

Climate Smart Agriculture : way forward for Food Security in a changing climate

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Side event to UNFCCC Bonn June 10th 2011



Food and Agriculture Organization of the United Nations



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A triple Challenge

- More food, in quantity, quality and diversity, everywhere for everyone
- Adapt to Climate Change
- Contribute to mitigate Climate Change



Two ways to adapt

- Getting more resilient to variability
- Getting prepared to long term changes



Two ways to mitigate

- Reduce emissions per kg of output (decorrelate production growth and emissions growth)
- Enhance agricultural soil carbons sinks



Efficiency

**Efficient & resilient
Food Systems**

Resilience



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Rain water harvesting



Zai pits



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Nutrient management

Bangladesh



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Conservation Agriculture



Ghana



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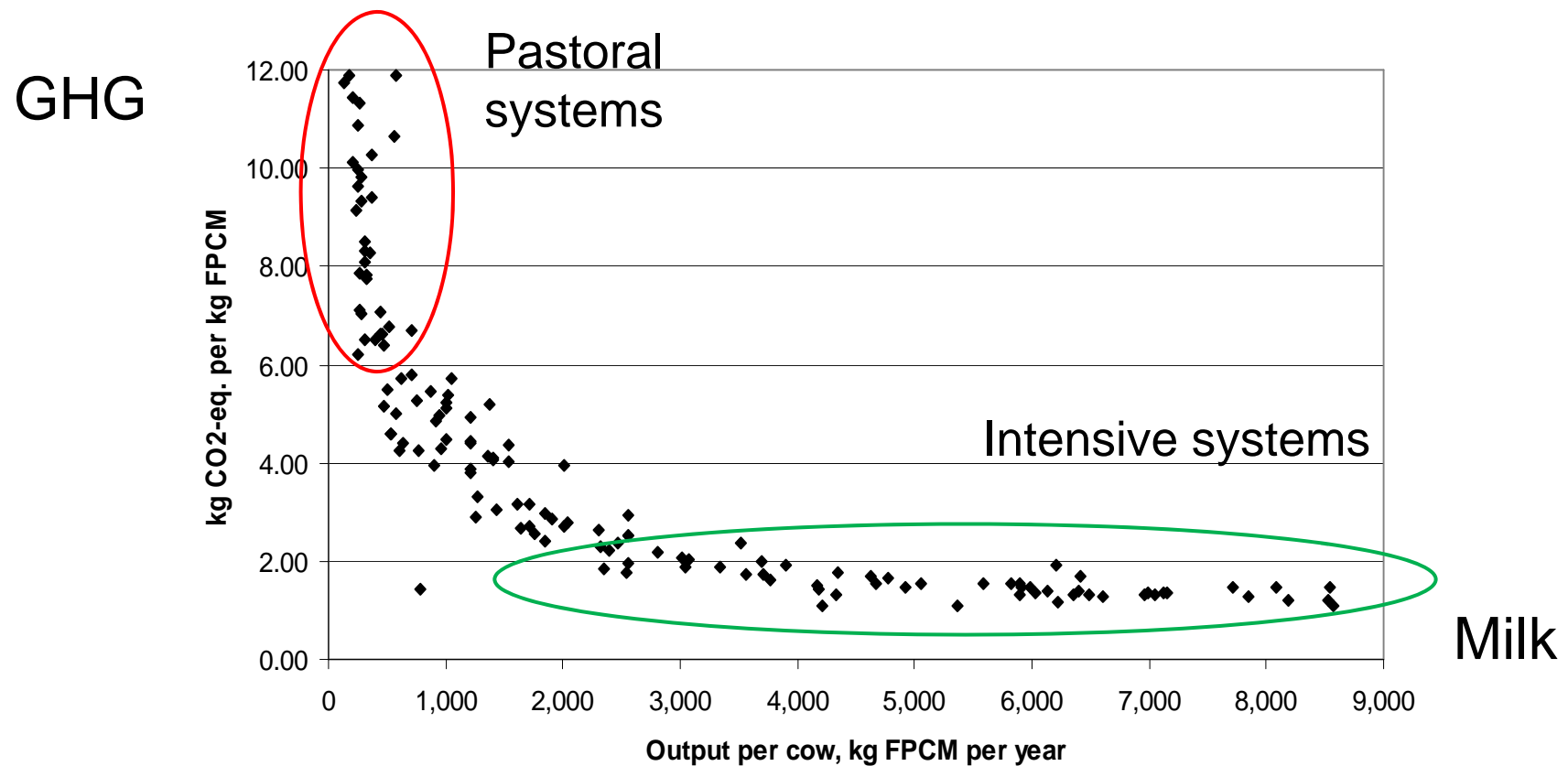
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Genetic resources

Lima: International Potato Center



Relationship between greenhouse gas emissions and output per cow



Biodigestors



Cambodia



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Resilience in livestock systems



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Crop-Livestock Systems



Learning from Shinyanga,
Tanzania: Restoring 500,000
ha of degraded grasslands

to higher productivity by adapting traditional
Ngitili agro-pastoral management



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Grassland & rangeland management



