

## Highlights of the month



**RED-PD093/12Rev.3(F)**

ADVANCING REDD+ IN GHANA: PREPARATION OF REDD+ PILOT SCHEMES IN OFF-

Approval Level: Project Manager

Title: ADVANCING REDD+ IN GHANA: PREPARATION OF REDD+ PILOT SCHEMES IN OFF-RESERVE FORESTS AND AGRO-FORESTS

Serial Number: 11

Host Government: GH

Executing Agency: GHANAIAN NATIONAL REDD+ SECRETARIAT

Starting date of the project: 29/03/2013

Project Duration: 12

## Highlights of the month

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Version:11.0

Date:04/02/2014

Approval Level: Project Manager

Executing Agency's full name:

GHANAIAN NATIONAL REDD+ SECRETARIAT

Executing Agency's address:

C/O FORESTRY COMMISSION OF GHANA  
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Information on Collaborating Agency(ies):

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LAENGGASE 85, CH-3052 ZOLLIKOFEN,  
SWITZERLAND

Technical Staff / Scientific Staff:



# INTERNATIONAL TROPICAL TIMBER ORGANIZATION

RED-PD093/12Rev.3(F)

ADVANCING REDD+ IN GHANA: PREPARATION OF REDD+ PILOT SCHEMES IN OFF-

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## Highlights of the month

Version:11.0

Date:04/02/2014

Approval Level: Project Manager

### Commencement and/or Completion of major activities:

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Activity 3.1 Capacity building for community groups about the potential of forest/tree protection has been carried out.

Planning and preparation for the following activities have also started:

- (a) Activity 3.2 Workshops for the sharing of results and conclusions of analytical studies, and
- (b) Activity 3.3 Publication of studies results and dissemination through ITTO.

### Summarize major progress and achievements:

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The draft report for activity 3.1 (capacity building workshop) is prepared and attached.

The aim of the capacity building exercise was to enhance knowledge among various stakeholder groups, especially local communities, so that they are equipped to actively participate in the developments and policy building regarding climate change. The training was conducted at the three project sites at Breman Asikuma, Enchi, and Kintampo. At each site, participants were invited from different communities to attend the day's training workshop. Ninety four (94) participants from ten (10) communities in the three project sites participated in the training programme. The participants were mainly farmers, community opinion leaders, as well as staff of Ministry of Food and Agriculture, Forest Services Division of the Forestry Commission, COCOBOD, and produce buying companies. Scientists from CSIR-FORIG conducted the training using different training methods and techniques, including interactive presentations with illustrations; discussions; brainstorming; and question and answers. Training handouts and other relevant literature were presented to the participants as reference materials. The draft workshop report is attached as Annex E of this report.

Under output 2, the draft reports for activities 2.1 and 2.3 have been reviewed and the final reports are under preparation for validation as Technical reports.

### List of products/outputs (reports, publications, maps, guidelines etc.):

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Draft Report (2014). Capacity building for community groups about the potential of forest/tree protection. Draft Training Workshop Report. Unpublished. 10pp.

### Difficulties/obstacles encountered:

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Difficulties/obstacles encountered:

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Nothing to report

Follow-up on PSC/PTC recommendations, ITTO monitoring visits:

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Nothing to report

## PROJECT FINANCIAL STATEMENT

Project		RED-PD 093/12			Period ending o		
Project	ADVANCING REDD+ IN GHANA: PREPARATION OF						
	Component	Original Amount (A)	Modified Approved Amount (A)	Expenditures To-date			Available Funds (E)
				Accrued (B) a/	Expended (C)	Total (D) { B + C }	{ A - D }
<b>I.</b>	<b>Funds</b>						
10.	Project					\$0.00	\$0.00
	11. National Experts (long term)	\$13,800.00			\$11,500.00	\$11,500.00	\$2,300.00
	11.1 Project Coordinator	\$1,800.00			\$1,500.00	\$1,500.00	\$300.00
	12.1 5 National Researchers/Experts	\$6,000.00			\$5,000.00	\$5,000.00	\$1,000.00
	13.1 6 Research Assistants	\$5,400.00			\$4,500.00	\$4,500.00	\$900.00
	14.1 Administrative staff	\$600.00			\$500.00	\$500.00	\$100.00
	19. Component Total:	\$13,800.00			\$11,500.00	\$11,500.00	\$2,300.00
40.	Capita	\$5,000.00			\$5,000.00	\$5,000.00	\$0.00
	41. Premises (Contribution to secretariat in Forig and the FC, Ghana)	\$5,000.00			\$5,000.00	\$5,000.00	\$0.00



