

Earned versus Unearned Aid and Livelihood-Conservation outcomes A Field Experiment in Sierra Leone

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Or, how I learned (not) to do field experiments

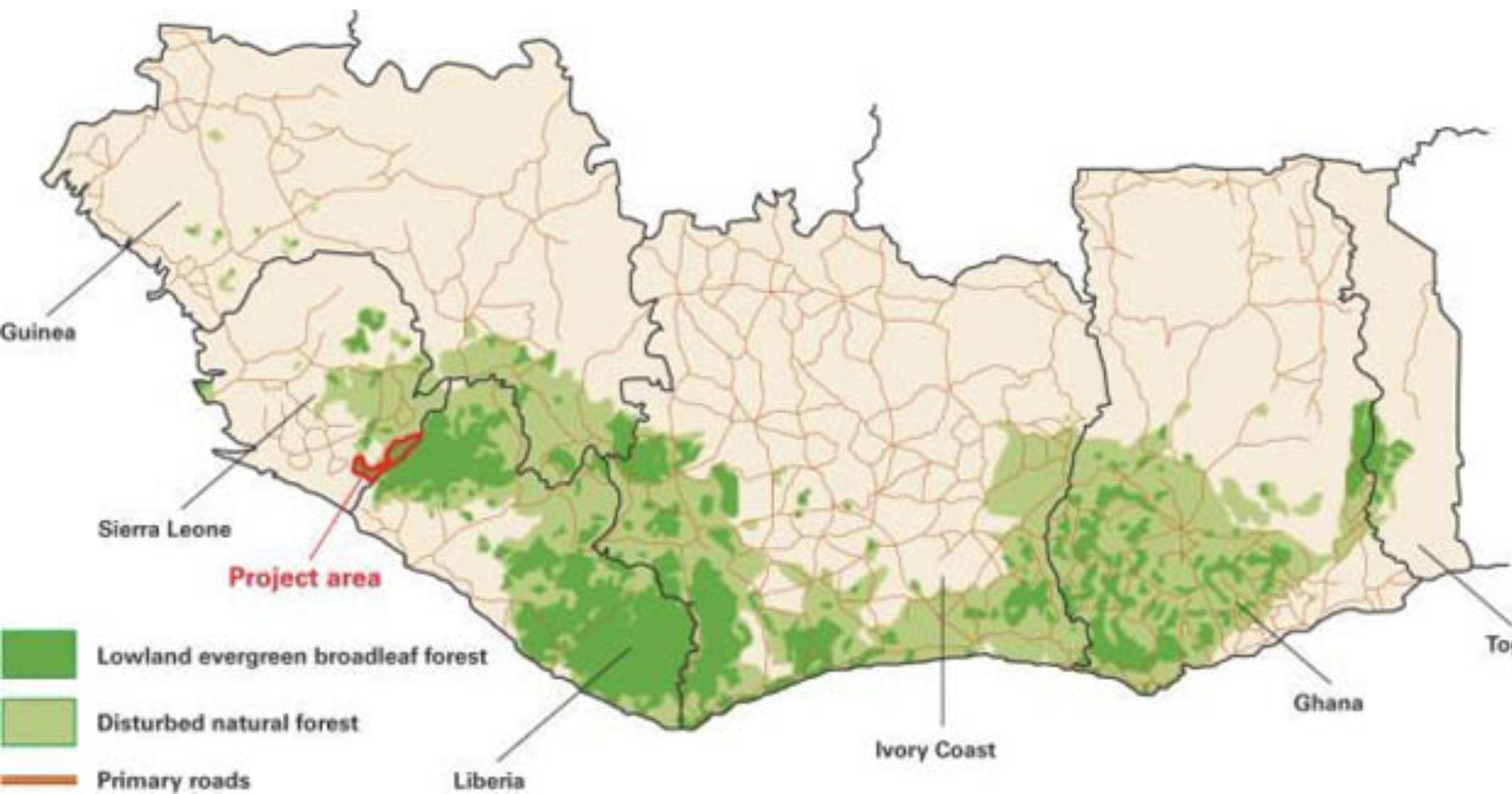
Maarten Voors
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- Sierra Leone
- 2010



GRNP





Gola Forest

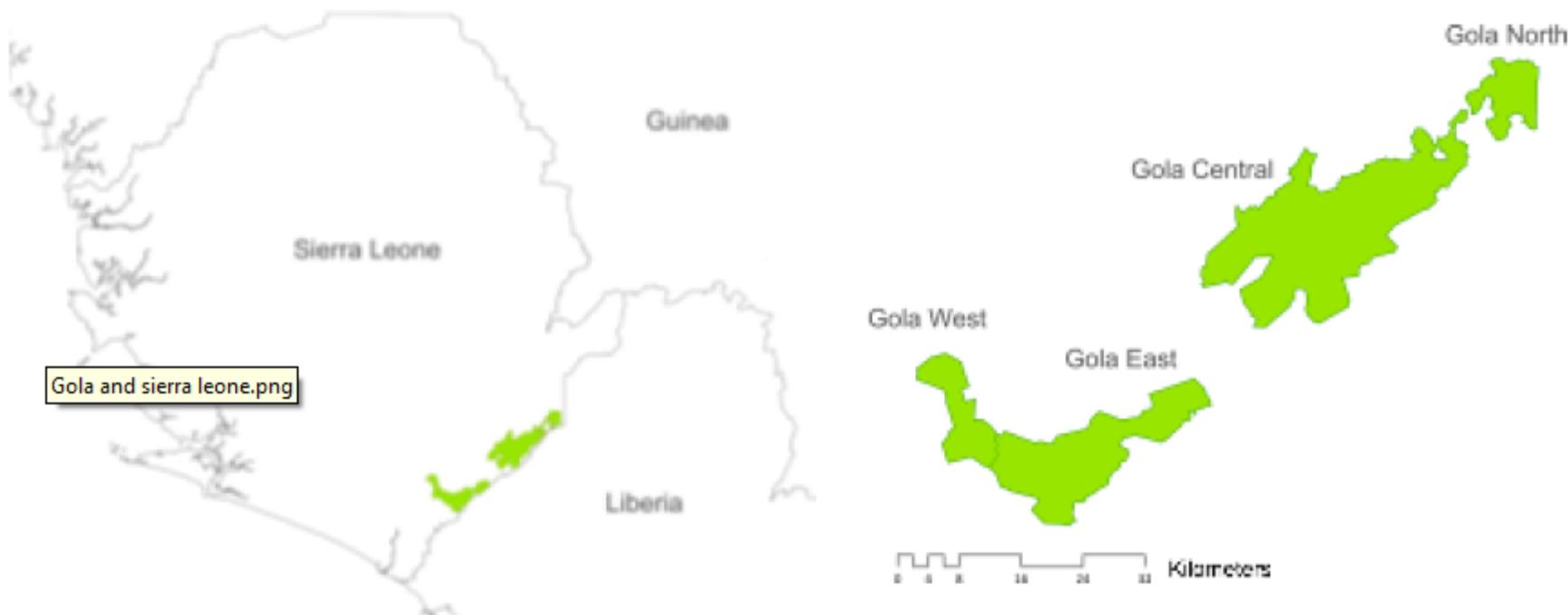




Gola Rainforest National Park

- Work in the region since 1980s
- New interest after civil war (1991 – 2002)
- Donor interest (RSPB, EU)
- Policy interest, creation of Transboundary Peace Park
- Clear questions
 - How do we create community “buy-in” for conservation?
 - How can we improve livelihoods
 - What are the unintended consequences? (esp socially)

Gola Rainforest National Park





People



Trees

The setting

- **No**
 - Hunting
 - Mining
 - Logging
- **Conservation and Livelihood Aid Program in Sierra Leone**
- **Partnerships**
 - Practitioners: RSPB, GRNP, CSSL, MoA
 - Researchers: Economists, anthropologists and ecologists
 - Njala (SL), Wageningen (NL), Cambridge (UK), Chicago (USA)

Chiefdom Development Fund

- Two dominant aid distribution models:
 - unconditional aid (aid as a gift) vs.
 - aid-for-work programs

Question 1: does aid **work?** [does X cause Y]

Question 2: **which type** of aid works best? [does X cause Y]

What program?

What evaluation method?

How to measure success?

