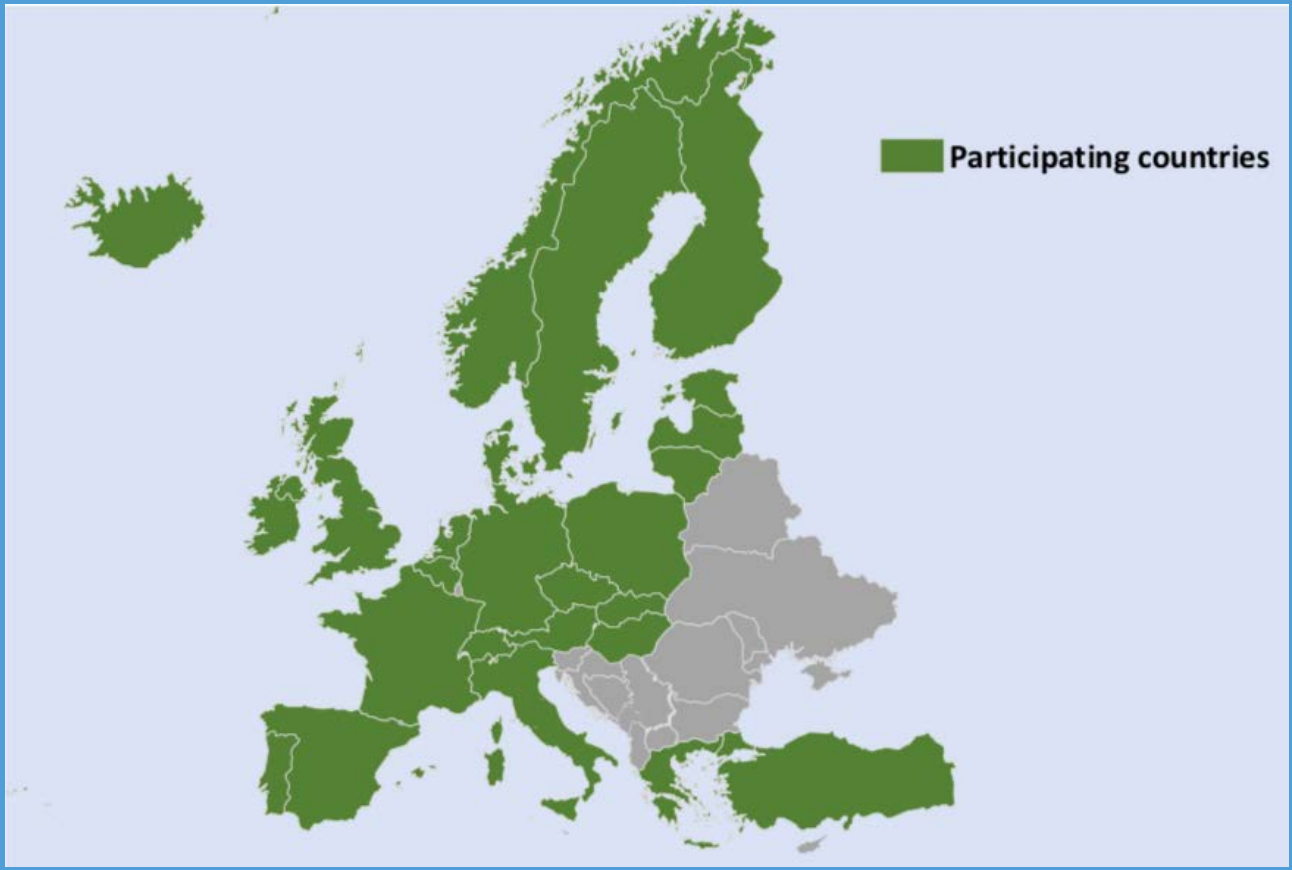
- Political agenda, policy processes and bio-physical processes not at the same pace
- Political agenda: SDGs achieved in 2030.
- BUT: after more than 5 years: limited implementation of SDGs at national, European and global level