## PROJECT CASH FLOW STATEMENT

Project		RED-PD 093/12 Rev.3 (F)	Period ending or			
Project		ADVANCING REDD+ IN GHANA: PREPARATION OF REDD+				
		Component	Reference	Date	Amount	
					in US\$	Local Currency Gh¢
<b>A.</b>	<b>Funds</b>					
	1.	First instalment		April '13	\$17,500.00	33,687.50
	2.	Second Instalment		June'13	\$17,500.00	35,857.50
	3.	Third instalment		November '13	\$17,500.00	34,982.50
	4.	Fourth instalment		January '14	\$17,249.00	38,465.27
		ETC.				
		<b>Total Funds Received:</b>			<b>\$69,749.00</b>	<b>142,992.77</b>
<b>B.</b>	<b>Expenc</b>					
10.	Project	National Experts (long term)			<b>\$11,500.00</b>	<b>23,001.15</b>
		11.1 Project Coordinator			\$1,500.00	3,000.15
		12.1 5 National Researchers/Experts			\$5,000.00	10,000.50
		13.1 6 Research Assistants			\$4,500.00	9,000.45
		14.1 Administrative staff			\$500.00	1,000.05
	19.	<b>Component Total:</b>			<b>\$11,500.00</b>	<b>23,001.15</b>
40.	Capital				<b>\$5,000.00</b>	<b>9,787.50</b>
	41.	Premises (Contribution to secretariat in Forig and the FC, Ghana)			\$5,000.00	9,787.50
	49.	<b>Component Total:</b>			<b>\$5,000.00</b>	<b>9,787.50</b>
50.	Consur				<b>\$2,000.00</b>	<b>3,850.00</b>

	51.	Office supplies, utilities and other supplies			\$2,000.00	3,850.00
	59.	Component Total:			<b>\$2,000.00</b>	<b>3,850.00</b>
60.	Miscell				<b>\$0.00</b>	<b>0.00</b>
	61.	Steering committee meeting				
	69.	Component Total:			<b>\$0.00</b>	<b>0.00</b>
70.	Execut				<b>\$36,624.20</b>	<b>73,252.06</b>
	71.	Executing Agency Management Costs			\$36,624.20	73,252.06
	79.	Component Total:			<b>\$36,624.20</b>	<b>73,252.06</b>
		Total Expenditures To-date:			<b>\$55,124.20</b>	<b>109,890.71</b>
		Remaining Balance of Funds (A-B):			<b>\$14,624.80</b>	<b>33,102.06</b>



## PROJECT FINANCIAL STATEMENT

Project		RED-PD 093/12			Period ending o		
Project	ADVANCING REDD+ IN GHANA: PREPARAT						
	Component	Original Amount (A)	Modified Approved Amount (A)	Expenditures To-date			Available Funds (E)
				Accrued (B) a/	Expended (C)	Total (D) { B + C }	{ A - D }
<b>I.</b>	<b>Funds</b>						
10.	<b>Project</b>					\$0.00	\$0.00
	11. <b>National Experts (Researcher)</b>	<b>\$39,200.00</b>			<b>\$26,619.48</b>	<b>\$26,619.48</b>	<b>\$12,580.52</b>
	11.1 Project Coordinator	\$4,200.00			\$3,700.00	\$3,700.00	\$500.00
	11.2 Climate change and REDD experts	\$12,000.00			\$12,000.00	\$12,000.00	\$0.00
	11.3 Inventory and Ecologist Expert	\$7,000.00			\$4,119.48	\$4,119.48	\$2,880.52
	11.4 Forester	\$6,000.00			\$2,000.00	\$2,000.00	\$4,000.00
	11.5 Socio-Economist	\$5,000.00			\$2,000.00	\$2,000.00	\$3,000.00
	11.6 Agroforester	\$5,000.00			\$2,800.00	\$2,800.00	\$2,200.00
	12. <b>Other Personnel</b>	<b>\$35,280.00</b>			<b>\$17,711.99</b>	<b>\$17,711.99</b>	<b>\$17,568.01</b>
	12.1 Assistant (Climate Change and REDD)	\$6,000.00			\$5,563.47	\$5,563.47	\$436.53
	12.2 Assistant (Inventory and Ecology)	\$2,000.00			\$338.69	\$338.69	\$1,661.31
	12.3 National Research Assistant (MSc)	\$750.00			\$738.28	\$738.28	\$11.72
	12.4 Research Assistant (Forestry)					\$0.00	\$0.00
	12.5 Research Assistant (Socio-economist)	\$3,000.00			\$1,400.00	\$1,400.00	\$1,600.00
	12.6 Research Assistant (Agroforester)	\$3,000.00			\$1,520.29	\$1,520.29	\$1,479.71
	12.7 Research Assistant (coord. of publi.)	\$5,000.00				\$0.00	\$5,000.00
	12.8 Administrative staff	\$1,800.00			\$1,751.26	\$1,751.26	\$48.74
	12.9 National Research Associate	\$5,750.00			\$2,800.00	\$2,800.00	\$2,950.00
	12.91 National Senior Consultant	\$7,000.00			\$3,600.00	\$3,600.00	\$3,400.00
	12.92 Community staff	\$980.00				\$0.00	\$980.00
	13. <b>International Consultants (HAFL)</b>	<b>\$57,500.00</b>			<b>\$0.00</b>	<b>\$0.00</b>	<b>\$57,500.00</b>
	13.1 Senior Forestry Consultant	\$17,500.00				\$0.00	\$17,500.00
	13.2 Senior Agricultural Consultant	\$7,000.00				\$0.00	\$7,000.00
	13.3 Research Manager, HAFL	\$33,000.00				\$0.00	\$33,000.00
	14. <b>Fellowships and Training</b>	<b>\$28,200.00</b>			<b>\$0.00</b>	<b>\$0.00</b>	<b>\$28,200.00</b>
	14.1 Training (MSc)	\$28,200.00				\$0.00	\$28,200.00
	15. <b>Workshops</b>	<b>\$19,900.00</b>			<b>\$6,434.40</b>	<b>\$6,434.40</b>	<b>\$13,465.60</b>
	15.1 Workshops (verification &proj. comp)	\$12,600.00			\$330.94	\$330.94	\$12,269.06