Lots of this



The program

- Conservation and Livelihood Aid Program
- Aims
 - *Development, livelihoods, conservation*
 - *Sensitisation, support, inclusion*
- Community driven development
 - Communities decide, allocate, manage

Theory of change (very implicit)

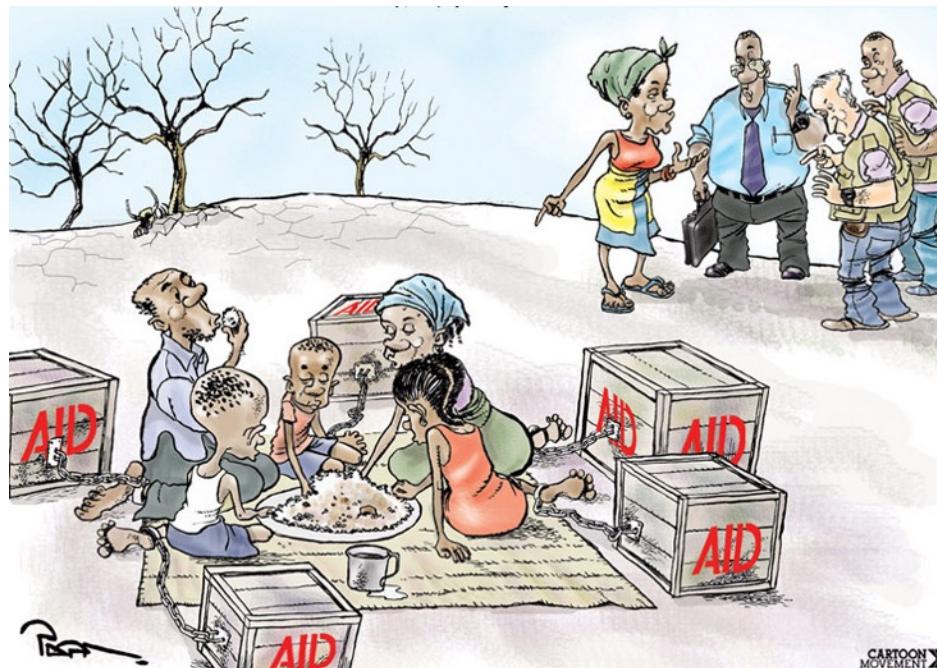
- Aid -> livelihoods -> attitude shift -> deforestation
- Sensitization -> attitude shift -> deforestation
- Village development groups -> livelihoods-> attitude shift -> deforestation

Academic motivation

- Conservation impacts
 - No clear overall hypothesis
- Indirectly via
 - Enhancing goodwill & reciprocity (+) winning the hearts and minds
 - Relax binding constraints (-) chainsaws (+) off farm labour
 - Land use changes (+) if land sparing investments, (-) is labour sparing investments, so dependent on aid use

Motivation

- Focus on economic and social impacts
- Take conservation as additional outcome, not primary
 - Any aid (windfalls, transfers, and resources) *should* boost development (+)
 - *But* there might be detrimental **social** effects of aid (-):



Motivation

- Economic and social impacts
 - Any aid (windfalls, transfers, and resources) *should* boost development
 - *But* there might be detrimental social effects of aid:
 - ...increase conflicts as competition for resources increase
- Windfalls
 - Entitlement. Windfalls are taxable for public good (less property rights)
 - Consumed rather than invested ('wasteful use of aid' and undermining future consumption)

Motivation

- Most evidence at macro level
- Little evidence of how windfalls impact individual behavior
 - See Paler (2012) and Caselli and Michaels (2013) for micro evidence
- In this study we look at economic, social and conservation impacts using micro-level experimental data.

Forging partnerships

- Lots of discussions
- Expert input
- Qualitative investigations
- Piloting and testing

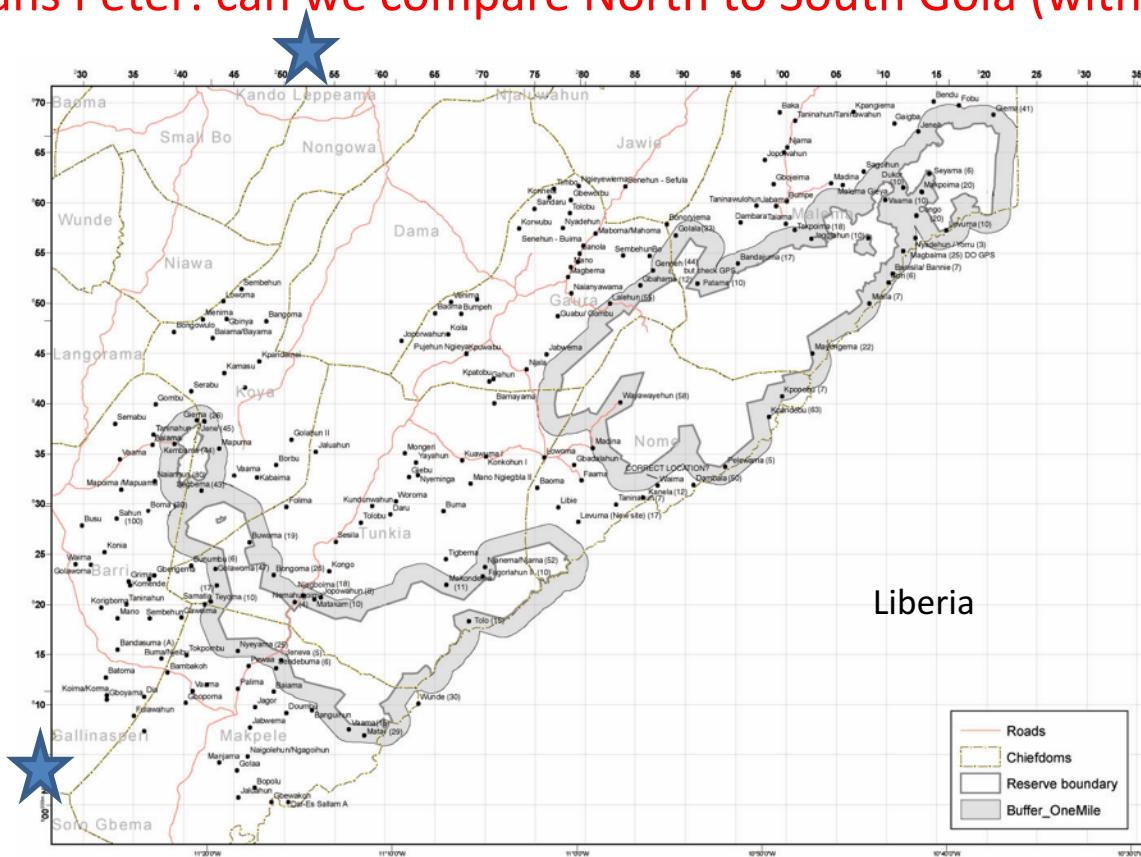


Chosing the method

- How do we tackle this question?
- How do we create the counterfactual?
- Upto recently: insights from marco models or other projects
 - Correlation and causation?
 - Cross country comparisons?
 - Local policy?
- Interest is at the micro level and as a pilot

