

Prioritizing responses to desertification

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USDA **ARS** Agricultural
Research
Service



Obstacles & constraints:

Potential solutions:

Insufficient resources to remediate all desertified lands in the United States

Prioritize remediation projects based on **assessment** of long- and short-term potential of the land.

Insufficient time to monitor project success or failure.

Simple monitoring tools.

Biologists
Soil Scientists



Universities

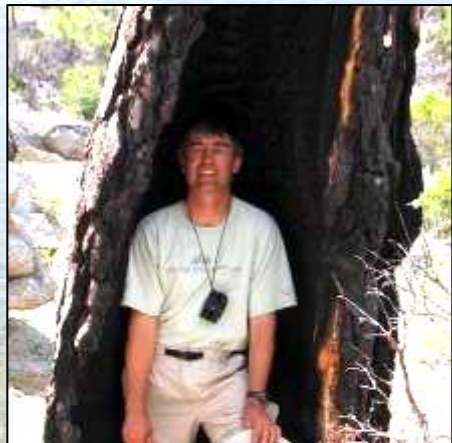


International
Cooperators

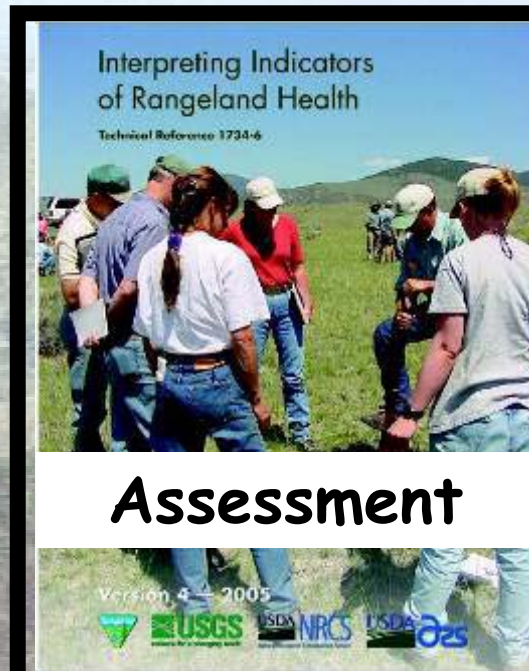
Government
Managers