		15.2 Capacity building for community groups	\$6,300.00			\$6,103.46	\$6,103.46	\$196.54
		15.3 Scientific Advisor	\$1,000.00				\$0.00	\$1,000.00
	19.	Component Total:	<b>\$180,080.00</b>			<b>\$50,765.86</b>	<b>\$50,765.86</b>	<b>\$129,314.14</b>
20.	Sub-co		<b>\$0.00</b>			<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
	21.	Sub-contract (Topic e.g. mapping, etc.)					\$0.00	\$0.00
	22.	Sub-contract (Topic 2)					\$0.00	\$0.00
	29.	Component Total:	<b>\$0.00</b>			<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
30.	Travel						\$0.00	\$0.00
	31.	Daily Subsistence Allowance	<b>\$25,710.00</b>			\$12,203.34	\$12,203.34	\$13,506.66
		31.1 National Experts and Assistants	\$12,750.00			\$10,703.44	\$10,703.44	\$2,046.56
		31.2 International Consultant(s)	\$10,000.00				\$0.00	\$10,000.00
		31.3 Others (Research Assistants)	\$800.00				\$0.00	\$800.00
		31.4 Driver	\$2,160.00			\$1,499.89	\$1,499.89	\$660.11
	32.	International Travel	<b>\$25,000.00</b>			<b>\$0.00</b>	<b>\$0.00</b>	<b>\$25,000.00</b>
		32.1 International Consultants	\$12,000.00				\$0.00	\$12,000.00
		32.2 Communication and Visa costs	\$3,000.00				\$0.00	\$3,000.00
		32.3 Travel Costs HAFL Collaborators	\$10,000.00				\$0.00	\$10,000.00
	33.	Local Transport Costs	<b>\$16,500.00</b>			<b>\$13,889.96</b>	<b>\$13,889.96</b>	<b>\$2,610.04</b>
		33.1 Vehicle Hire/Transportation	\$6,900.00			\$6,579.21	\$6,579.21	\$320.79
		33.2 Fuel	\$9,600.00			\$7,310.75	\$7,310.75	\$2,289.25
		33.3 Others					\$0.00	\$0.00
	39.	Component Total:	<b>\$67,210.00</b>			<b>\$26,093.29</b>	<b>\$26,093.29</b>	<b>\$41,116.71</b>
40.	Capita		<b>\$4,500.00</b>			<b>\$3,176.93</b>	<b>\$3,176.93</b>	<b>\$1,323.07</b>
	41.	Premises					\$0.00	\$0.00
	42.	Land					\$0.00	\$0.00
	43.	Vehicle(s)					\$0.00	\$0.00
	44.	Capital Equipment	<b>\$4,500.00</b>			<b>\$3,176.93</b>	<b>\$3,176.93</b>	<b>\$1,323.07</b>





## PROJECT CASH FLOW STATEMENT

Project	RED-PD 093/12 Rev.3 (F)		Period ending		
Project	ADVANCING REDD+ IN GHANA: PREPARATION				
Component		Reference	Date	Amount	
				in US\$	Local Currency Gh¢
<b>A.</b>	<b>Funds</b>				
	1. First instalment		3rd April '13	\$100,000.00	192,500.00
	2. Second Instalment				
	3. Third instalment				
	4. Fourth instalment				
	ETC.				
	<b>Total Funds Received:</b>			<b>\$100,000.00</b>	<b>192,500.00</b>
<b>B.</b>	<b>Expenc</b>				
10.	Project				
	11. National Experts (long term)			<b>\$26,619.48</b>	<b>52,200.00</b>
	11.1 Project Coordinator			\$3,700.00	7,334.00
	11.2 Climate change and REDD experts			\$12,000.00	23,586.00
	11.3 Inventory and Ecologist Expert			\$4,119.48	7,930.00
	11.4 Forester			\$2,000.00	3,980.00
	11.5 Socio-Economist			\$2,000.00	3,980.00
	11.6 Agroforester			\$2,800.00	5,390.00
	12. Other Personnel			<b>\$17,711.99</b>	<b>34,722.81</b>
	12.1 Assistant (Climate Change and REDD)			\$5,563.47	11,180.00
	12.2 Assistant (Inventory and Ecology)			\$338.69	674.00

