Climate smart agriculture

anemerging African Vision

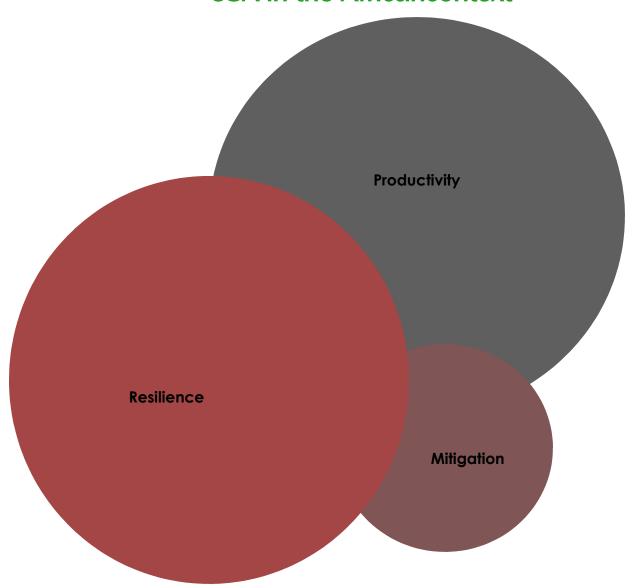
Dennis Garrity

DrylandsAmbassador, UNCCD

Senior Fellow, World Agroforestry Centre



CSA in the Africancontext







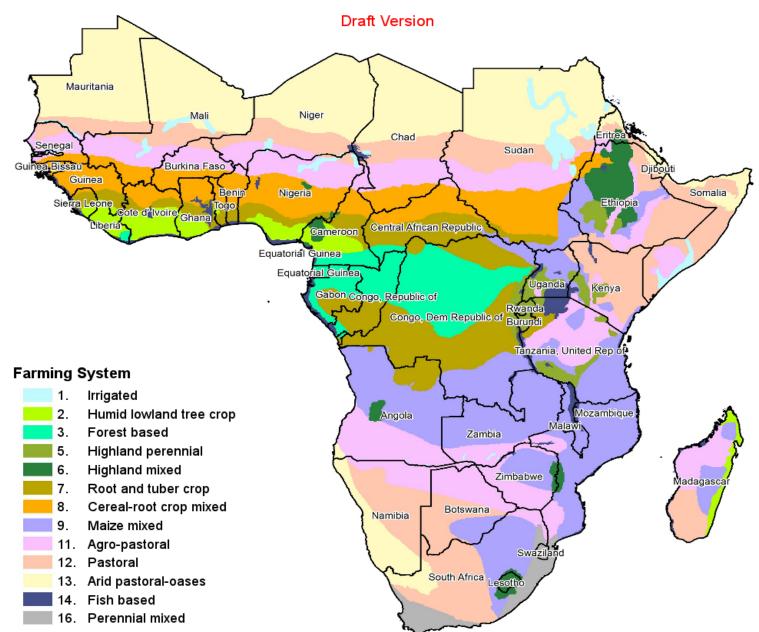








The farming systems of Africa



Maize-mixed: Aggregated Assessment

Africa: Maize-mixed

Aggregated Assessment

	Practices	Production	Resilience	Mitigation
Soil fertility	Nitrogen fertilizer (e.g. urea) ‡	+++	+/-	-
	Integrated nutrient mgmt. (e.g. banding, microdosing) ‡	++		-
	Reduced residue burning γ	++	+	++
	Reduced tillage / no-till γ	+	+	+
	Green manures (reduced fallow) y	+++	++	
	Fertilizer trees (e.g. Faidherbia albida) y	+++	+++	++
	Conservation agriculture (mulch, no-till, etc.) γ	++	++	++
	Conservation ag with fertilizer trees ‡	+++	++	+++
	Grain, livestock, and fertilizer tree integration‡	+++	++	++
Genetics	Improved crop variety (breeding, engineering) γ	++	++	+
Water use	Water pumps for imigation (petrol)‡	+++	++	-
	Irrigation techniques (amount, timing, technology) y	++	++	+/-
	Microcatchment (e.g. Zai pits, microbasins, terracing)‡	++	++	
	Rainwater catchment, storage, delivery (e.g. farm ponds) ‡	++	++	
Information Technology	Planting date recommendations y	++	++	
	Sentinel warming systems (drought, pests) y	+	++	





Maize farming in a *Faidherbia* agroforest in Mbarali District, Southern Highlands, Tanzania. 2008