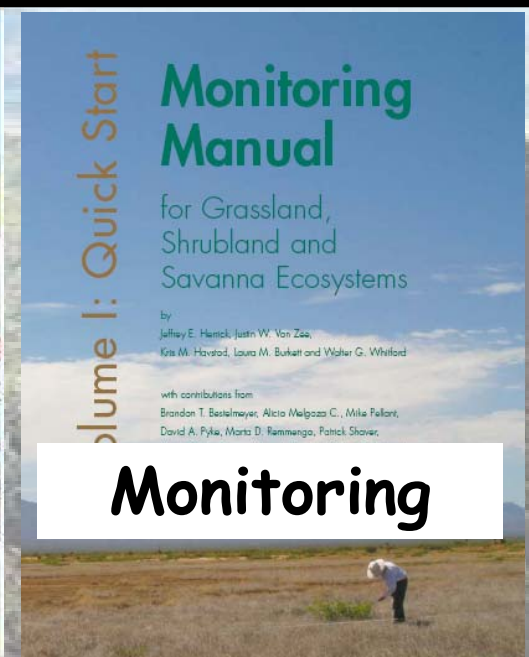
+ Advisors +
NGO's



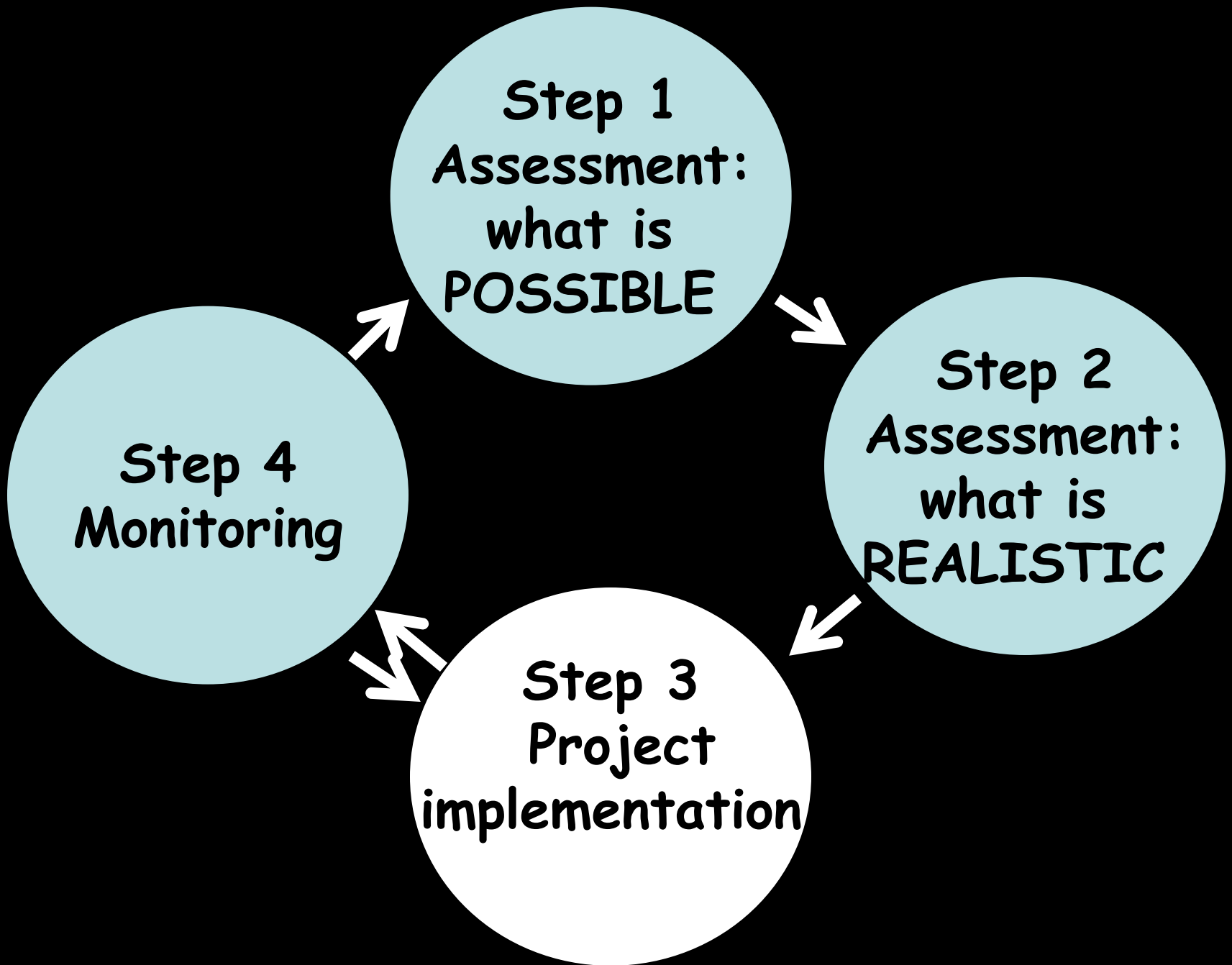
Environmentalists
& Ranchers



Assessment



Monitoring



*Step 1 - Determine what is POSSIBLE
(long-term potential) based on SOILS,
CLIMATE & LOCAL KNOWLEDGE*



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Shallow Soil = Low potential*

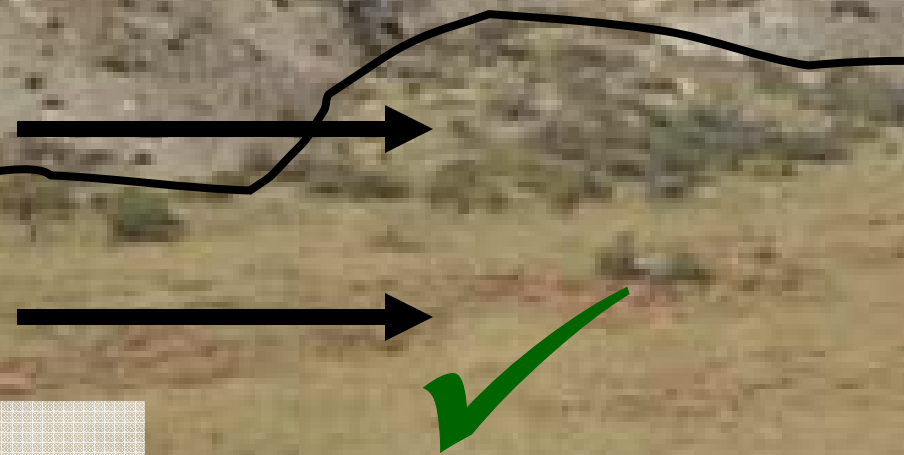
Deep Soil = High potential*

*Step 2 - Determine what is
REALISTIC (short-term potential)
based on SOILS and VEGETATION*

\$\$\$ + low potential

\$ + high potential

*Cost and potential
success of grassland
restoration based on
assessment of shrub
cover and soil condition*



