



# Climate Change Mitigation – Unleashing the Potential of Agriculture

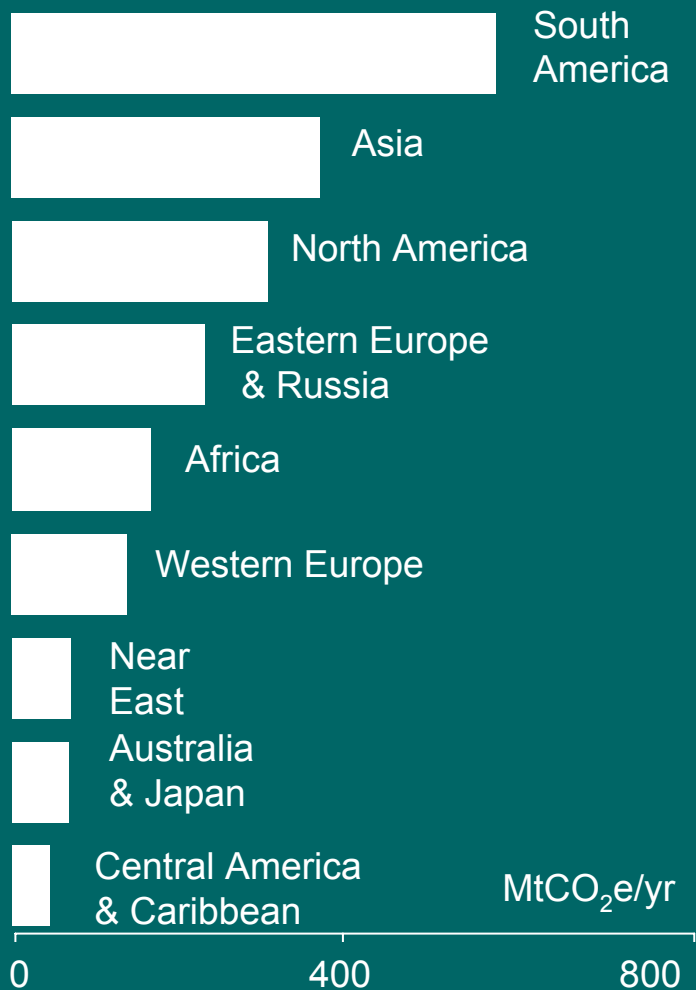
Alexander Müller  
Assistant Director-General  
Natural Resources Management and Environment  
Food and Agriculture Organization of the United Nations