Photo: Saldl Mkomwa





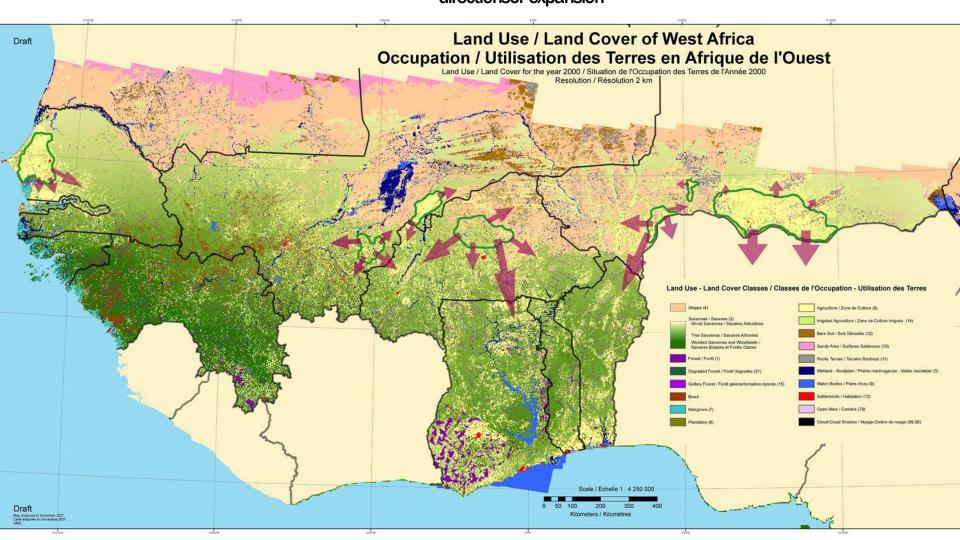
African farmers have shown us the way to successfully integrate trees into cropping systems:

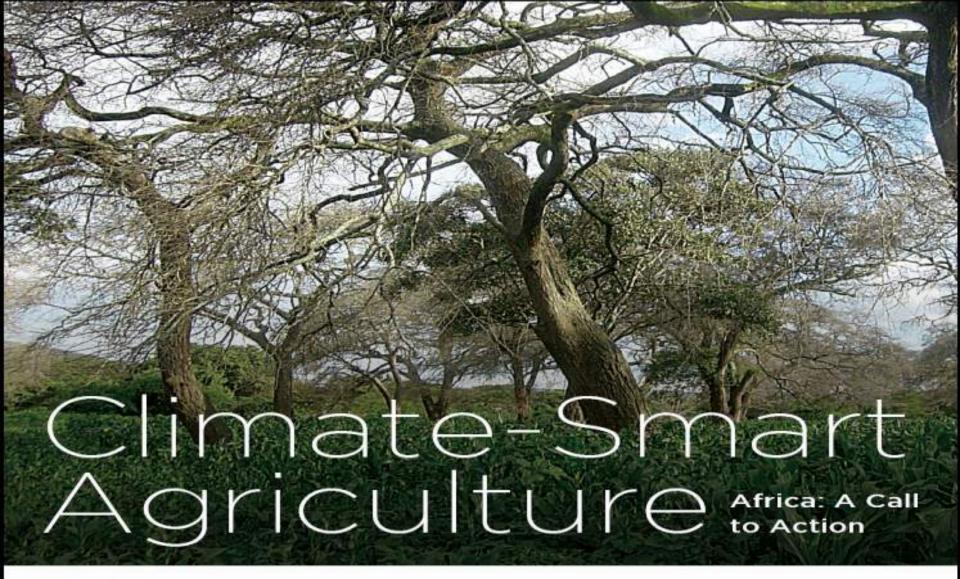


Five million hectares of croplands now dominated by fertilizer-fodder-fuewoodtrees in Niger

Major agroforestry regions in West Africa and

directions of expansion



























engaged in

EverGreen

Agriculture

in Africa

SENEGAL **MALI NIGER NIGERIA** BURKINA **FASO** GHANA

SOUTH ETHIOPIA SUDAN UGANDA KENYA

RWANDA KEN BURUNDI

TANZANIA

ZAMBIA

CHAD

MALAWI

ZIMBABWE

Farmer ManagedNatural Regeneration

Conservation Agriculturewith trees

Trees interplanted inconventional tilled cropland

Farmer ManagedNatural Regeneration +Trees interplanted inconventional tilled cropland

EverGreenAgriculture Partnership Farmers and farme groups International and Private Sector regional research Civil Society Donors The Partnership International and Youth and regional Education development Governments and Policy

Conclusions – Way Forward

- The approach of Ever Green Agriculture has taken root in Africa, and is spreading rapidly
- Millions of smallholders are adopting effective land regeneration methods
- Many nations are creating the policy and institutional environments to favor adoption
- * **USAIDcould be instrumental**in expanding the scope forEverGreenAgriculture in Africa
- **The African CSA Alliance**provides a great platform to reach 25 million farmers with CSA practices including Ever Green Agriculture during the coming decade.