Tunisia



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Agroforestry



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Reduce food losses

Metallic silos in
Afghanistan

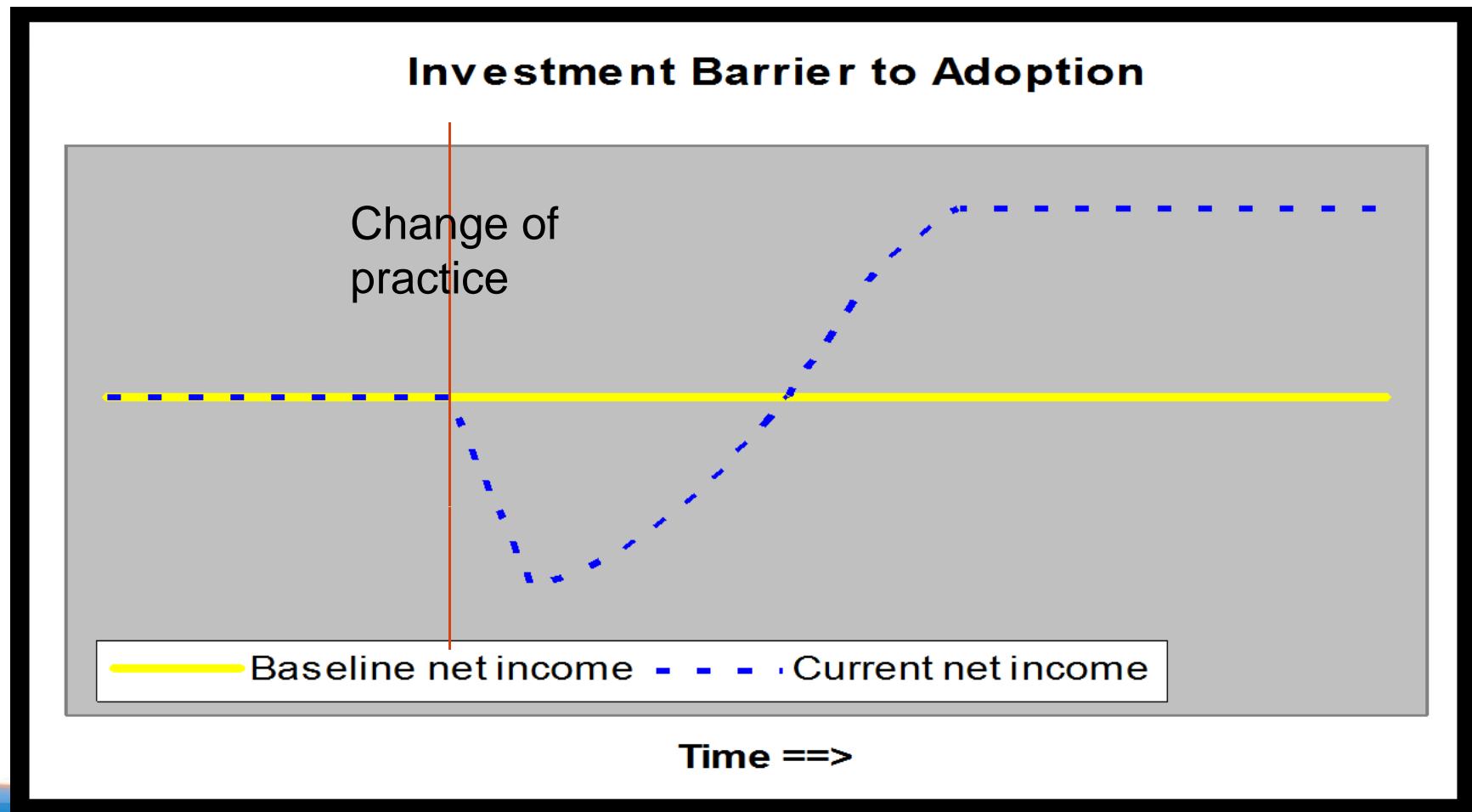


Manage risks

- monitoring
- vulnerability assessment
- identification of (ex-ante) damage reduction measures
- early action
- Reparation of losses to productive assets



Enabling farmers to change



Main points

- Food Security
- Importance of adaptation of agriculture
- Necessary increase of production to be taken into account in NAMAs
- NAMAs to include carbon sinks (Ag)
- Specificity of agriculture, small holders, to be taken into account in financial mechanism



FAO's submissions

- Towards a Work program on Agriculture, a submission to the AWG-LCA by the Food and Agriculture Organization of the United Nations(submitted 14 May 2010)
<http://unfccc.int/resource/docs/2010/smsn/igo/081.pdf>
- A submission to UNFCCC Secretariat on approaches to address losses and damages in agriculture, forestry and fisheries in answer to the invitation of article 28 of Decision FCCC/AWGLCA/2010/L.7 (submitted 21 February 2011)
<http://unfccc.int/resource/docs/2011/smsn/igo/105.pdf>
- A submission to UNFCCC Secretariat on NAMAs in answer to the invitation of article 82 of Decision FCCC/AWGLCA/2010/L.7 (submitted 21 February 2011)
<http://unfccc.int/resource/docs/2011/smsn/igo/096.pdf>
- A submission to UNFCCC Secretariat on non market based mechanisms to enhance mitigation actions (submitted 21 February 2011)
<http://unfccc.int/resource/docs/2011/smsn/igo/097.pdf>
- Climate Change and Food Security in the Context of the Cancun Agreements (submitted 23 March 2011)
<http://unfccc.int/resource/docs/2011/smsn/igo/121.pdf>



Link Food Security & Climate Change in international Fora

- CFS has requested a study to HLPE on Food Security & Climate Change
- Climate negotiations have to include Food Security concerns