Choosing the method

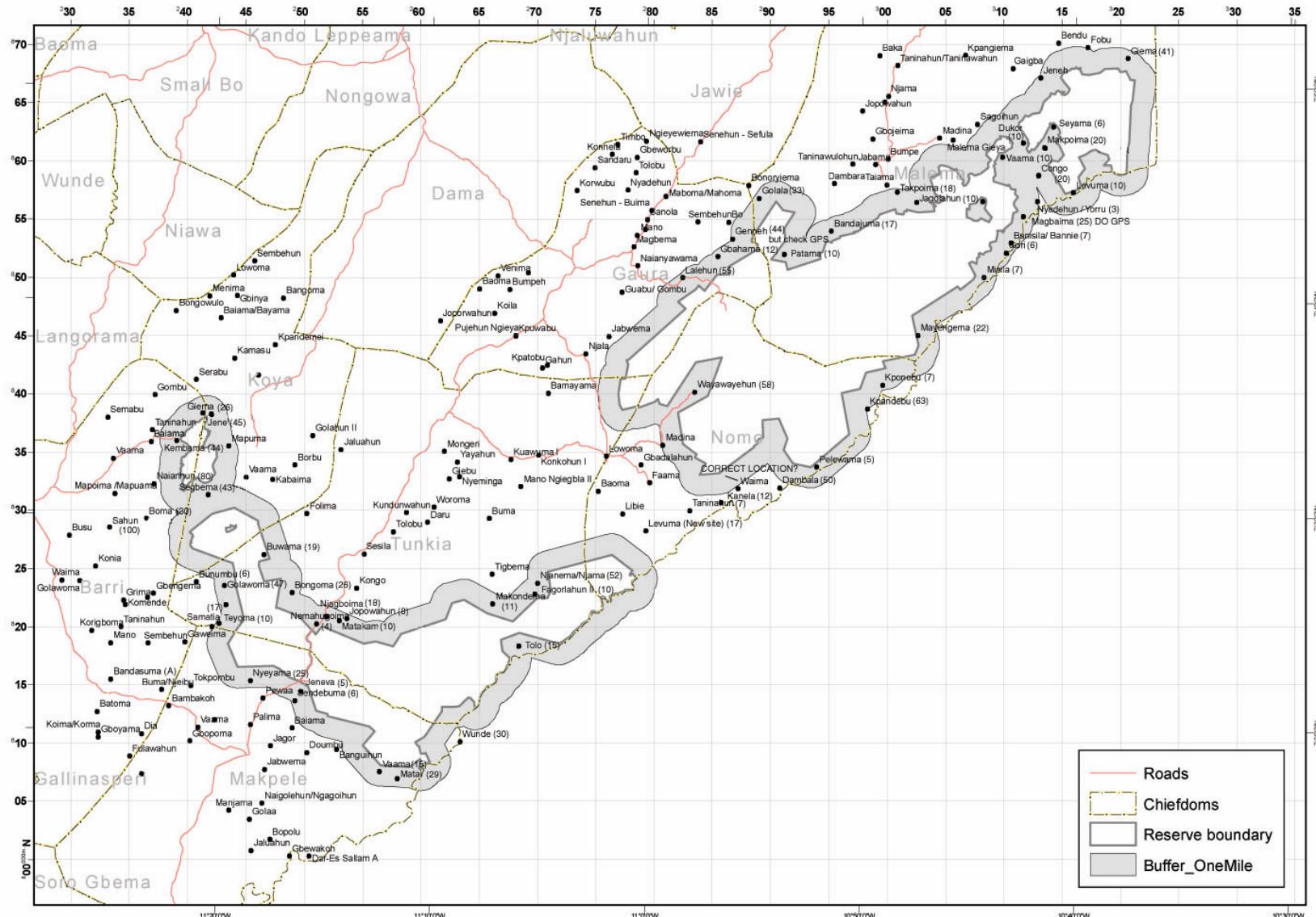
- Field experiment?
 - No!
 - Hans Peter: can we compare North to South Gola (with-without)



Chosing the method

- Field experiment?
 - Maybe
 - But: *can we not do a guided randomization?*

Design: RCT



Design: RCT

- Randomization unit?
 - Here the village level, through public lottery
 - Lottery in each of six chiefdom **blocking/stratification**
- Measurement at village and household level
- $j = 1, \dots, 66$ [villages] **clusters**
- $i = 1, \dots, 1650$ [respondents]
- Power issues?

Design

- Community Development Fund

<i>“Windfall Aid”</i> Aid Given to Households	Treatment 1
<i>“Earned Aid”</i> Aid Given Conditional on Work	Treatment 2
Control group	No aid

Ethics and RCTs?

Experimental Design: Aid-for-Work



Conservation and Livelihood Aid Program

- Money for projects



Conservation and Livelihood Aid Program

- Discussions
- Vote
- Local management
- Information
- Training



Design: vouchers

- Six vouchers per household in treatment villages
- Each voucher worth 10,000 Leones (USD 2.5)
 - USD 15/hh. Not a trivial amount of cash for our respondents
 - Aid for work: 6 days of full-time work (road improvement).

Experimental Design: Goods

MENU

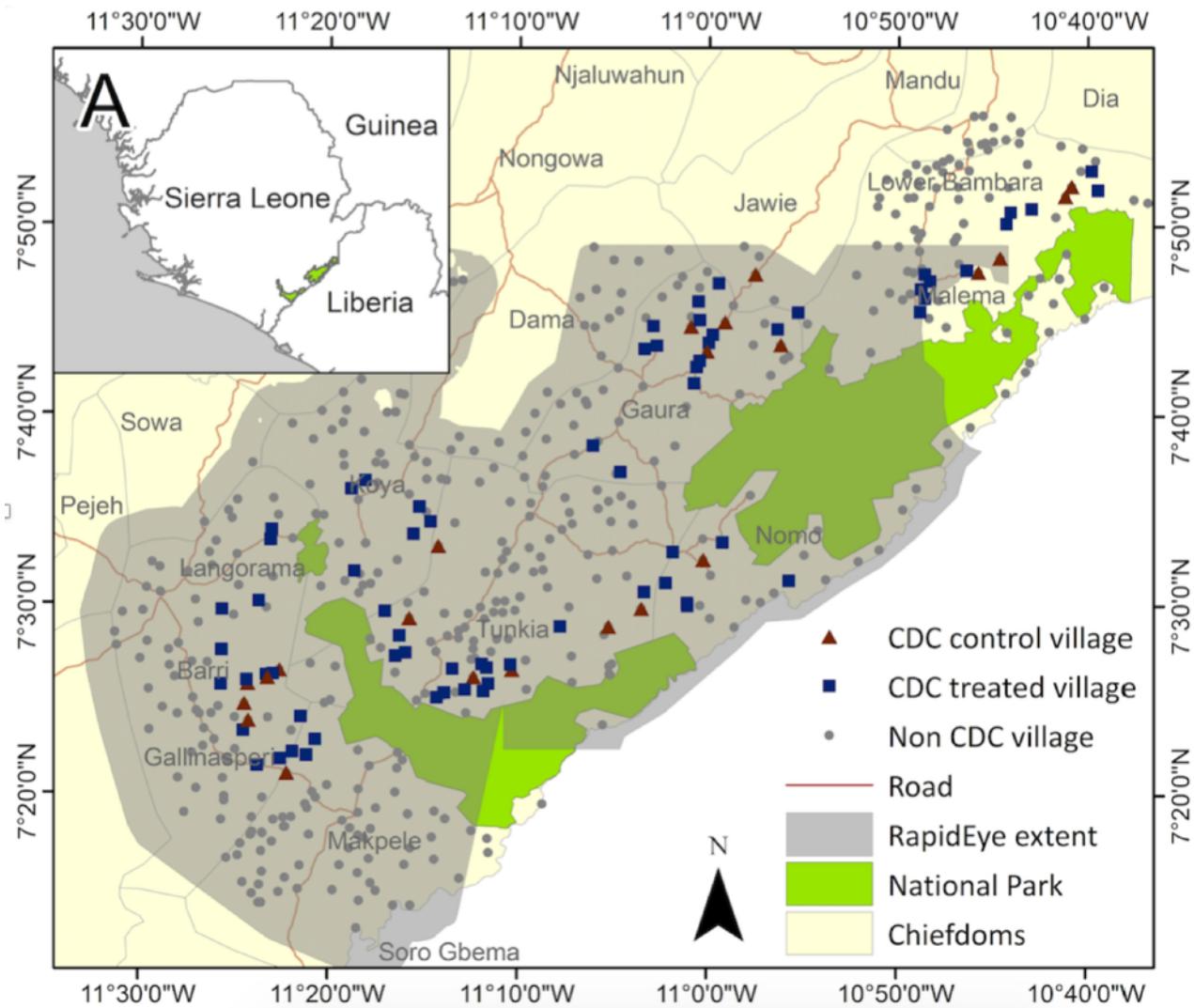
	Description of goods		Price (Le)
01	PALM OIL (PINT)		1,200
02	SALT (BUTTER CUP)		500
03	SUGAR (BUTTER CUP)		1,500
04	MAGGI (PKT)		12,500
05	MAMPO - SANDEGE (PKT)		6,500
06	RICE (BUTTERCUP)		800
07	RADIO		75,000
08	RUBBER BOWL (MEDIUM)		12,000
09	HOE (BIG)		15,000
10	HOE (SMALL)		5,000
11	BRUSHING KNIFE		5,000

14	IVS SEED RICE (BUSHEL)		60,000
15	CASSAVA STICKS - IMPROVED (BUNDLE, 30)		10,000
16	COFFEE SEEDLING		2,500
17	CACAO SEEDLING		2,500
18	OIL PALM SEEDLING - IMPROVED		10,000
19	GOAT HAMMER		8,000
20	FERTILIZER NPK 15/15 FOR RICE (BAG)		115,000
34	PVC ELBOW/ T		12,000
35	ROOFING NAIL (PKT)		25,000
36	NAILS 4" (PKT)		9,000
37	NAILS 3" (PKT)		9,000
38	WATER TANK (1000 L.)		1,300,000
39	WATER TANK (500 L.)		800,000

How to measure impact?