# 1. Ultimate UNFCCC objective also depends on Agriculture



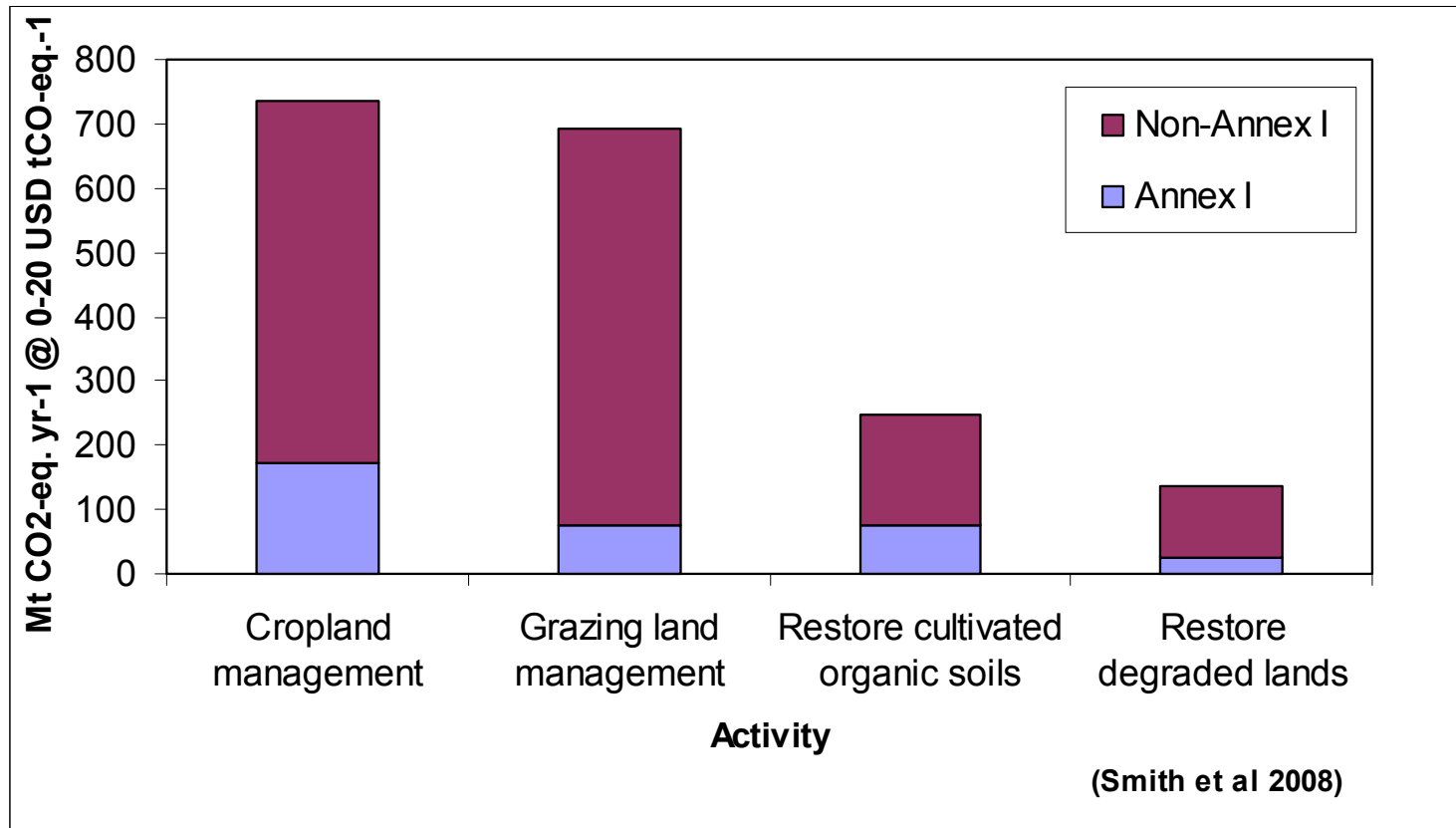
Technical mitigation potentials of agriculture by 2030 (data IPCC AR4, 2007)



- Agriculture is a major source of GHG emissions (14%), and growing
- 70% of technical mitigation potential from agriculture is in developing countries
- ~80% increase in agriculture required to meet multiple and increasing demands by 2050 (food, income, employment)
- Agricultural mitigation practices generate high co-benefits (food security, productivity, resilience, ecosystem services)
- High relevance for NAMAs and ultimate objective of the Convention



# Mitigation potential @ 0-20 USD/tCO<sub>2</sub> from agricultural practices with high co-benefits





## 2. We can act now



- **Effective methodologies for MRV exist; but we need more field experience**
  - Coordinated reference sites and models
  - Combining measurements from field surveys and remote sensing
- **Piloting accounting approaches for agriculture mitigation will reduce costs and risks**
  - Sector and practice-based default values for crediting mitigation from agriculture management changes
  - Use of “buffer credits” to manage permanence and leakage risk
- **A phased approach: moving forward in tandem with capacity building, technology development and financing**



## 3. Financing to fit Agriculture



**Current financing mechanisms do not capture agriculture mitigation potential and co-benefits**

**Key requirements for delivering finance to agriculture**

- (i) **Aggregation** capacity across large numbers of farmers
- (ii) **Flexible** and innovative payment schemes/institutions that address risk, investment and cash flow needs
- (iii) **Supportive/fair** policies and institutions; recognition of individual and community property rights
- (iv) **Simplified** rules and lower transaction costs to increase farmer participation

**Integrated approach to financial sources and mechanisms (existing/new, public/private, ODA/new and additional resources)**

- valuing mitigation/development/adaptation synergies
- financing capacity building, technology development/transfer



Photos: FAO Mediabase

## 4. Possible next steps



- A coordinated set of country level pilot activities to validate methodologies for agricultural mitigation and collect data
- Linking and leveraging financial resources for innovative payment/incentive schemes
- Make resources available to build capacity, develop and transfer technology for agricultural mitigation
- Transition to more comprehensive approaches for terrestrial carbon to capture synergies and avoid perverse outcomes



***The urgency of climate change and food insecurity  
requires action now  
to unleash synergies to meet these  
interdependent challenges***

***Copenhagen CAN open the door to  
agriculture***

See FAO submission at

***<http://unfccc.int/resource/docs/2008/smsn/igo/036.pdf>***