		12.3 National Research Assistant (MSc)			\$738.28	1,440.00
		12.4 Research Assistant (Forestry)				0.00
		12.5 Research Assistant (Socio-economist)			\$1,400.00	2,695.00
		12.6 Research Assistant (Agroforester)			\$1,520.29	2,926.56
		12.7 Research Assistant (coord. of publi.)				0.00
		12.8 Administrative staff			\$1,751.26	3,487.25
		12.9 National Research Associate			\$2,800.00	5,390.00
		12.91 National Senior Consultant			\$3,600.00	6,930.00
		12.92 Community staff				0.00
	13.	International Consultants (HAFL)			\$0.00	0.00
		13.1 Senior Forestry Consultant				0.00
		13.2 Senior Agricultural Consultant				0.00
		13.3 Research Manager, HAFL				0.00
	14.	Fellowships and Training			\$0.00	0.00
		14.1 Training (MSc)				0.00
	15.	Workshops			\$6,434.40	12,934.00
		15.1 Workshops (verification &proj. comp)			\$330.94	738.00
		15.2 Capacity building for community groups			\$6,103.46	12,196.00
		15.3 Scientific Advisor				0.00
	19.	Component Total:			<b>\$50,765.86</b>	<b>99,856.81</b>
20.	Sub-co				<b>\$0.00</b>	<b>0.00</b>
	21.	Sub-contract (Topic e.g. mapping, etc.))				0.00
	22.	Sub-contract (Topic 2)				0.00
	29.	Component Total:			<b>\$0.00</b>	<b>0.00</b>
30.	Travel					
	31.	Daily Subsistence Allowance			<b>\$12,203.34</b>	<b>23,774.00</b>
		31.1 National Experts and Assistants			\$10,703.44	20,882.00
		31.2 International Consultant(s)				0.00

		31.3 Others (Research Assistants)				0.00
		31.4 Driver			\$1,499.89	2,892.00
32.		International Travel			<b>\$0.00</b>	<b>0.00</b>
		32.1 International Consultants				0.00
		32.2 Communication and Visa costs				0.00
		32.3 Travel Costs HAFL Collaborators				0.00
33.		Local Transport Costs			<b>\$13,889.96</b>	<b>27,210.50</b>
		33.1 Vehicle Hire/Transportation			\$6,579.21	12,745.00
		33.2 Fuel			\$7,310.75	14,465.50
		33.3 Others				0.00
39.		Component Total:			<b>\$26,093.29</b>	<b>50,984.50</b>
40.		Capital			<b>\$3,176.93</b>	<b>6,253.03</b>
	41.	Premises				0.00
	42.	Land				0.00
	43.	Vehicle(s)				0.00
	44.	Capital Equipment			<b>\$3,176.93</b>	<b>6,253.03</b>
		44.1 Laptop Computers			\$2,296.30	4,420.37
		44.2 Printers			\$880.63	1,832.66
		44.3 GPS				0.00
49.		Component Total:			<b>\$3,176.93</b>	<b>6,253.03</b>
50.		Consumables			<b>\$2,661.72</b>	<b>5,282.87</b>
	51.	Layout and printing of documents				0.00
	52.	Dissemination of publications			\$295.75	587.12
	53.	Stationery and other supplies			\$365.97	712.75
	54.	Contribution to office maintenance			\$2,000.00	3,983.00
	55.	Contribution to HAFL Secretariat				0.00
	56.	Public Awareness support (Media)				0.00





Annexes



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## Global warming, climate change and forest protection

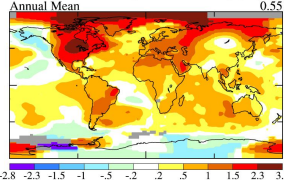
Lawrence Damnyag, Kwame Antwi Oduro and Angella Adjei-Darko



## What is global warming

- Global warming: the increase in the Earth's average temperatures year to year, which leads to changes in the climate
- Climate change: a change in the mean temperature, rainfall and wind speed that define climate or their variability.

- Since 1880 to 2012, about 9 high points of the land and the Ocean surfaces temperature have been recorded
- 2012 is one of these 9 points



January 15, 2013 NOAA/NASA 2012 Global

## What is global warming

- Greenhouse gases (GHGs) are water vapor, carbon dioxide, methane and others
- These gases cause green house effect. How? They allow sun's rays to pass through them and prevent the returning heat from earth to escape
- Greenhouse effect: when gases such as carbon dioxide prevent the energy generated by the sun and radiated back from the earth in the form of heat to escape the Earth's atmosphere

## Increase in average global temperature- climate change-Is it human caused

- Economic analysis shows human activities cause changes in the climate
  - That such changes could have harmful and irreversible consequences
- There is the need for society to take some steps to guard against such extreme events
- Steps should be taken to reduce CO2 and the GHG emissions
- Countries need to take steps to adapt to the global warming
- Economically sound and politically feasible policies need to be adopted

## International agreement and carbon sinks


- World Meteorological Organization (WMO) and United Nations Environment Program (UNEP) form Intergovernmental Panel on Climate Change(IPCC) in 1988
  - Purpose: to address GHG emissions
- First IPCC report in 1990, led to signing of UN framework convention on climate change (UNFCCC) by 174 countries in 1992
- UNFCCC committed signatories to stabilize atmospheric CO2
- Developed countries (Annex I) to reduce emissions to 1990 level by 2000
- In Kyoto meeting (COP3), 11-12-1997, industrialized countries agreed to reduce CO2 emissions (by an average of 5.2% from 1990 level)
- They were to do this in 2008-2012

## Kyoto protocol


- Kyoto Protocol(KP): an international agreement covering the period 2008-2012 to slow climate change.
- Under the protocol industrialized countries agreed to reduce their collective greenhouse gas emissions by 5.2 percent from 1990 levels
- Clean Development Mechanism (CDM): a scheme that helps industrialized countries meet their Kyoto Protocol emission targets in two ways
  - Reducing their own emissions:
  - Invest in reducing GHG-CO2 emissions or in enhancing GHG-CO2 sinks in developing countries.

