

Official UNFCCC COP18 Side Event

Lessons learnt from scaling-up actions on food security, adaptation and mitigation





Agricultural and food system successes in adaptation and mitigation – climate-smart agriculture

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Background

- UNFCCC process very slow we need action on agriculture on the ground now – What can be done at scale?
- Agriculture is the sector where adaptation and mitigation are intertwined
 - What are the CSA examples that demonstrate what can be achieved at scale?



Selected 14 cases

- Cases had to have some connection with climate change, i.e. covered one or more of following:
 - Climate risk management
 - Adapting to longer term change
 - Sequestering CO2
 - Reducing GHG emissions
- 10's of thousands of households or hectares
- National policy initiatives focused on climate



Category	Case studies
 Policies/national strategies – CSA major aim 	 Brazil: Low Carbon Agricultural Programme Australia: Carbon Farming Initiative Denmark: Agreement for Green Growth
2. Policies/national strategies – CSA side effects	 Niger: Community Action Plan Morocco: Plan Maroc Vert
3. Climate risk management	 India: Weather-based Crop Insurance Scheme India: Integrated Agrometeorological Advisory Services Ethiopia: Productive Safety Net Programme
4. Agricultural initiatives with strong link to climate change adaptation and mitigation	 Vietnam: System of Rice Intensification Niger: Farmer Managed Natural Regeneration Africa: Drought Tolerant Maize for Africa Kenya: Agricultural Carbon Project



Key lessons #1: Tradeoffs can be avoided

- In general, trade-offs were avoided e.g.-Niger higher tree biomass vs. higher crop yields
- Adaptation to current risks was ensured, e.g.-PSNP, protecting current assets



Key lessons #2: Need costeffective and comparable indices for measuring GHG fluxes and adaptive capacity

- Many assumptions made about GHG benefits and about improved adaptive capacity – few measurements
- GHG measurements in smallholder
 systems complex



Example for #2: SAMPLES aims to quantify greenhouse gas emissions and removals at field, whole-farm, and landscape scales

5year project involves field-testing the protocol -developing examples of pro-poor mitigation solutions in key agro-ecosystems in the developing world. -Work initiated in the crop-livestock systems of East Africa and irrigated rice cropping systems of Southeast Asia

Government of Canada/Department of Environment-supports work of the Global Research Alliance on Agricultural Greenhouse Gases



Key lessons #3: Strong government support is crucial

- Changes in legislation (Denmark, environmental policies to reduce N fertilizer application rates)
- Government-administered programs (LACP-Brazil, Morocco Green Plan)
- Provision of finance and incentives (PSNP, LACP, USD 1.5b & lines of credit for farmers)



Key lessons #4: Upfront costs may be substantial

• E.g. Brazil Fund: \$ 1.5 billion, Chinese program US\$ 28.8 billion over ten years

• e.g. Costs related to:

- Establishment of new institutions
- Provision of financial incentives
- Provision of social safety nets
- Subsidies to risk management
- National budgets crucial
- Donor agencies in many cases
- Private sector in a few cases: HT Canola
- Future: Green Climate Fund?



Key lessons #5: An iterative learning approach with investment in capacity strengthening is critical

- e.g. the second phase of Nigerien Community Action
 Plan built on lessons learnt in first phase
- 'innovation system' approach rather than a 'technology transfer' approach – i.e. Beneficiaries strongly involved in testing
 - e.g. Farmer field schools in Vietnam
- Invariable multi-partner initiatives
- Capacity strengthening crucial
 - e.g. training in Banks for the Brazil Fund



Example for #5: Capacity for sciencepolicy engagement that informs decision making across local, national and regional scales

CCAFS Regional Learning-Partnerships; Building capacity for evidence informed policymaking

Evidence Participatory filtering and setting of amplification Policymaking regional science through baseline Knowledge coprocess & research of institutional generation & informed across agenda focused shared learning expertise local, national & on 'future' covering regional levels agricultural southern & systems eastern Africa