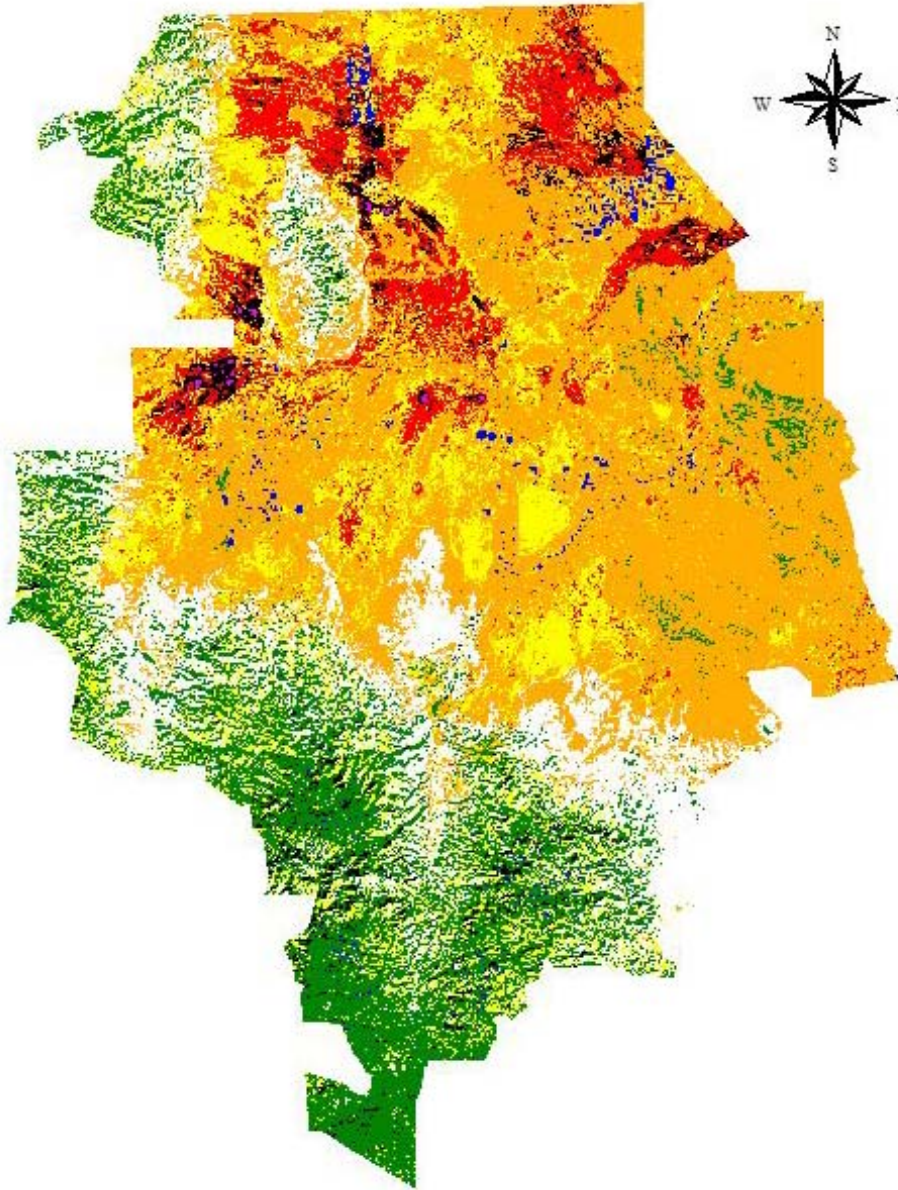
*Assessment of
grassland
restoration
potential based
on simple
VEGETATION
indicators*



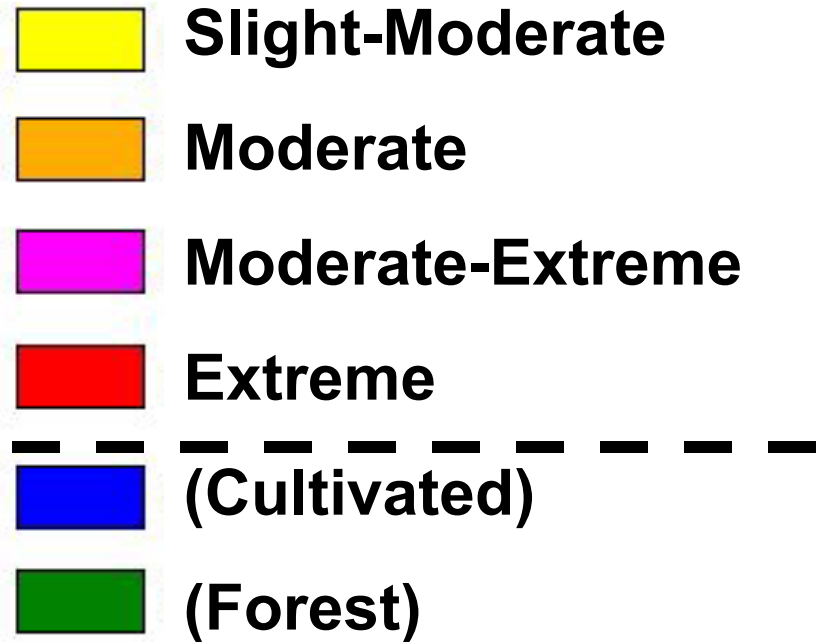
*Assessment of
grassland restoration
potential based on
simple SOIL
indicators*