## Kyoto protocol

- ❑ **Joint implementation (JI)** Industrialized country undertake GHG-CO2 reduction activities in another industrialized country
- ❑ **Assigned amount units(AAUs):** Industrialized country can purchase AAUs from another industrialized country
- ❑ **AAU:** Emission permits in excess of what a country needs to meet its target

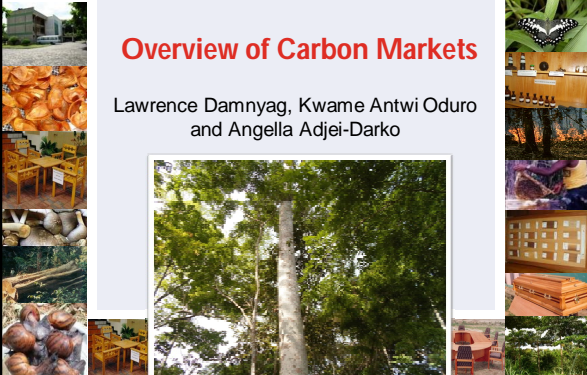


THANK YOU


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## Overview of Carbon Markets

Lawrence Damnyag, Kwame Antwi Oduro and Angella Adjei-Darko



## Overview of carbon markets

- ❑ Compliance Market
- ❑ Voluntary Carbon Markets
- ❑ Voluntary and Compliance Carbon Market Size
- ❑ The Stages of the CDM Project Cycle
- ❑ Who Is Who in a Carbon Offset Project
- ❑ Key Elements of Offset Standards

## What are carbon markets

- ❑ **Carbon markets:** financing bodies and mechanisms that can exchange the
- ❑ carbon credits generated from verified REDD activities.
- ❑ This could take the form of ‘voluntary markets’ (that are formed under agreed bilateral mechanisms between the trading parties) or
- ❑ ‘compliance market’ (that are legally regulated to meet emission reduction target under multilateral agreements).

## Compliance and voluntary markets

- ❑ Carbon offsetting -paying someone else to reduce GHG emissions elsewhere
- ❑ the purchaser of a carbon offset aims to compensate for – or “offset” – their own emissions
- ❑ Individuals seek to offset their travel emissions
- ❑ companies buy large quantities of carbon offsets to “neutralize” their carbon footprint or that of their products.

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- Carbon offset markets exist both under **compliance schemes and as voluntary programs**
- Compliance markets are created and regulated by mandatory regional, national, and international carbon reduction regimes e.g.
  - the Kyoto Protocol and
  - the European Union's Emissions Trading Scheme
- **Voluntary offset markets function** outside of the compliance markets and
- They enable companies and individuals to purchase carbon offsets on a voluntary basis
- The voluntary market is smaller than the compliance market, (€62.6 million in 2006; Hamilton, 2007)
- but it is also growing rapidly


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### Reasons for voluntary carbon markets

- They enable those in unregulated sectors or countries that have not ratified Kyoto, such as the US, to offset their emissions
- They enable companies to gain experience with carbon inventories
  - emissions reductions and
  - carbon markets.
- This may facilitate future participation in a regulated **cap-and-trade system**

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- Project developers are more flexible to implement projects that might otherwise not be viable (e.g. projects that are too small or too disaggregated) in a compliant market
- Corporations can benefit from the positive public relations associated with the voluntary reduction of emissions



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### Standards/schemes for Reducing GHG emission


- There are different standards in the carbon market for reducing emissions
- The compliant market-CDM standard/scheme exist
- The voluntary carbon-voluntary standards exist e.g.
  - Verified Carbon Standard(VCS)
  - The Climate, Community & Biodiversity Standards (CCBS)
  - Plan Vivo System etc



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### Standards/schemes for Reducing GHG emission

- differences exist among standards is how projects are reviewed and approved
- CDM, projects are verified by third-party auditors, reviewed, approved or rejected by the CDM Executive Board
- voluntary offset standards do not have such a body to review and approve the projects after the auditors have verified them
- The lack of a standard body which approves projects increase conflicts of interest,
  - particularly where auditors are selected and paid for by the project developer



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### Registries Used by Each Standard

- Carbon offset registries keep track of offsets
- They minimize the risk of double-counting, that is, having multiple stakeholders take credit for the same offset.
- Registries also clarify ownership of offsets
- **Offset Transactions**
- Pricing of Offsets
- Price of Offsets' indicates the cost of one offset representing the reduction of 1 tonne of CO<sub>2</sub>e.
- Offset prices depend on many different parameters, e.g. type of project, the location, market demand, stringency of the standard requirements

### Review of Standards Used In the Voluntary Offset Market

- ❑ Each standard accepts different types of offset projects
- ❑ The CDM, for example accepts all projects that reduce the six GHGs listed in the Kyoto Protocol,
- ❑ with the exception of the protection of existing forests (REDD), nuclear energy, and HFC destruction from new facilities
- ❑ **Offset Project Types**
- ❑ REDD = Reduced Emissions from Degradation and Deforestation
- ❑ EE = Energy Efficiency
- ❑ RE = Renewable Energy
- ❑ LULUCF = Land Use, Land-Use Change and Forestry = Bio-Sequestration