- Outcomes -> voucher survey, project survey
 - Consumption, investments
 - Individual, group
- Impact -> household survey, AFEs and FFE
 - Economic variables
 - income, savings, effort, etc
 - Social variables
 - cooperation, altruism, conflicts, etc
 - Conservation / support for NGO
 - stated behaviour, attitudes, actual behaviour, land use

- 68 villages
- 46 aid
 - 22 windfall
 - 24 work
- 22 no aid



After two years

- Was there a measureable difference between villages?
- Do villages that took part in the Conservation and Livelihood Aid Program look different?

Measurement strategy

- Visit all villages
- Lots of interviews



Field work



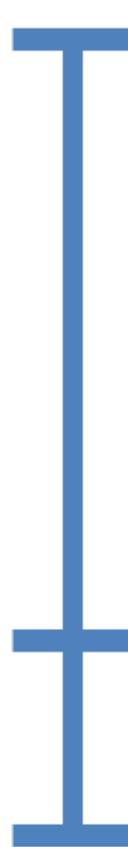


Community Development Program

- RSPB:

“This program will dramatically reduce poverty and build strong support for conservation”

Timeline



January-March 2011:

1. Baseline survey
2. Explanation of intervention
 - Aid-for-Work program
 - Distribution of vouchers
3. Orders received
4. Goods delivered
5. Midline Survey
6. Endline Survey

November 2011:

May-June 2013:

Balance

Table I. Balance Statistics

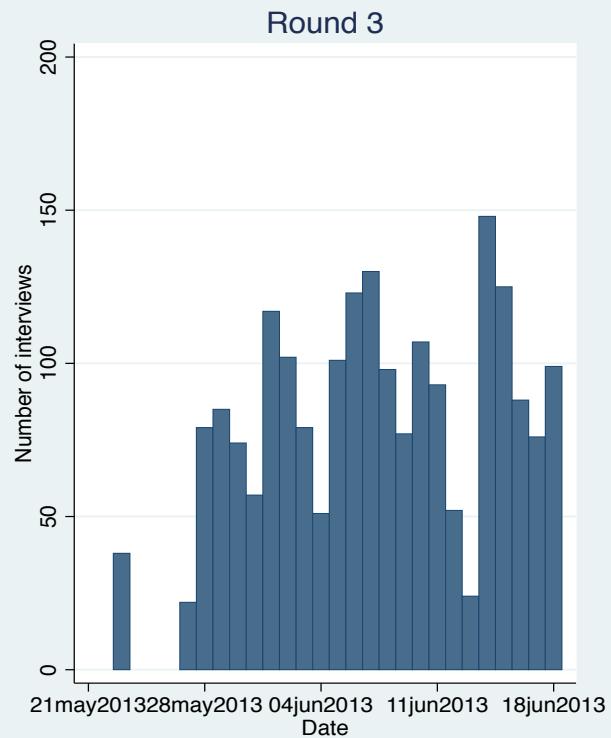
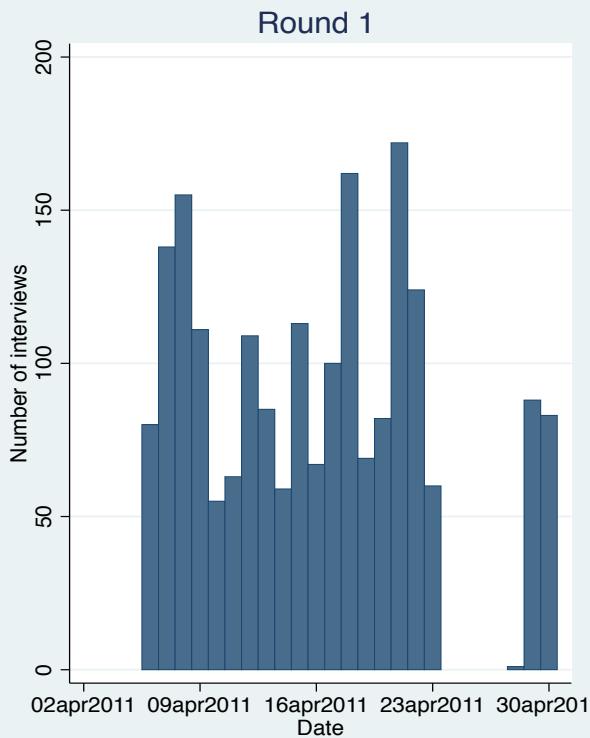
	Control		T1: Windfall Aid		T2: Aid for Work		p values		
	mean	se	mean	se	mean	se	C - T1	C - T2	T1 - T2
Age (years)	39.95	0.61	38.31	0.60	39.31	0.61	0.08	0.49	0.32
Male	0.66	0.02	0.60	0.02	0.58	0.02	0.14	0.02	0.43
Work (hours per day)	5.69	0.09	5.95	0.09	5.94	0.10	0.20	0.19	0.97
Farm size (bushels)	5.30	0.23	5.44	0.22	5.17	0.25	0.81	0.84	0.65
People are honest	0.89	0.01	0.92	0.01	0.93	0.01	0.18	0.12	0.82
Distance to HQ	5.28	0.05	4.71	0.06	4.82	0.06	0.17	0.23	0.80
Village size (hh)	49.49	1.02	40.24	0.98	43.70	1.23	0.22	0.50	0.68

Note: Baseline data 2011. Control, n=22, 578; Windfall Aid n=22, 553; Aid for Work, n=24, 591

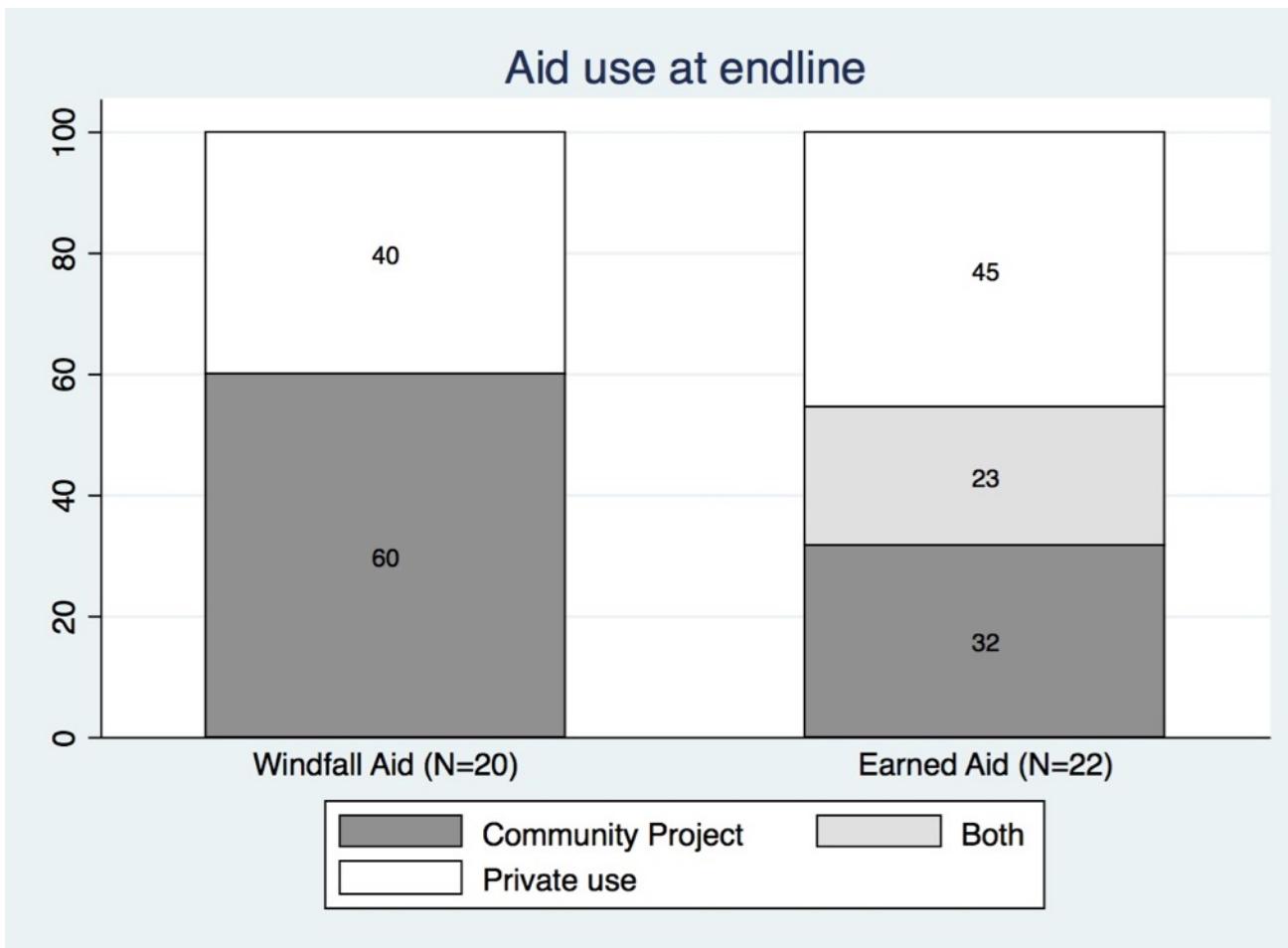
Why do we do this?

