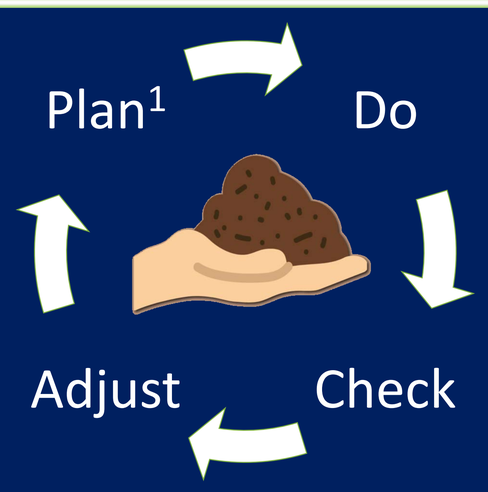
Label for Sustainable Soil Management

Nine Douwes Dekker, Margot Veenenbos, Wim Dijkman

1. Objectives

- Develop a tool that fosters and rewards farmers to apply measures for sustainable soil management
  - ➥ e.g. crop type, use of pesticides, crop rotation intensity, type of tillage, type of manure, machinery
- Provide tool to stakeholders, e.g. investment company (real estate), crop purchasing industry, water company, bank)

2. Methods: expert judgement



Translating research to practice; using expert judgement to decide

- The impact of measures
- The verifiability of measures in the field

[1]*Tague, Nancy R. (2005) [1995]. "Plan–Do–Study–Act cycle". The quality toolbox (2nd ed.). Milwaukee: ASQ Quality Press. pp. 390–39*

3. Results: soil management tool

1. The soil is covered for at least 80% of the year (using cover or permanent crops)

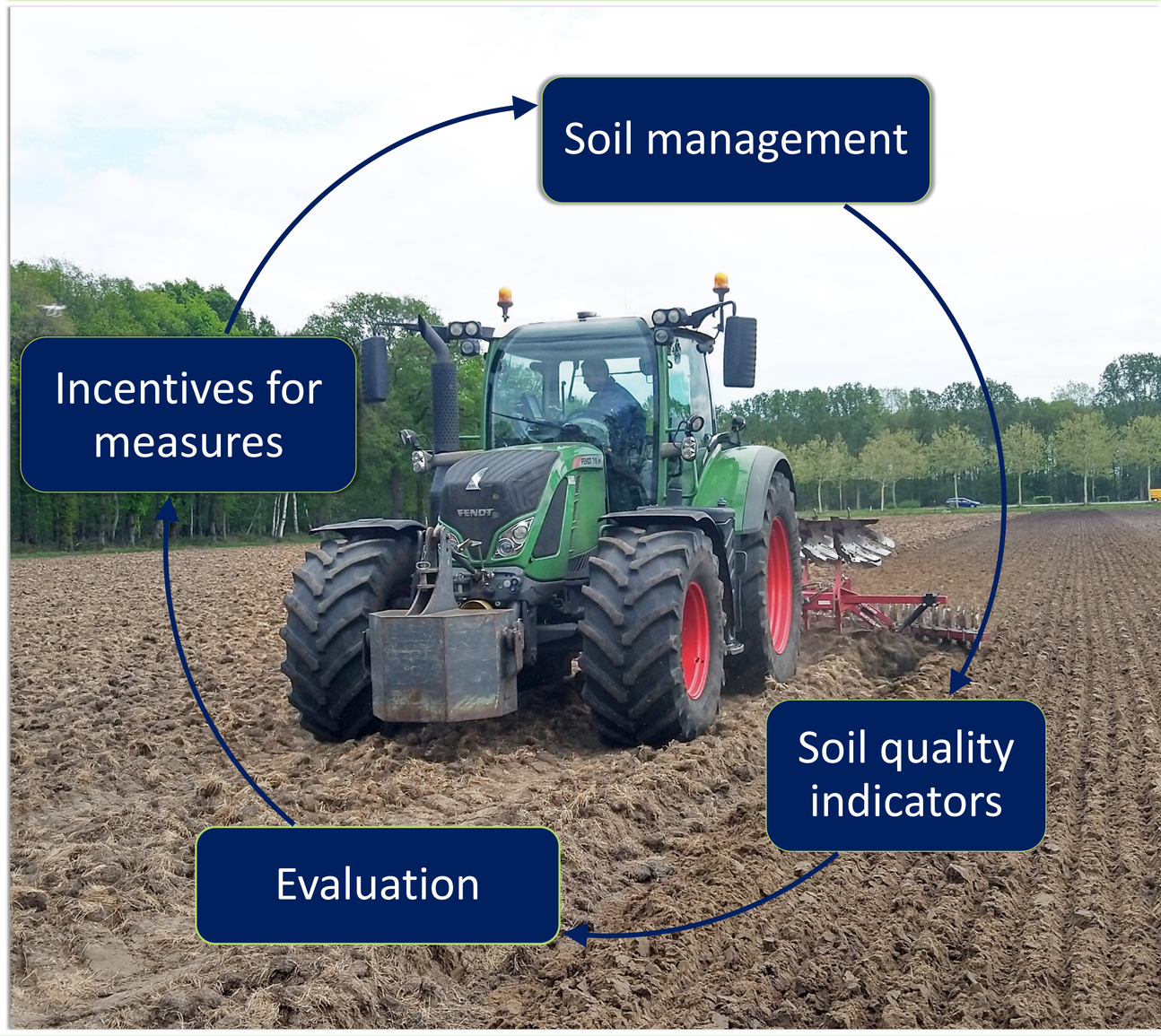
2. Crop rotation contains a maximum of 25% potatoes

3.a. Crop rotation contains interim summer crops (e.g. cereals, grass, Lucerne, clover); at least 40% of the crop rotation
3.b. 20% of the rotation contains deep root crops

4. Use of Integrated Pest Management (IPM) or alternative techniques for reduced use of pesticides

5. Growth of early season crop varieties, (e.g. for potatoes or sugar beets)

6. Net input of organic matter into the soil, e.g. through organic manure or compost application (on a farm level)



4. Conclusions

- Reward/value the farmer for his input (*measures*), rather than for the output (*indicators*)
- The “perfect” tool does not exist; ongoing validation is needed
- The weight of the individual measures is subjective to each stakeholder; how to cope?
- Sustainable soil management happens in the field!

CLM Research and Advice, The Netherlands
+ 31 655 696 320 | wdijkman@clm.nl