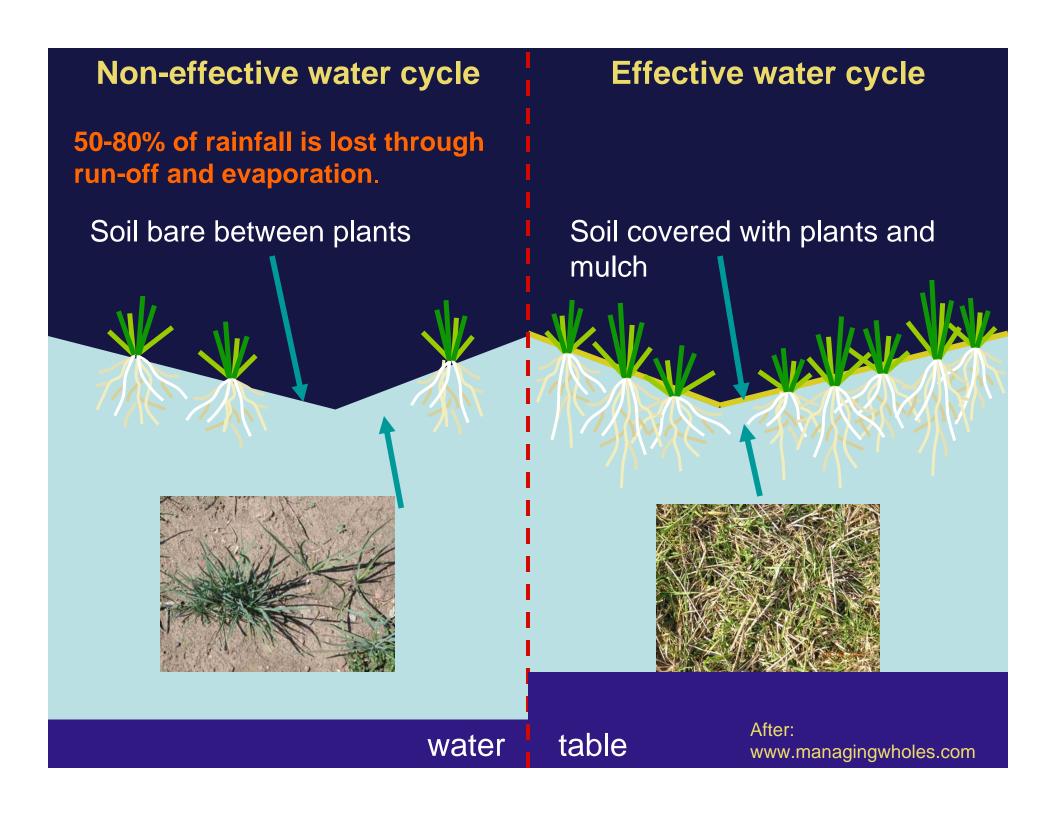
### **Drought: the other side of water** Seeking root causes and sustainable root solutions

**Constance L. Neely Heifer International** 



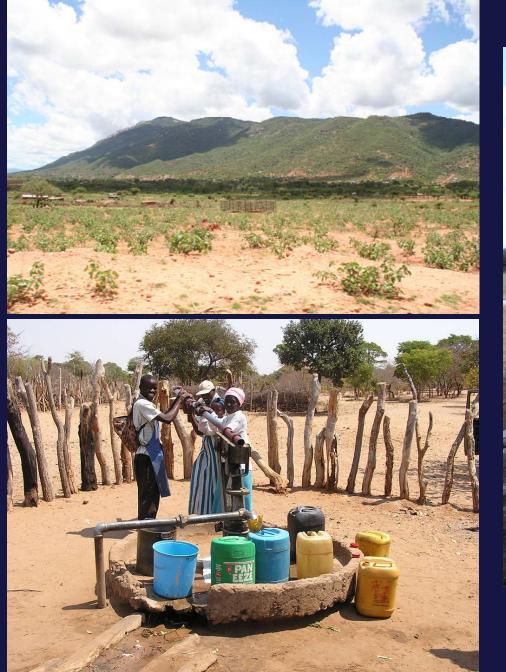
## **Understand 4 Ecosystem Functions**





## Soil Life and Land Health























Neely 2009

Photo credits: A. Savory



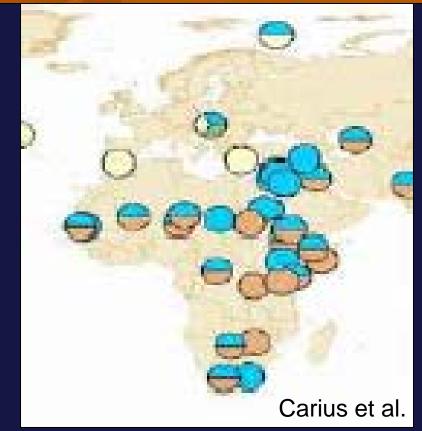
# **Sub-Saharan Africa**

- 70% of the population relies on dry and subhumid lands.
- Desertification affects 1/3 of the continent.
- 40% of the land is dedicated to pastoralism.