Timeline

Figure 1: Interview Rollout



Aid use



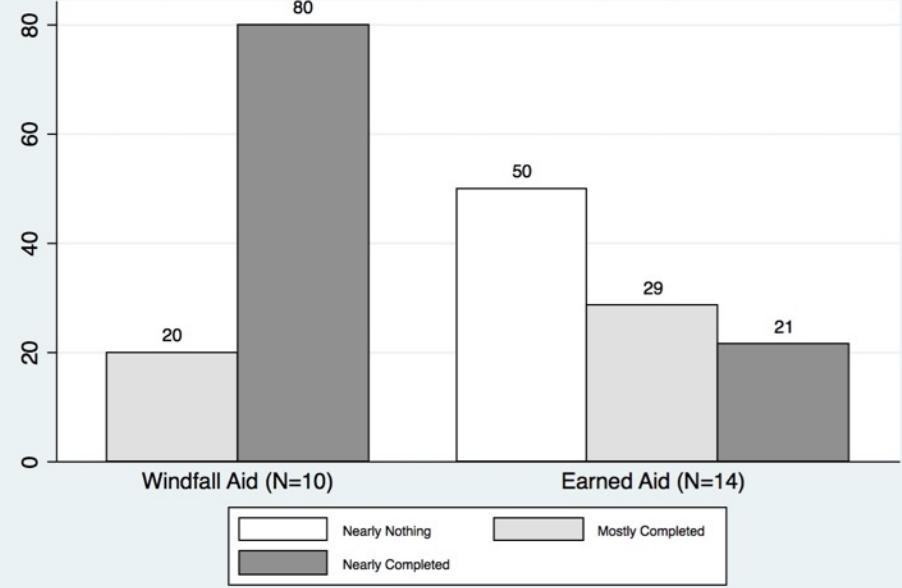
social dynamics vs “property rights” hypothesis for aid for work treatment

Community projects

Type of Community Project (at Endline)



Completion of Community Project



Under windfall aid, more likely community project are (almost) finished

How do we measure impact?

- Household survey and behavioural games/AFEs
 - 1600+ respondents in 67 villages
- Survey
 - Individual variables: age, gender, education, income, ..
 - Community variables: population, inequality, market access, etc
- Behavioral Games
 - Social outcomes
- Framed field experiment / structured community activity
 - Conservation

Individual Survey (END – 2013)		Village		Code		
		Chiefdom		Code		
Enumerator					Code	
Respondent Name					HH ID	
Team Code			Date (DD MM YYYY)			

Respondent characteristics		
1. Is this a representative?		1. Yes 2. No
2. Is yes, is he a member of the household of the original participant?		1. Yes 2. No
3. How old are you?		years
4. Is the person male or female?		1. M 2. F
5. Do you have a tin roof?		1. Yes 2. No
6. Do you have a mobile phone?		1. Yes 2. No
7. Are you considered a stranger in the village you live?		1. Yes 2. No
8. What is your main work activity?		1. Farming 2. Petty Trade 3. Housework 4. Mason/Carpenter/Etc 5. Other: _____
9. How many hours do you work in a typical workday?		hours
10. How many bushels of rice did you sow past growing season?		bushels
11. How many bushels of rice did you harvest in the past growing season?		bushels
12. How many meals do you eat per day?		meals
Income		
How much did you earn in the past year:		
13. Labour on someone else's farm		Le
14. Selling farm products (palm oil, groundnuts, etc)		Le
15. Remittances (money gifts sent back by family from outside village)		Le
16. Next to the above incomes, do you have any other type big income?		
17. Other specify _____		Le
18. Other specify _____		Le
Expenditures		
In the last month, how much money did you spent on:		
19. Salt		Le
20. Sugar		Le
21. MSG/Maggi		Le
22. Soap		Le
Do you own a:		

23. Bed		1. Yes 2. No
24. Table		1. Yes 2. No
25. Torch Light		1. Yes 2. No
26. Machete/cutlass		1. Yes 2. No
27. Radio		1. Yes 2. No
28. Private toilet		1. Yes 2. No
Savings and loans		
29. Did you borrow money in the past year		1. Yes 2. No
30. How much did you borrow? "0" if no to question 26		Le
31. How much did you repay? "0" if no to question 26		Le
32. Who did you borrow it from?		Not Applicable 1. Family 2. Osusu 3. Money lender (not trader) 4. Trader 5. Bank 6. Friend 7. Other: _____
33. Use of loan?		Not Applicable 1. Buying agricultural inputs 2. Buying food 3. Durable goods 4. Medical emergency 5. Education 6. Other: _____
34. Do you save money?		1. Yes 2. No
35. If yes, how much have you saved?		Le
36. If yes, where do you keep it?		1. At home 2. With friend or family member's house 3. Osusu 4. Bank 5. Other: _____
Farming		
37. On average, how long do you leave your land fallow?		Years
38. Do you hide any of your harvest so others won't know you have it?		1. Yes 2. No

Village Record Sheet					Village Name				
Team code					Village Code				
Enumerator	Name	C	O	D	E	Date	Day	Month	Year

1.1 Year the village was founded | | | | |

1.2 Village Chief Characteristics

1.2.1 Name | | | | |

1.2.2 Tribe [see codes] | | | | |

1 = Mende, 2 = Gola, 3 = Other (specify)

1.2.3 Year elected | | | | |

1.2.4 Age | | | | |

1.2.5 Years of Education | | | | |

Codes

1 = none 6 = some SS

2 = some primary school 7 = completed SS

3 = completed primary school 8 = some college

4 = some JSS 9 = completed college

5 = completed JSS 10 = Arabic education

11 = other, specify

1.2.6 Land farmed acres

1.2.7 Number of Wives | | | | |

1.5.4 Thatch | | | | %

1.6 Wall Materials (% of houses)

1.6.1 Mud walls | | | | %

1.6.2 Mud block | | | | %

1.6.3 Cement | | | | %

1.7 What activities does the chief organize?

1.7.1 Brushing the road | | | |

1.7.2 Cleaning the well | | | |

1.7.3 Community farm plot | | | |

1.7.4 Other (describe) | | | |

1.8 NGO projects in the past 5 years

NGO Name	Type of activity
----------	------------------

1.8.1 | | | |

1.8.2 | | | |

1.8.3 | | | |

1.8.4 | | | |

Social impacts?