### Full-fledged Standards


- ❑ Clean Development Mechanism
- ❑ Gold Standard
- ❑ Voluntary Carbon Standard 2007 (VCS 2007)
- ❑ VER+
- ❑ Chicago Climate Exchange (CCX )
- ❑ ISO 14064-2
- ❑ GHG Protocol for Project Accounting

### Bio-Sequestration Standards


- ❑ CDM Afforestation and Reforestation Standard (CDM A/R)
- ❑ VCS AFOLU Standard
- ❑ The Climate, Community & Biodiversity Standards (CCBS)
- ❑ Plan Vivo System
- ❑ Characteristic of each standard

### Forestry carbon markets

- ❑ The forest carbon markets are not well standardized in terms of contractual set-up of
  - carbon transactions
  - there are many different carbon payment arrangements
  - between project developers and buyers of credits.



- ❑ there is currently no standardized method transactions for forestry credits
- ❑ This is mainly
  - due to transactions in the voluntary market
    - occurring case-by-case and over the counter
- ❑ and carbon credit exchanges, always being associated with a project contractual design which raise overall transaction costs




### Structure of carbon markets

- ❑ Voluntary Carbon Standard and the CarbonFix Standard are the
  - most preferred carbon accounting standards for the OTC market
- ❑ The others are **Forest Carbon Standards** i.e.
  - A/R CDM,
  - American Carbon Registry (ACR),
  - Climate, Community and Biodiversity Standards (CCBS),
  - Climate Action Reserve (CAR), and
  - Plan Vivo Standards

## Structure of carbon markets

- Among all carbon accounting standards the
  - A/R CDM was regarded as most popular.
- However, project developers considered
  - voluntary carbon accounting standards,
  - voluntary carbon standards (VCS) and
  - the CarbonFix Standard as the most favored choices in 2010



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# THANK YOU



## Overview of PES and REDD+

Lawrence Damnyag, Kwame Antwi Oduro Ernest G. Foli and Angella Adjei-Darko

## Content

- What is PES
- What is REDD+
- Concept of PES and REDD+
- How REDD+ works
- Concerns/issues to be addressed for REDD+ to work
- What to do before the main REDD+
- Conclusion-what to keep in mind


## What is PES

- Environmental services, referred to as ecosystem services, are **resources** and **processes** supplied by forest for the benefit of human beings.
- Four broad categories of ecosystems services have been identified (UN MEA, 2004) as:
  - Provisioning - production of food and water;
  - Regulating - control of climate and disease;
  - Supporting - nutrient cycles and crop pollination; and
  - Cultural- spiritual and recreational benefits (e.g., sacred groves, etc).
- **Payments for environmental services (PES)**: schemes where beneficiaries of ecosystem services pay those who manage them to ensure the services continue.
- PES is an economic instrument that provides incentives to land owners to supply environmental services, which benefit society broadly.

## WHAT IS REDD+

- REDD-Plus connotes **reducing emissions** from **deforestation** and **forest degradation** (DFD), conservation, sustainable forest management and enhancing carbon stocks.
- International forest policy to regulate **climate change** impact resulting from emissions of **GHG-CO2**.
- Opportunity for developing countries to get compensation for CO2 reduction actions from their forests

Yet to be included in **Post Kyoto protocol-2008-2012**



### Concept of PES and REDD+

- Resource users, communities that provide Ecosystem Services to be compensated for the cost of provision
- Those who benefit from these services should be made to pay for them
- REDD initiatives can deliver significant climate change mitigation benefits along with co-benefits
  - These include protecting the environmental services that forests offer, improving the livelihoods of forest-dwelling communities and clarifying land tenure rights
- Ecosystem Services that forests provide include:
  - Watershed protection
  - Biodiversity conservation/protection
  - Carbon sequestration and storage
  - Landscape beauty-nature based tourism
- No compensation is paid to land users for the services generated from their lands.
- They do not take these services into account in making decisions about the land use.

### HOW REDD+ WORKS (APPROACHES)

A. Levels at providing payments

- Direct REDD project support
- Direct support to countries-national level

Combination of 2

- National level favored globally
  - Advantages-policies + measures easy

B. Phases-1,2, 3

- Phase 1
  - Readiness phase: prepare a national REDD+ strategy;
  - Build capacity in MRV;
  - Demonstration activities.
- Phase 2
  - Make policies and measures to reduce emissions.
- Phase 3
  - Full UNFCCC compliance REDD+ countries paid for reduced emissions and enhanced carbon stocks relative to agreed reference level;
  - Advantage of phase approach-flexibility