Regional Rangeland Health Assessment



Degradation class



Step 3: Simple monitoring methods



Plant cover



**Plant spacing
(for wind erosion)**

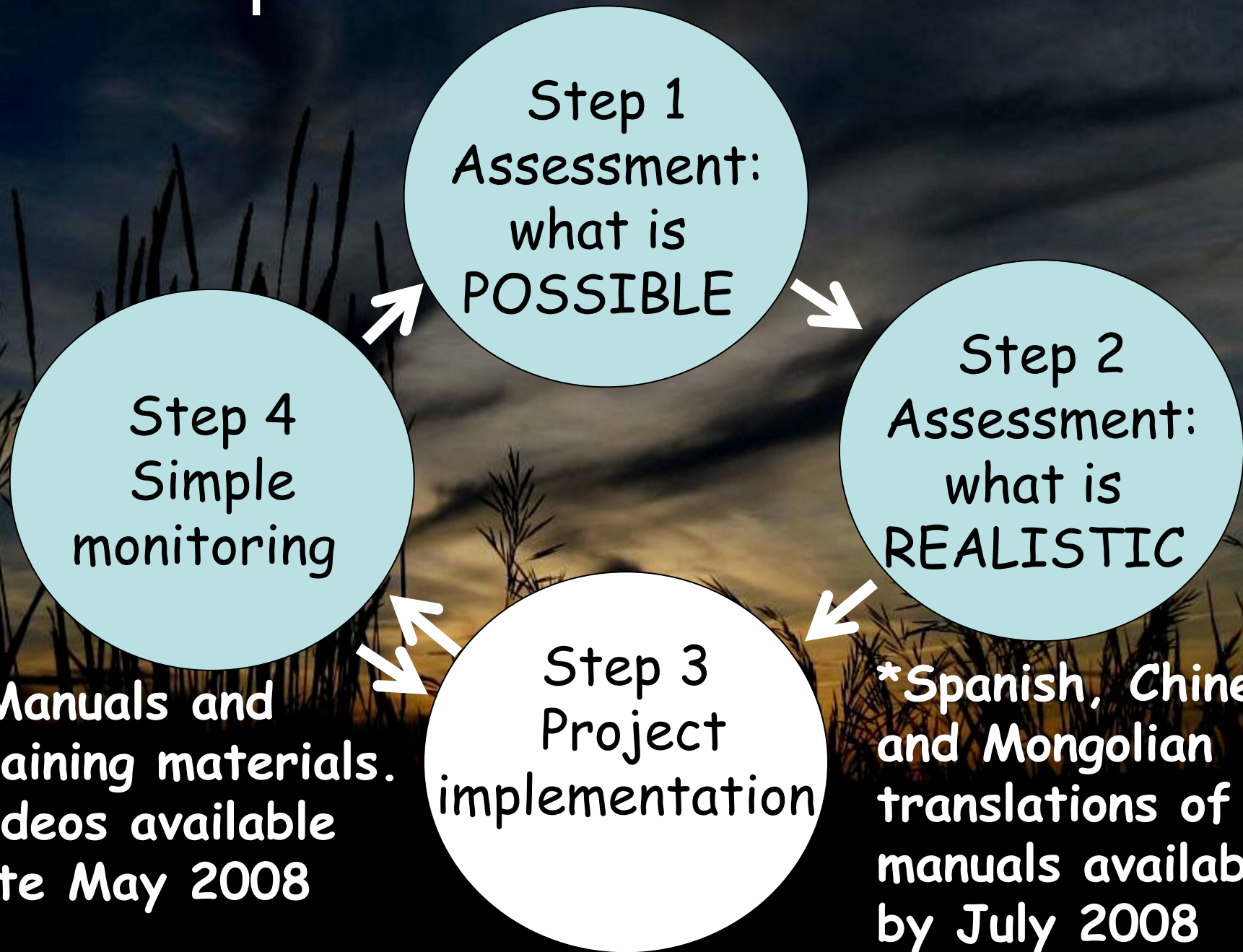


**Field test: soil
erosion risk**



**Early warning:
weed invasion**

<http://usda-ars.nmsu.edu>



*Manuals and training materials. Videos available late May 2008

*Spanish, Chinese and Mongolian translations of manuals available by July 2008