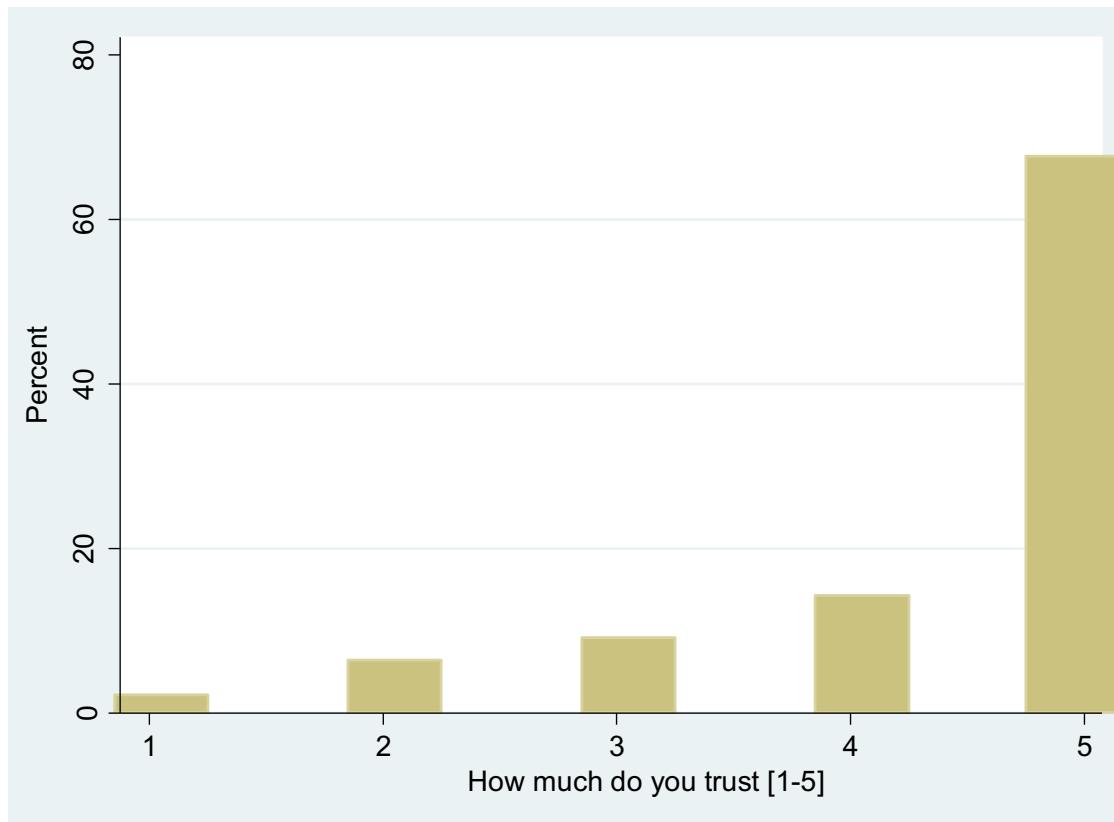
VILLAGE CODE:

HOUSEHOLD CODE:

Module 10.1 SOCIAL CAPITAL

Please rate level of trust in	1. How much do you respect these people?	2. How much do you trust these people?	3. If you were in trouble, would you go to these people for help?	4. How well do these people represent your interest
1. Own HH members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Members of extended family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Neighbors and friends in the village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Strangers in the village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Village chief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Section chief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Paramount chief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Community elders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Chiefdom court	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Magistrate court	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Local police	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. National police	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. National authorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Social impacts?



Social outcomes

- Modified dictator game

Activity #3

	Please choose between the following two options, how you want money to be allocated to you and somebody else in the village:				Die roll (mark one):	Payout to this HH (one line only):	Payout to other HH (one line only):			
	Option A		Option B							
	You get:	Other gets:	You get:	Other gets:						
1	1,000 Le	1,000 Le	1,000 Le	2,000 Le						
2	2,000 Le	0 Le	1,000 Le	1,000 Le						
3	1,000 Le	0 Le	1,000 Le	1,000 Le						
4	2,000 Le	3,000 Le	1,000 Le	1,000 Le						

- Outcome:
sharing types based on choices

Egalitarian types	Freq.	Percent
Inequality-Averse	721	33.38
Behindness-averse	298	13.80
Aheadness-Averse	447	20.69
Selfish	518	23.98
Generous	176	8.15
Total	2,160	100.00

Like GRNP?

Like the GRNP programme	Freq.	Percent	Cum.
Completely Disagree	23	1.02	1.02
Slightly disagree	7	0.31	1.33
Neither agree nor disagree	57	2.53	3.87
Slightly Agree	151	6.71	10.58
Completely Agree	2,012	89.42	100.00
Total	2,250	100.00	

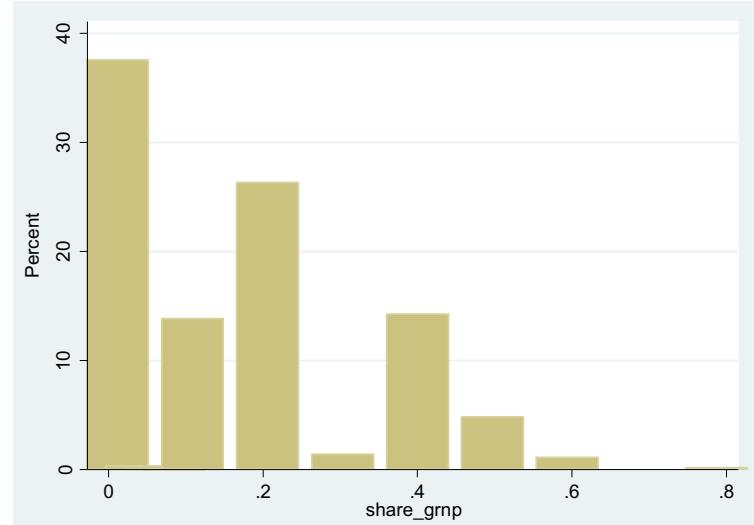
Conservation outcomes

- Dictator game

Activity #2

We will give you 5,000 Le for your time here today. We want to know if you are willing to share any of this money with the GRNP to support their efforts to protect and manage the national park. Out of the 5,000 Le, how many Leones would you like to give to the GRNP?	Keeps for self	Gives to GRNP
	Le	Le

- Outcome: share of endowment shared (or kept)
- $\text{Corr } (y_1, y_2) = -0.01$
- what?



Willingness to invest in conservation

- Going beyond surveys
- Set up an new activity.
 - Believable and real/meaningful measure
 - Behavioral ie: a choice not words
- Land set aside
 - Ask the village if they are willing to select a plot of land that they can designate as an area dedicated to NTFP harvesting.
 1. Agree to not farm on this land for the next several years
 2. Demarcate this plot before the research team returns in a week (brush the boundary of the plot, put up a fence, put up signs or pylons, else)
 3. Collect a sample of NTFPs from this plot to show to the researchers when they return in a week.

Stata/SE 14.1

File Edit View Data Graphics Statistics User Window Help

Tue 10:22

Data Editor (Browse) — WFG_EL_analysis.dta

Filter Variables Properties Snapshots

Edit Browse

id_vill[1]											Variables																																																																																																																				
	id_vill	hh_id	is_chd_nm	is_chd_cd	Treatment	is_3_age	is_4_gender	is_5_tin	is_83_likegrnp	irs_givegrnp	Name	Label																																																																																																																			
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24	1	15	Barri	1	1	35	Female	0	Completely Agree	2000	Label	WFG IS ID...																																																																																																																			
25	3	1	Barri	1	2	59	Male	0	Completely Agree	0	Type	int																																																																																																																			
26	3	2	Barri	1	2	50	Male	0	Completely Agree	0	Format	%8.0g																																																																																																																			
27	3	3	Barri	1	2	51	Male	Yes	Completely Agree	500	Value label																																																																																																																				
28	3	4	Barri	1	2	32	Male	0	Completely Agree	0	Notes																																																																																																																				
29	3	5	Barri	1	2	56	Male	Yes	Completely Agree	500	Data																																																																																																																				

Vars: 10 of 281 Order: Modified

Obs: 956

Filter: Off

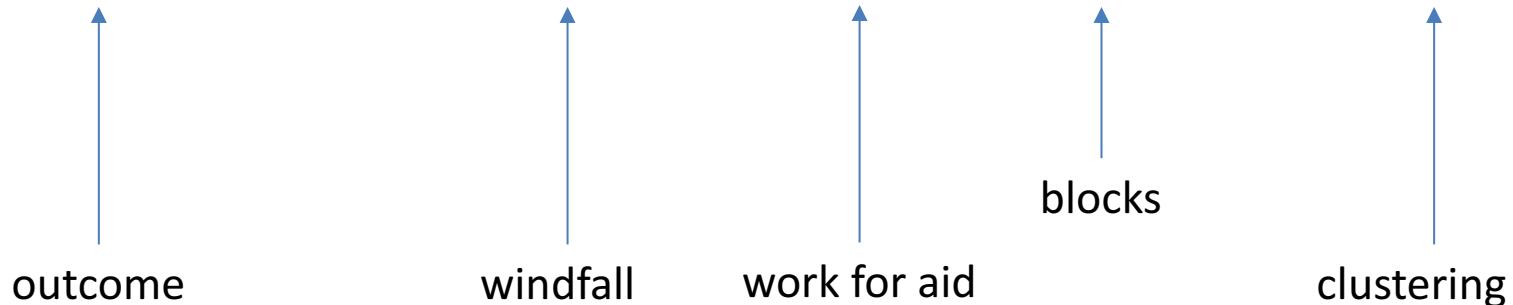


Aid impact

- Hardly any...