### How REDD+ Works (Approaches)

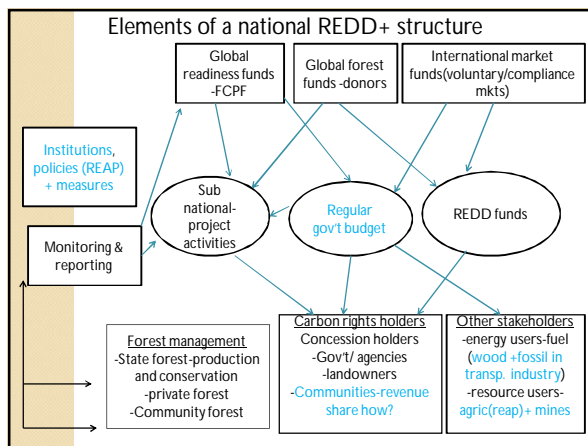
- Credits from reduced emissions, also called 'avoided deforestation', would be quantified
- That positive quantity would then become a credit that could be sold in an international carbon market
- the credit could be handed to an international fund set up
- to provide financial compensation to participating countries that conserve their forest
- REDD schemes allow forest conservation to compete on economic terms with the drivers of deforestation
- Current economic drivers favor destructive logging practices and conversion of forest to other uses, such as pasture for livestock and farmlands

### Challenges to be addressed for REDD scheme to work

- Measuring carbon:** How to accurately estimate how much carbon is being stored there
- New technologies such as satellite imaging and computer modelling are making the measurement of carbon stocks
- Making payments:** How will countries be rewarded and what form will that reward take?
- Who should be paid for protecting a specific forested area:
  - national governments, local forest communities or logging companies
- National governments in countries likely to benefit from REDD may wish to retain control over how payments are distributed

### Challenges to be addressed for REDD scheme to work

- Accountability**
  - If a REDD payment is made, but a forest still gets destroyed, what then?
  - What can be done to ensure that carbon payments lead to sustained forest protection?
- Funding**
  - Should developed countries create a fund to reward countries that reduce emissions from deforestation?
  - Or, should these emissions reductions be linked to a market-based carbon trading system?
  - How would such a market system work in practice?



### Concerns/issues to be addressed for REDD+ to work

- **Leakage:** what occurs when a reduction of emissions in one area leads to an increase in emissions in another area.
- Additionality
- Monitoring, reporting and verifications (MRV)
- Reference level
- Revenue distribution-international-national-local
- Cost and certification standards
- Project-based REDD+ to start before?
- Involvement of stakeholders-Agric, mines, transport, industry to let REDD+ be well implemented
- REDD+ safeguards? to cater for negative impacts e.g. environmental & Social -risk of loss of farmland- if low funds

### Conclusion-what to keep in mind

- We should put in measures and strategies to address DFD
- Recall a strategy - plan(s) to overcome a difficult task
- e. g of strategy -Vietnam-American War, Alex Fergusson/David Mores Manchester United, etc

THANK YOU

### Participation of Local Communities in REDD+

Kwame A. Oduro, Lawrence Damnyag, Angella Adjei-Darko

### What is Participation?

... Participation is very much about the rights of people.

*What is Participation?*

... Generally, the word "participation" refers to either the act of taking part in something, or having a share in something.

- .....decision making
- .....resource use

Design, planning and implementation of REDD+ activities

### Why Community Participation?

- Different reasons why community participation is promoted:
  - Local communities have been effective in forest conservation
  - Strengthen the capacities of communities or to empower communities (increase control over critical resources and decisions)
  - A global study showed that there are both high carbon storage and livelihood benefits in places where communities have control over larger forest areas
  - To make projects more effective and efficient

### Why Community Participation?

- Participation in REDD+ has to take place at all levels:
  - at the level where national policies and laws, or programs on REDD+ will be designed and decided on; and
  - the local level where programs and projects are implemented.
- Practically, for local communities participation at the national level is through your leaders who have been or will be engaged in the REDD+ discussion and who are advocating for the respect of local communities rights and concerns
- It is at the local level that communities will be directly participating in REDD+



### Why Community Participation?

- When participation of local communities is guided by the principle of FPIC, we can say that it is genuinely **empowering**. It creates the precondition under which the communities freely, on their own will and thus with full commitment engage in the initiative.
- A REDD+ project which is based on such a genuine partnership with local communities can be called community-based REDD+.
- For a REDD+ project, FPIC means that everyone residing within a project area must have knowledge of the proposed REDD+ project and must give their consent openly and freely.

### DISCUSSION

- How would you feel if outsiders will make decisions that affect your community without consulting you?

Or

- What may be the effects if outsiders will make decisions that affect your community without consulting you?

### Synthesis of Discussion

- How participation should be made effective

## THANK YOU

# Opportunities and challenges of REDD+

Lawrence Damnyag, Kwame Antwi Oduro and Angella Adjei-Darko



## Outline

- Costs and benefits of REDD+ to local communities
- Potential impact of REDD+ on local community livelihood
- What will make REDD+ feasible
  - Stable land tenure-land registration from LAP project
- What are REDD+ activities and which are not

## REDD + activities

- Replanting initiatives in deforested and degraded areas
- Conservation enhancing activities –e.g.
  - forest plantation establishment on farmlands and agroforestry,
  - nurturing of trees on farmlands



## Activities that are not REDD+

- Difficulty in undertaking REDD+ intervention on **sun grown cocoa and rice growing farmlands**
- Shift from shaded to open cocoa farming,
- Prevalence of illegal mining and chainsaw operations
- Charcoal production and bush fires
- Insufficient incentives to conserve or plant trees on farmlands outside forest reserves



## Cost of REDD+

- Transaction cost
- Implementation cost



### REDD+ Costs

#### Opportunity costs

- Direct-on-site opportunity costs
  - Profit difference between conserving forests and converting them into other, typically more valuable, land uses;
  - The difference in profits from increasing carbon within forests or of restored forests
- Indirect, off site costs
  - difference in value added activities, tax revenue differences, agriculture and forest product price increases
- Socio-cultural costs
  - Livelihoods restricted or changed
  - Psychological, emotional or spiritual impact.