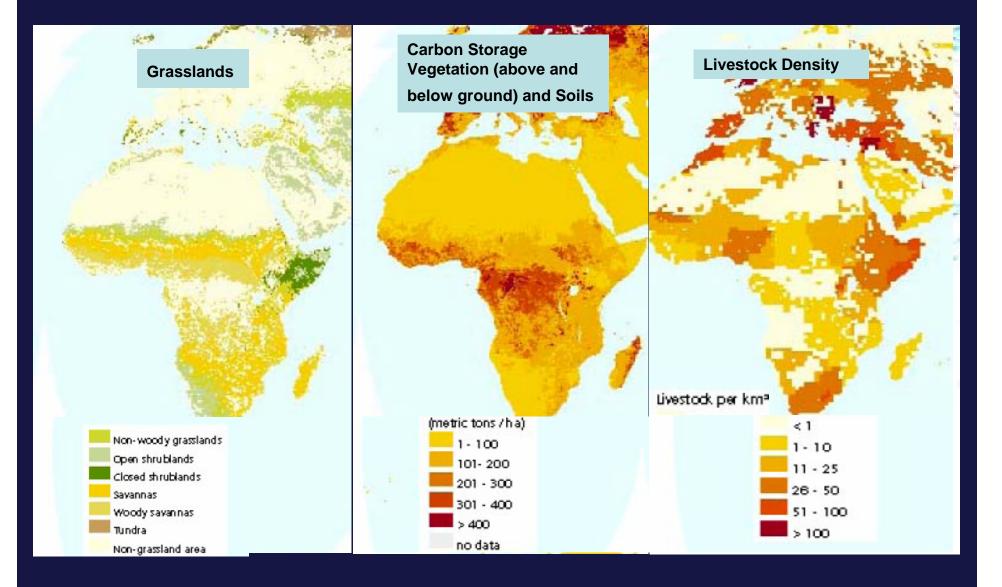


# Drought Risk Hotspots, Sub-Sahara Africa heinteraction t high overall significant or nerability and n dry periods, lrought risk. horased dyperiods Drought risk totspot (hazard + high vulnerability) Externe drought hezard Semicant drought hazard

#### **Environmental Conflicts**



### **Grasslands, Carbon, Livestock**



# Tools



## **Grazing and Animal Impact**



## **Regenerating Landscapes**





•Planned and controlled grazing

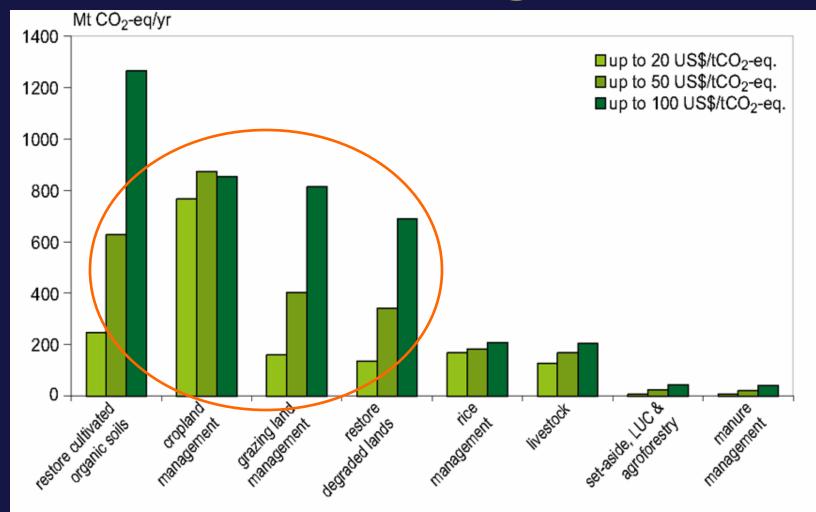
•Deep rooted diverse perennial species

•Full soil cover

•Prohibit burning

•Plan for drought in time and not space

## **Costs of Mitigation**



Potential at 3 different costs per unit CO2-eq



IPCC (4AR), 2007

## Recommendations

- Manage for effective water cycles and livelihoods. Drought prevention and climate adaptation are linked.
- Consider a campaign for agro-ecological approaches that results in diverse soil cover
- Uplift and recognize the role and practice of women and men farmers and pastoralists who directly manage our natural resource base and are constantly adapting to change (including drought cycle management practiced by indigenous peoples).
- Facilitate the exchange of know-how.
- Build out Communities of Practice for information exchange and capacity building for multi-stakeholder decision making.
- Ensure secure tenure and user rights.





#### I have seen both sides of water Mildred Mkandla

n my part of the world – Africa, have only in one side of water. The other side of water, the side with little water They can and must experience the other side of water too If we work hard enough to make sure it happens I have lived on both sides of water And I know what it is like on both"