Analysis

$$\bullet \quad Y_{ij} = \beta_0 + \beta_1 T1_j + \beta_2 T2_j + W'_k \Pi + \varepsilon_{ij}$$



Many outcomes....

	Obs	Mean	Std. Dev.	Min	Max
Log income from farm products	2209	8.18	5.37	0	15.52
Log income from wage labour	2192	4.33	5.22	0	15.20
Log income from remittances	2188	5.09	5.45	0	15.20
Log other income 1	2243	3.91	5.66	0	15.76
Log other income 2	2224	0.76	2.89	0	14.91
Do you own a...					
...Machete? (1=yes)	2251	0.89	0.32	0	1
...Tin roof?	2249	0.35	0.48	0	1
...Mobile Phone?	2249	0.22	0.41	0	1
...Bed?	2251	0.92	0.27	0	1
...Table?	2251	0.61	0.49	0	1
...Torch?	2251	0.83	0.38	0	1
...Radio?	2251	0.36	0.48	0	1
...WC?	2249	0.37	0.48	0	1
Number of acres rice sown?	2230	2.71	1.86	0	26
Farm productivity (bushels harvested / bushels sown)	2121	2.92	2.35	0	28.57
Number of hours worked in a typical day	2241	5.43	2.14	0	13
Point where the respondent switched	2099	4.70	1.70	1	7
Did you receive an agricultural loan in the previous year? (1=yes)	2251	0.11	0.31	0	1
Did you receive a loan for consumption in the previous year? (1=yes)	2251	0.26	0.44	0	1
Do you save money? (1=yes)	2247	0.37	0.48	0	1
Point where the respondent switched	2118	3.31	1.97	1	7
Change in inequality	2245	2.00	0.90	1	3

- Multiple hypothesis testing adjustments
- Mean index

Mean index

- Define groups / families
- Summary of multiple outcomes within each family
 - Redefine outcomes (more is better)
 - Normalize (relative to control group)
 - Take standardized average of multiple outcome scores
 - Hence outcomes on control group have mean = 0, SD = 1
 - see Kling et al. 2007
- Coefficients represent standard deviations changes
- A case for pre-registration?

Economic Outcomes

Table II. Economic Outcomes

Panel A Aid Impacts					
	(1) Income Flow	(2) Income Assets	(3) AFE Myopic	(4) Hours worked	(5) AFE Effort
Windfall Aid	0.029 (0.118)	0.099 (0.141)	-0.117† (0.072)	-0.124 (0.089)	-0.028 (0.137)
Aid for Work	-0.048 (0.108)	-0.122 (0.116)	-0.139* (0.080)	-0.035 (0.092)	-0.153 (0.129)
N	1617	1617	1517	1611	1507

Constant not reported. Robust standard errors in parentheses clustered at village level.

† p < 0.15 * p < 0.10, ** p < 0.05, *** p < 0.01.

Economic Outcomes

Table I. Economic Outcomes Part 1

	(1) Farm income	(2) Work income	(3) Other income	(4) Productive assets	(5) Other assets	(6) Farm size	(7) Farm productivity	(8) Hours work	(9) Effort AFE
Windfall Aid	0.007	-0.074	0.069	0.094	0.081	-0.072	0.151	-0.129*	0.069
	(0.077)	(0.086)	(0.080)	(0.060)	(0.127)	(0.080)	(0.126)	(0.071)	(0.085)
Earned Aid	-0.045	-0.014	-0.073	-0.082	-0.027	-0.144*	0.087	-0.079	-0.076
	(0.075)	(0.066)	(0.072)	(0.070)	(0.109)	(0.077)	(0.101)	(0.066)	(0.084)
p value T1 vs T2	0.512	0.480	0.059	0.008	0.316	0.226	0.642	0.413	0.069
N	1588	1588	1612	1617	1617	1605	1529	1611	1507

Robust standard errors in parentheses clustered at village level. Chiefdom dummies included. * p < 0.10, ** p < 0.05, *** p < 0.01.

Economic Outcomes

Table I. Economic Outcomes Part 2

	(1) Agricultural loan	(2) Consumption loan	(3) Saving	(4) Myopic AFE	(5) Change in Inequality
Windfall Aid	-0.094 (0.069)	-0.096 (0.061)	0.111 (0.082)	-0.060 (0.074)	0.086 (0.145)
Earned Aid	-0.109 (0.066)	0.017 (0.069)	0.090 (0.083)	-0.087 (0.075)	0.123 (0.152)
p value T1 vs T2	0.821	0.091	0.803	0.736	0.789
N	1617	1617	1613	1517	1611

Robust standard errors in parentheses clustered at village level. Chiefdom dummies included. * p < 0.10, ** p < 0.05, *** p < 0.01.

Social Outcomes

Table II. Social Outcomes

	(1) Trust	(2) Food sharing	(3) Honesty perception	(4) Village level: Honesty AFE	(5) Contribution to Public Goods	(6) Chief Quality	(7) Number of conflicts	(8) Respondent Selfish, based on AFE
Windfall Aid	0.061 (0.103)	0.038 (0.125)	0.085 (0.070)	0.311 (0.345)	0.060 (0.186)	0.021 (0.114)	-0.068 (0.109)	0.036 (0.140)
Earned Aid	0.085 (0.089)	0.114 (0.135)	0.116* (0.065)	0.555 (0.348)	0.138 (0.126)	-0.089 (0.117)	-0.102 (0.115)	-0.032 (0.131)
p value T1 vs T2	0.817	0.522	0.612	0.529	0.700	0.302	0.655	0.609
N	1615	1613	1616	66	1616	1551	1567	1548

Robust standard errors in parentheses clustered at village level. * p < 0.10, ** p < 0.05, *** p < 0.01.

Conservation Outcomes

Table IV. Conservation Outcomes

	(1) Hunting, Logging and Mining in Community Forest	(2) Allow Illegal activities in GRNP	(3) Should have conservati on association in village	(4) Healthy Community Forest is important	(5) Healthy GRNP is important	(6) I like the GRNP	(7) Dictator game GRNP	(8) Quality of land for FFE
Windfall Aid	0.276 (0.245)	0.005 (0.063)	0.058 (0.150)	-0.064 (0.131)	0.072 (0.111)	0.084 (0.078)	0.116 (0.127)	0.911 (0.998)
Earned Aid	-0.059 (0.149)	-0.001 (0.059)	-0.127 (0.147)	-0.166 (0.113)	-0.198 (0.133)	-0.166 (0.101)	0.101 (0.127)	-0.148 (0.340)
p value T1 vs T2	0.157	0.927	0.211	0.497	0.038	0.013	0.907	0.297
N	1608	1615	1617	1617	1617	1617	1540	51

Robust standard errors in parentheses clustered at village level. * p < 0.10, ** p < 0.05, *** p < 0.01.

Conclusions

- Resources used for public goods in most treatments
 - significantly more so when windfall
- Hardly any impact
 - Community spirit!
- Done?
 - Is this evidence of absence of the absence of evidence

Conclusions?

- Hardly any impact
 - Do the results make sense?

Conclusions?

- Hardly any impact
 - Did the control group get treated?

Conclusions?

- Hardly any impact
 - Low treatment effect (\$15 per household)
- After seeing results: RSPB

“Of course there was no impact!”

Did the control group get treated?

- Survey: answers on voucher use for control villages!
- Ask the NGO for their records
 - Got a very complicated excel sheet
 - Lots of numbers, no idea what they mean
 - Perhaps they don't know either
- Trust what?
- Ignore?
- Accept?

Conclusions?

- Hardly any impact
 - Low treatment effect (\$15 per household)
- Power?
- MDE (average) should have been 0.3 SD

Power?