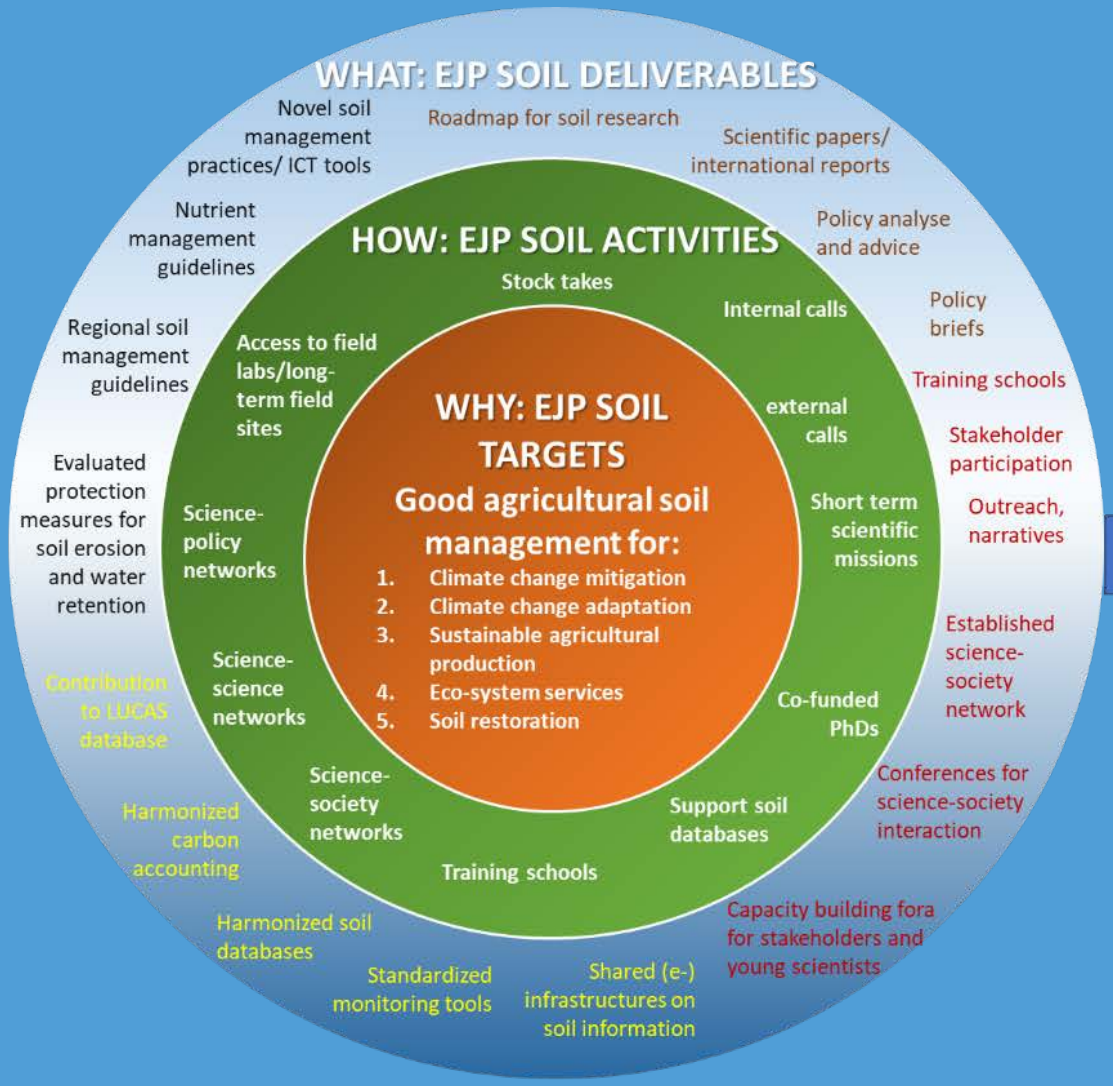
What do we need to solve this problem

- Create ambition to protect and restore the eco- and geosystem services the environment provides
- Develop **economic** measuring and modelling tools
- Create economical sustainable solutions based in science