Thank you

Australian Government

Department of Climate Change and Energy Efficiency

The Carbon Farming Initiative



www.climatechange.gov.au







Carbon Farming Initiative (CFI)

- Agriculture generates around 18 per cent of Australia's emissions (on average since 1990)
- Carbon Farming Initiative (CFI) legislated in mid 2011 to drive abatement through offsets in sectors not covered by the carbon price
 - Landholders can receive carbon credits for:
 - Reducing emissions
 - Increasing carbon stores
 - Kyoto and non-Kyoto compliant activities
- People and businesses can buy credits from landholders to offset their own emissions



Integrity Principles







CFI and carbon price mechanism

- Entities can meet carbon price obligations with Kyoto eligible CFI credits
- CFI carbon credits are called 'Australian Carbon Credit Units' (ACCUs) – each unit = 1 tonne of abatement
- Up to 5% fixed price period 2012/12 2015/16
 - 100% for landfill
- Uncapped in floating price period



CFI – Legislated scheme

- Independent Administrator established 02 April 2012
- Monitoring, reporting and verification
 - Project crediting ad post
 - Administrator can compel audits
- Measures to prevent fraud
- Compliance penalties



Offset Methodologies

- Developed by government and non-government
- Assessed by Domestic Offsets Integrity Committee (DOIC)
 - Independent experts
 - Public consultation
 - Makes recommendations to Minister
- Approved by Minister
- Legislative instruments



Avoiding adverse impacts

'Negative' list

- Projects that risk significant adverse impacts for water, biodiversity, land access for agricultural production, local communities or employment.
- Must meet environment, planning and water requirements
- Consider regional NRM plans
- Co-benefit index biodiversity, indigenous communities



Additionality

'Positive' list

- Activities that meet the objectives of the CFI and go beyond common business practice.
- Identified through stakeholder consultation, surveys.
- Minister approves activities considering the advice from the DOIC
- No crediting of projects that are required by regulation
- Methodologies must address a positive list activity
- Currently 15 positive list activities



Permanence obligations

- Maintain carbon or hand back credits for 100 years
 - For biosequestration projects only.
- Permanence requirement 'runs with the land'
- Re-establish carbon after a fire or drought.
- Risk of reversal buffer
 - temporary losses whilst carbon is re-established
 - wrong doing that can't be remedied.
- Carbon maintenance obligation



Examples of Eligible Activities

- Reforestation
- Revegetation
- Native forest protection
- Managed regrowth forests
- Rangelands restoration
- Savanna fire management

atraction

LANDFILL

Landfill gas flaring

roundwate

Soil carbon

- Fertiliser management
- Manure management

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Reduced enteric fermentation

Links to Australia's national accounts

- Measurement and estimation must be consistent with national accounts
 - UNFCCC reporting guidelines
 - IPCC Good Practice guidance
- Verified site specific data will feed into national accounts as part of continuous improvement
- Step-wise process for new estimation approaches
- CFI abatement subject to UNFCCC ERT



Questions?





A Case Study of

Good Practice in Climate Services from India

Kalpana Venkatasubramanian

COP 18, Doha

29 November 2012



Background: History of India AAS

- NCMRWF bulletins to farmers in 127 agroclimatic zones, through Agrometeorological Field Units (AMFU) in SAUs, their research stations, ICAR institutes
- 2008 District level advisories initiated
- 2011 Experimental block level forecasts
- 2012 Plans to scale up from 3 to 10 million farmers





Background: Communication Channels





Findings



State-wise gender disaggregated AAS awareness amongst Farmers (in %)



% Women Awareness

% Male Awareness

Findings



Clear distinction between farmers knowing about AAS and being able to use it for their purposes

State-wise AAS awareness and use amongst farmers (in %)







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Back

Farmer in a village in Tamil Nadu displaying the SMS he received with agro advisories for the week



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AAS Bulletin outside milk collection station in a village in Andhra Pradesh. AAS **Bulletins in** vernacular are put up in 5 commonly visited places in the village

Our heartfelt thanks to those who made this research possible



- ICRISAT staff at Patencheru, Andhra Pradesh
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