#### Implementation costs

- Land use planning
- Land tenure/governance reform
- Forest protection, improved forest and agriculture management
- Job training
- administration

#### Transaction costs

- REDD+ program development
- Agreement negotiation
- Emission reduction certification (measuring, reporting, and verification)
- Stabilization, prevent deforestation moving to other countries (stop leakage)

## Surveyed communities



## Potential impact of REDD+ on livelihood of communities

- **Potential positive impacts**
  - enhanced social relationship is expected by farmers
  - increased savings are expected that are likely to result from increase in financial institutions
- **Potential negative impacts**
  - reduction in food and cash production is expected
  - increase in crop pests and diseases



## What will make REDD feasible

- Stable land tenure
- Land registration under LAP
- Sustainable practices that help poor people, such as allowing communities to have access to forest goods



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## Carbon Rights and REDD+



### Defining Rights

... Carbon rights involve the question:

*Who owns the carbon stored in forests?*

...REDD+ is based on the right to benefit from (or compensated for) reducing forest based emissions of greenhouse gases, either through:

- .....fund-based payments,
- .....carbon market payments or
- .....combination of these

Should an entitlement to payment depend on who owns the so-called 'carbon rights'?

- Raises legal issues of how to define and allocate carbon rights in national REDD+ framework

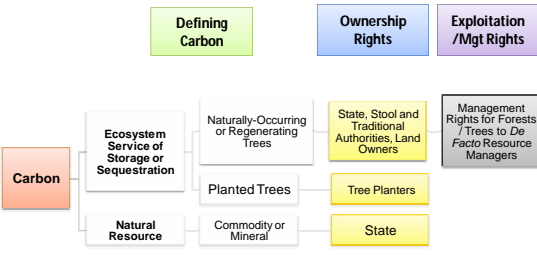
### Defining Rights

*What do we mean by carbon rights?*

... Put simply, the registration of a carbon right over a block of land will clarify the ownership of the right to the benefits and liabilities that arise from changes to the atmosphere that are caused by carbon sequestration and carbon release on that block of land. – **Government of Australia**

... Currently, Ghana has no legal provisions in place which define carbon or characterize carbon ownership

### Carbon definitions and related ownership and management rights



### Local communities and carbon rights

**Potential risks**

- There is a **risk of recentralization** of forest management, if governments treat carbon as a public good.
- The possibility of increased forest land values will increase the **risk of land-grabbing at the expense** of forest-dependent people.
- And while the sharing of carbon-related benefits remains unclear, there is a **risk of increased inequity**, with communities receiving less than a fair share.
- Risk of **conflict**

**Local communities and carbon rights**

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**Potential benefits**

- REDD+ could bring **income**
- For local communities the real value of REDD+ may lie in bringing the wider issues of **benefit sharing of all forests resources** into focus
- Negotiation of tenure and use rights is the key to making forest carbon markets work. This is the only secure route for local people to benefit from the whole range of forest products

**DISCUSSION**

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- Who should own carbon rights?

Or

- who can benefit from carbon emission credits, and what systems should be in place to protect local communities rights in the design of carbon market systems?
- What should be in place to ensure that somebody holds carbon rights?

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CAPACITY BUILDING WORKSHOP ON TREE/FOREST PROTECTION

RED-PD 093/12 Rev. 3 (F):

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Asikuma (Ghana), November 15, 2013

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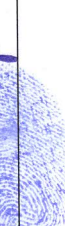


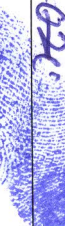
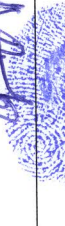

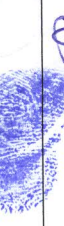




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42 Samuel Bo Adun	FSD	Enchi	0244068493	
43 Ebenezer Mensah	FSD	Enchi	0508930153	







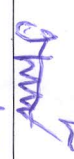

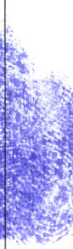
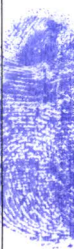
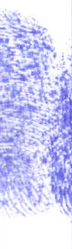
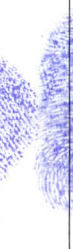
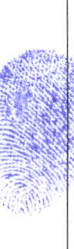


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Kintampo (Ghana), November 27, 2013

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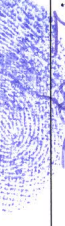
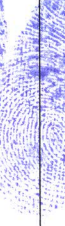
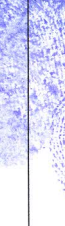
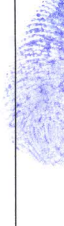


## CAPACITY BUILDING WORKSHOP ON TREE/FOREST PROTECTION

RED-PD 093/12 Rev. 3 (F):

"Advancing REDD+ in Ghana: Preparation of REDD+ Pilot Schemes in Off-Reserve Forests and Agroforests"

Kintampo (Ghana), November 27, 2013

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