EJP SOIL

80 million euro, 24 countries, 26 partners





IMPACTS of EJP SOIL

1. Understand soil management impacts on:
   - climate adaption and mitigation (soil carbon sequestration)
   - Sustainable agricultural production
   - Land and soil degradation
2. Understand how carbon sequestration contributes to regional CC mitigation
3. Establish soil networks and build capacity
4. Harmonize soil information and support international reporting
5. Foster adoption of sustainable soil management
6. Develop region and context-specific fertilization practices

HELPS TO IMPLEMENT & REALIZE

- CAP
- CLIMATE TARGETS
- SDGs (2, 13, 15)

Support farmers in their role as stewards of land and soil resources

WAGENINGEN UR
For quality of life

EU project: Providing support in relation to the implementation of soil and land-related Sustainable Development Goals at EU level

Our suggested methodology for

Action: follow a system approach

land MDPI

Article

Soil Related Sustainable Development Goals: four concepts to make Land Degradation Neutrality and Restoration work

Keesstra, S.D.[1,2], Mol., G.[1], de Leeuw, J.[3], Okx, J.[1], Molenaar, C.[4], de Cleen, M.[4], Visser, S.M.[1]

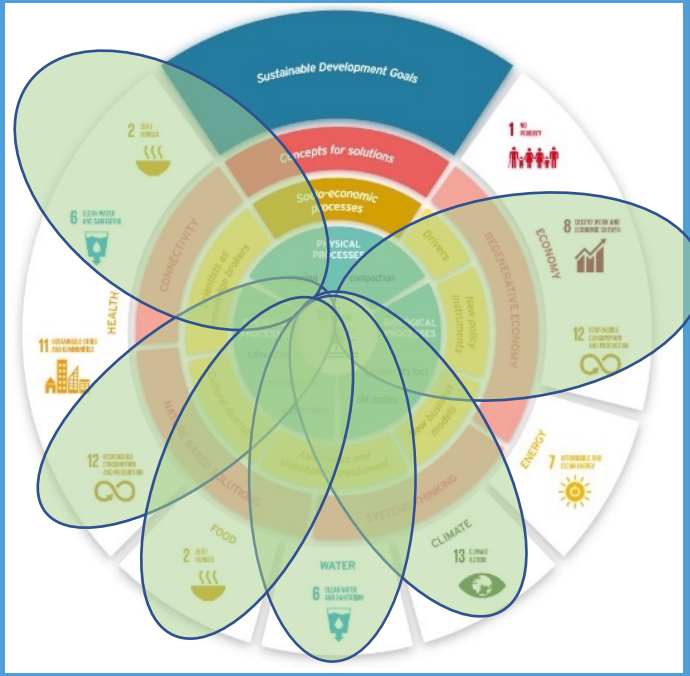
Insight 1 in SA: Economic and environmental sustainability is also possible without subsidy

Workshop and fieldvisit: December 3-5, 2
at the university of the Free State in
Bloemfontein, South Africa entitled “The
of soil C in **Conservation Agriculture** and
carbon sequestration in South Africa”

- SA no subsidy system like Europe.
- any change must be economically viable.
- **Good option: integrate livestock in farming systems:**
- reduce fertilizer input
- income through meat
- Trampling manure and crop residues increases soil carbon, soil health and biodiversity (soil and above)

WAGENINGEN UR
For quality of life

Ultra high density grazing



Scoring system

Health	Food	Water	Climate	Energy	Economy	Soil/land
2	2	6	13	7	1	15
6					8	
11					12	
12						

