LOW EMISSION DEVELOPMENT & CLIMATE-SMART AGRICULTURE

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Siem Reap, Cambodia
December 5, 2016
OUTLINE

1. What are Low Emissions Development Strategies (LEDS)?
2. What is USDA doing related to LEDS?
3. Opportunities for future collaborations
LOW EMISSION DEVELOPMENT STRATEGIES (LEDS)

Key objectives:
- reduce greenhouse gas emissions
- increase resilience to climate change impacts
- achieve social, economic and environmental development goals

Platforms:
- LEDS Global Partnership
- Enhancing Capacity for LEDS (EC-LEDS) – USG interagency initiative

Synergistic to Climate-Smart Agriculture, with development goals more explicitly being spelled out in terms of agricultural productivity
USDA & LEDS

Leveraging technical expertise within the department and at US land-grant universities, such as:

- Agricultural statistics
- Agrometeorology
- Animal productivity modelling
- Climate and crop modelling
- CSA technology development
- Econometric modeling and cost-benefit analyses of practices
- Linking science with policy
- Monitoring and evaluation
- etc.
USDA & ECLEDS
2011-2018

- **Costa Rica** – Implementation of Livestock Nationally Appropriate Mitigation Action (NAMA)
  - USAID, Min. of Agr, Min. of Env, CATIE, Univ. Wisconsin, ICRAF

- **Mexico** – Agriculture GHG monitoring protocols from cereals, nitrous oxide emissions factors
  - Min. of Agr, CIMMYT, COLPOS, Michigan State University

- **Vietnam** – Improved water and fertilizer use in rice and feed and waste management in livestock
  - Min. of Agr, NAEC, UCDavis, Univ. of Arkansas

- **Kenya** – Protocols for quantifying emissions from CSA practices, scientific exchange programs
  - Min. of Agr, ICRAF, FAO, Cornell, Univ. of Florida
OPPORTUNITIES

- Expansion of USDA EC-LEDS work in Asia under exploration
- Strengthen links between REDD+ and LEDS across landscapes e.g. Agroforestry;
- Sharing lessons and tools with interested country counterparts
  - Leverage the LEDS-GP and EC-LEDS platforms
  - Link with the NDC Leadership Compact initiatives
- USDA works with other USAID missions on climate-smart agriculture outside explicit LEDS work
  - e.g. CSA program with FTF Tanzania - leveraging expertise towards government capacity building needs
THANKS

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SUPPLEMENTAL SLIDES
LEDS GLOBAL PARTNERSHIP

Building skills in low emission development and Nationally Determined Contributions (NDCs) implementation

- peer learning, technical assistance, knowledge resources, and early mover projects
- formation and implementation of LEDS
- 79 countries, 300 institutions
- 3 regional platforms, 6 technical working groups
- CSA -> AFOLU group, initiated at Asia LEDS 2013 mtg
ENHANCING CAPACITY FOR LOW EMISSION DEVELOPMENT STRATEGIES (EC-LEDs)

US Government interagency effort to assist countries developing and implementing LEDS

Works with partner countries on:

1. Targeted technical assistance
2. Building shared knowledge base on LEDS
EC-LEDS: WHERE & WHAT

Planning
- Supporting institutions
- Greenhouse gas (GHG) inventories
- Data and analysis

Action
- Clean energy
- Sustainable landscapes
Current: Managing beef and dairy cattle for productivity and low emissions

- Partners: Ministry of Agriculture and Rural Development (MARD), National Agriculture Extension Center (NAEC), UC Davis

- Output: Beef and dairy cattle Least Cost Ration Formulation Programs

- Training extension officers how to improve feed recommendations, based on locally available feed, to increase productivity and decrease emissions
USDA EC-LEDs VIETNAM

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Relationship between productivity and emissions intensity (kg fat and protein correct milk (FPCM) vs. kg CO2 equivalent/kg FPCM)

Increased productivity and decreased emissions intensity coupled for cows producing <2000kg FPCM/yr

Source: Gerber et al., 2011.
NEXT STEPS

• Scaling results through extension system
• Local case studies & recommendations
• Factsheets for farmers

Trainings:
2015 Taurus
2016 PCDairy

Software in English and Vietnamese
(&Spanish PCDairy)
ADDITIONAL CONTACTS

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