

Using COMET-Farm to Assess Soil Health

Simple tools to support soil and farm management decisions



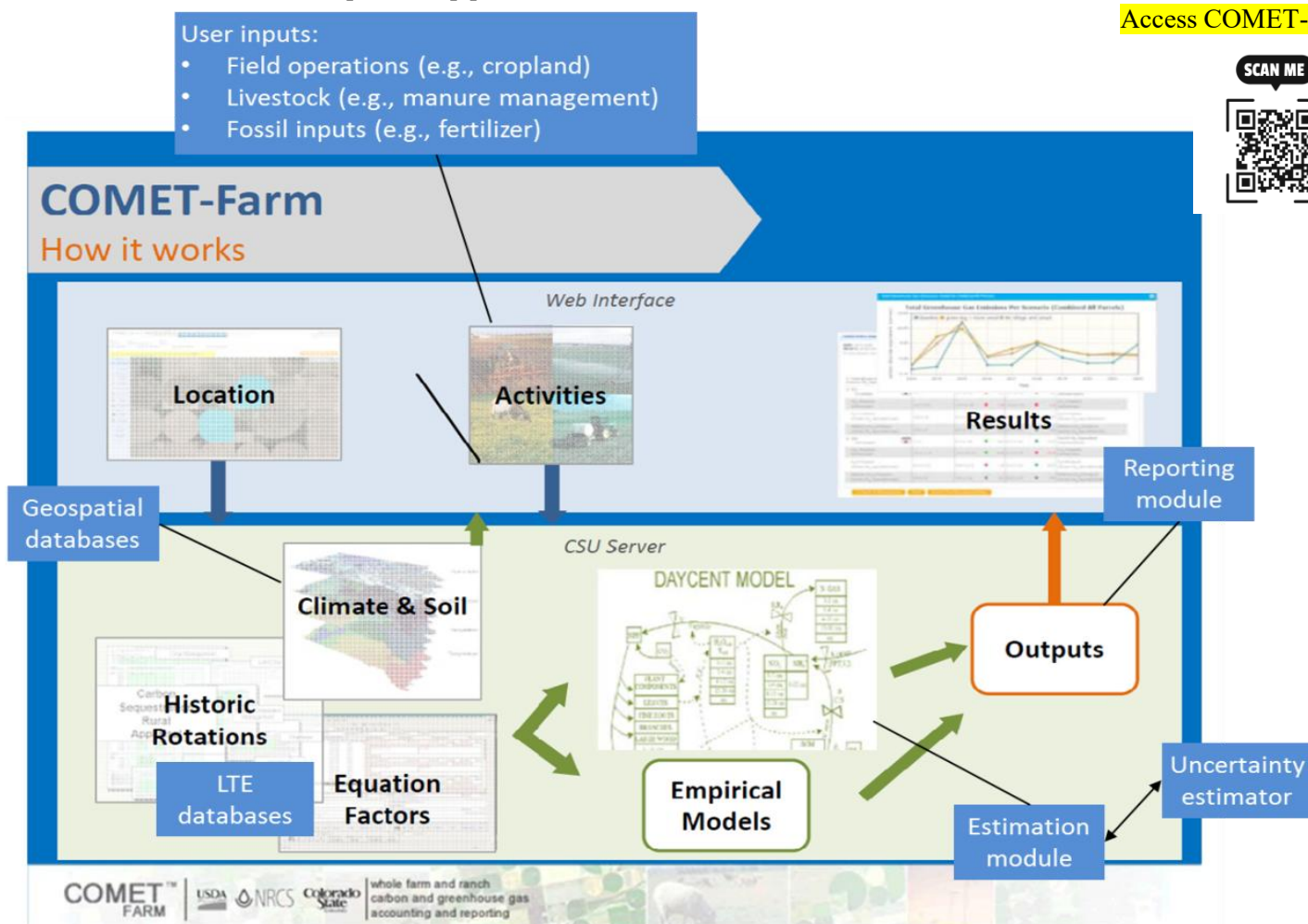
What is COMET-Farm?

COMET-Farm is a free USDA tool that estimates how farming practices affect soil carbon and greenhouse gas emissions. It helps farmers understand how management decisions influence soil health, resource use efficiency, and long-term system performance.

Why This Matters in Semi-Arid Regions

Water is the primary limiting factor in this region. Improving soil carbon can increase water retention, enhance soil structure, and improve crop performance under water-limited conditions.

Access COMET-Farm here



Practices that support Soil health and soil Carbon

- Cover crops
- Compost or manure
- Reduced tillage
- Crop rotation

Important to Know

- Soil carbon builds slowly over time
- Benefits may take time to become noticeable
- Crop yield still depends on water availability and nutrient supply

Acknowledgement



For more information:

Dotun Arije

Ph.D. Candidate, Department of Plant and Environmental Sciences
Email: arjedn@nmsu.edu

Dr. Rajan Ghimire

Associate Professor, Agricultural Science Center at Clovis
New Mexico State University
Email: rghimire@nmsu.edu