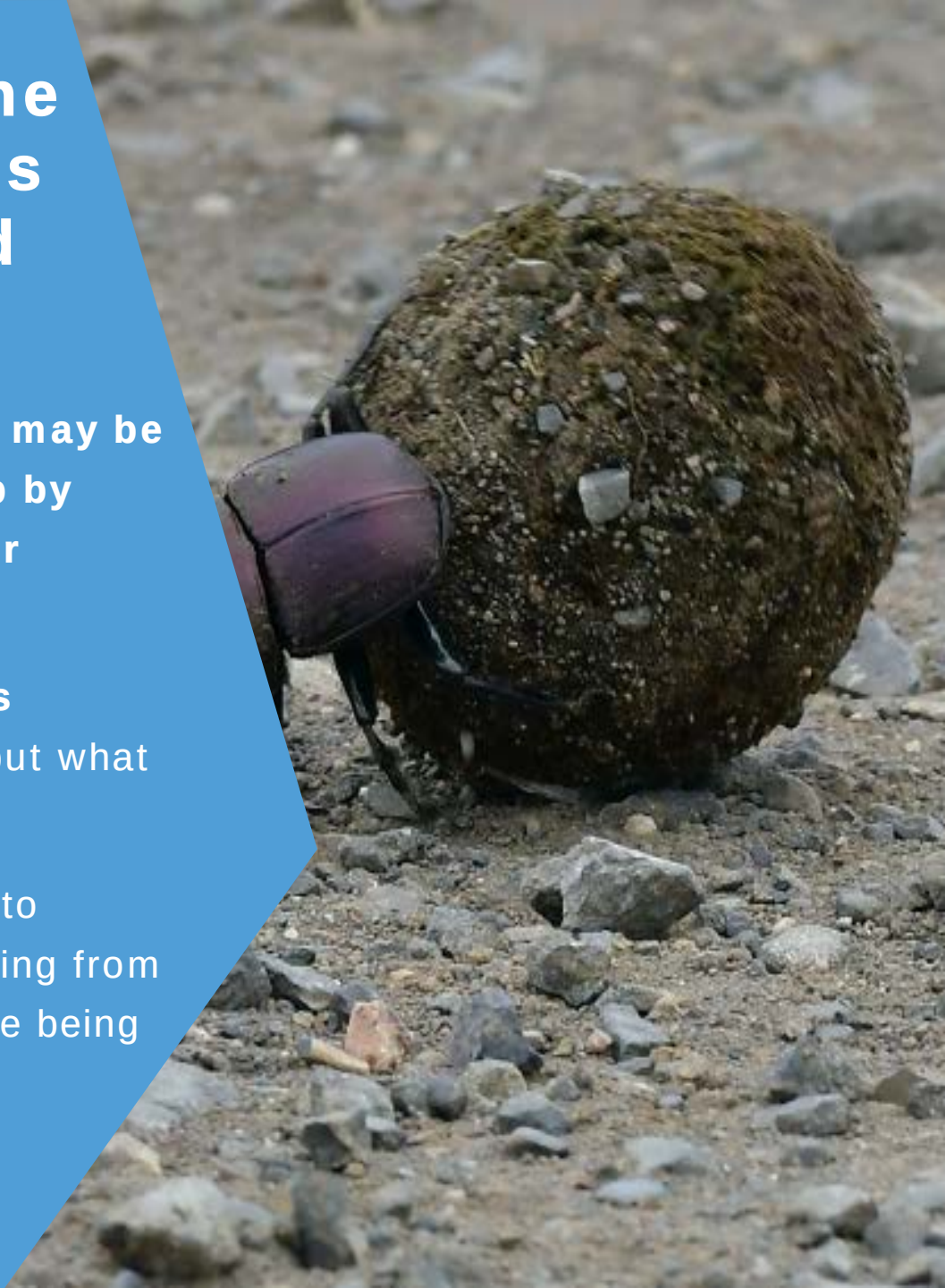
Insight 2 in SA: The transition towards sustainable farming can also be slow:

- **Every step into the direction of sustainability if a good one**
- The step from conventional farming to regenerative agriculture is a too big a step for most farmers.
- Therefore intermediate steps need to be promoted too.

WAGENINGEN UR
For quality of life

Vision and love for the land: a good farmer is a steward of the land

- **Most famers love their land but may be caught in a socio-economic trap by doing as their fathers or as their neighbors.**
- We ask them to serve **public goals** (climate change biodiversity etc), but what do they get in return?
- **Hands-on tools and knowledge** to enabling farmers to earn a good living from their land in a sustainable way while being respected in their community.



WAGENINGEN UR
For quality of life

To promote change we need:

We need to find solutions for every farm.

- Alternative strategies are:
  - holistic, local and custom made to move into the right direction
  - in reach of the farmers context.
  - Developed in collaboration with farmers
  - ensuring a **good livelihood** for the farmer.
- Narratives for trust and show regenerative agriculture is a reachable for all

WAGENINGEN UR
For quality of life

Thanks for your attention

- Questions?