Table A1 Power calculations (MDE) based on baseline variables

Name	Mean	SD	MDE	% difference at mean
Tin roof?	0.35	0.48	0.14	41.83
Mobile Phone?	0.13	0.34	0.10	79.02
Do you hide your harvest?	0.62	0.49	0.15	24.09
# bhs you share with	3.42	2.83	0.86	25.25
Are people honest?	0.91	0.29	0.09	9.74
Is inequality changing?	1.90	0.77	0.24	12.40
Do you attend Community Meetings?	0.90	0.29	0.09	9.93
Is your chief good?	0.89	0.31	0.10	10.79
# times won in coordination game	1.59	1.09	0.33	20.94
Egalitarian type, sharing game	2.67	1.57	0.48	17.96
Point where respondent switched something for nothing	2.90	1.58	0.48	16.62
Point where respondent switched Time preference game	3.93	2.19	0.67	16.95
Hours worked per day	5.57	1.79	0.55	9.81
# of <u>bushels</u> rice harvested this year	3.92	2.54	0.77	19.74
# palavas with other HH last month	0.35	0.64	0.20	55.91
# asked chief for help last month	0.86	1.05	0.32	37.20
# times worked on community project last month	2.29	1.49	0.45	19.82
# community meetings attended last month	2.48	1.58	0.48	19.37

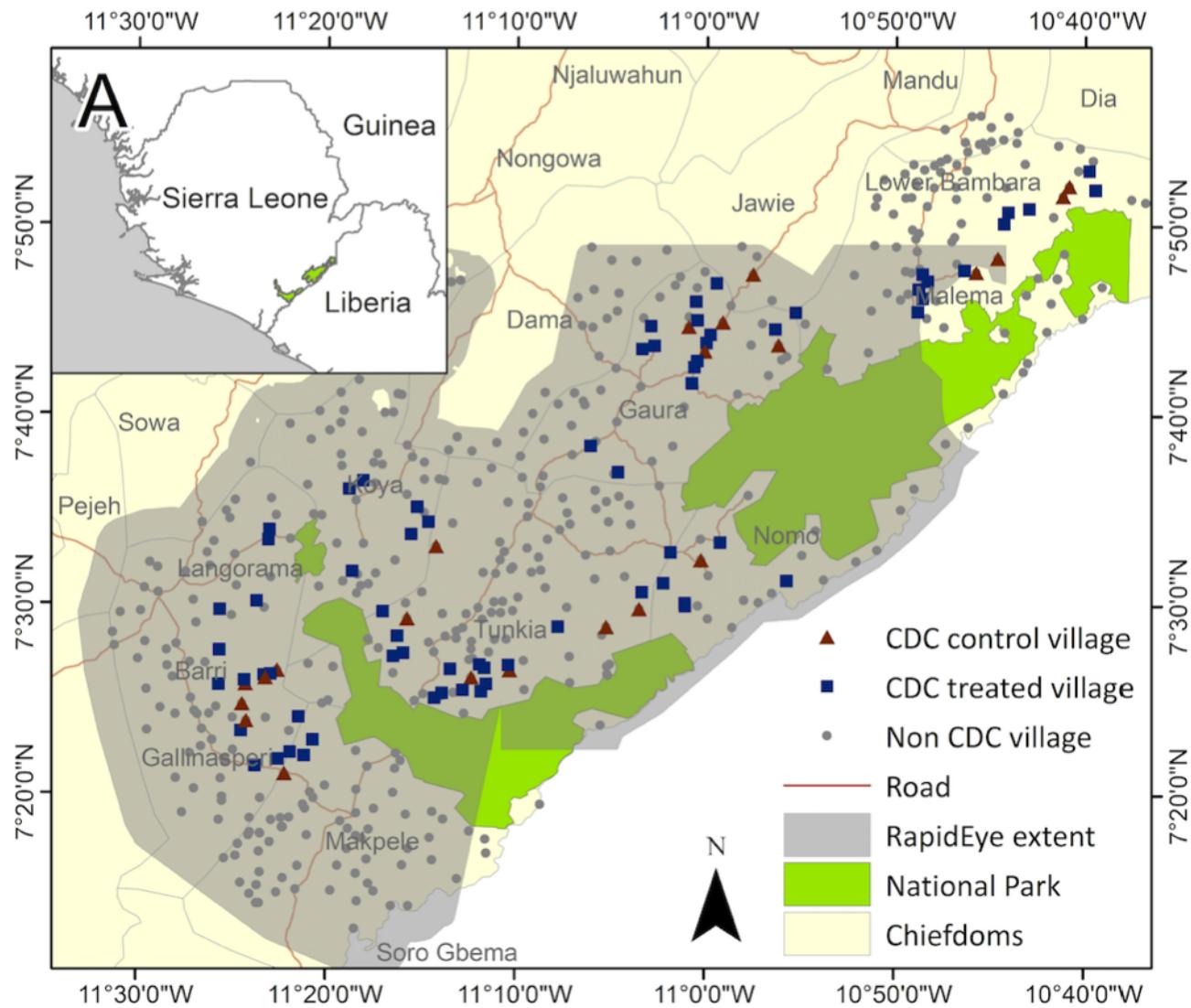
Notes: We assume for $i=1, \dots, 30$ respondents per village and $j=1, \dots, 23$ villages per treatment arm. Based on earlier work we assume $\rho=0.1$

Conclusions

- Hardly any impact
 - Spillover effects? Are units independent?

Spillovers

Independence?



Control over implementation

- **Evaluation is not implementation** of intervention
- Lots of opportunities to lose control
- Often there is a collaborating partner, NGO, company, government
 - Quality of implementation varies by unit (records?, control?)
 - Treatment group is not treated
 - Treatment is delivered to control group
 - By partners
 - By other agency “*Goal built us fake toilet*”
 - Due to proximity of units: ie spillovers

When is this a problem?

Control over implementation

- People respond to treatment
 - People (dont) want to be treated (compliance problems)
 - People change behavior in response to treatment (Hawthorne effects)
 - Confusion over intervention and evaluation (informed consent)
 - *Students from Njala University played some games with us and we gain some money*
 - *Njala University researchers have done extremely well in our community. Through their research we got the mosque from GFP*

When is this a problem?

Control over implementation

- Research implementation
 - Often large groups of research assistants
 - Logistical challenges
 - RAs misbehave
 - Attrition
 - People dont want to be (re-)interviewed
 - People leave, die, etc
 - Major shocks (Ebola!)
 - Mis-specifying variables
 - Not including relevant variables

When is this a problem?

Informed Consent

John List, *Principle Investigator*

Give the informed consent form to the participant and talk it through with them.

My name is _____ . I am a research associate hired by Njala University, Wageningen University, Cambridge University and the University of Chicago. I am here to conduct a study that will look at livelihoods in villages around the Gola Rainforest National Park (GRNP).

Before we begin, I would like to take a minute to explain why I am inviting you to participate and what I will be doing with the information you provide to me. Please stop me at any time if you have any questions. After I've told you a bit more about my project, you can decide whether or not you would like to participate.

This research is being conducted by researchers from the Njala University, Wageningen University, Cambridge University and the University of Chicago. We will be interviewing in 100 villages near the GRNP. The researchers will use the information we collect in articles that might be published, as well as in academic presentations and to assist NGO's working in the area.

Participation should take about an hour. Participation is on a purely voluntary basis. You will be asked to participate in an activity and you will be asked to answer questions about yourself and your family. There are minimal risks to you from answering these questions. The information we collect today is private and confidential. We will not share any details from the survey about your friends or family with anyone besides the research team from Wageningen University and the University of Chicago. These surveys will go to a secure location at Wageningen University.

If at any time and for any reason, you would prefer not to answer any questions, please feel free not to. If at any time you would like to stop participating, please tell me. We can take a break, stop and continue at a later date, or stop altogether. You will not be penalized in any way for deciding to stop participation at any time.

If you have questions, you are free to ask them now. If you have questions later, you may contact me by calling the research supervisor, Esther Mokuwa, at 079-837708. You may also contact the researchers at the University of Chicago. Ty Turley is the student researcher responsible for this project, and he can be reached in the following ways:

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Department of Economics
1126 E. 59th St. Chicago, IL 60615, USA
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Solutions

- A lot of communication
- Lots of preparation
- A long and detailed protocol, informed consent
- Common interests
- Pre-analysis plan
- Design adjustments
- Econometric adjustments

Windfall Gains Endline Protocol

Sierra Leone

Wageningen University / University of Cambridge / University of Chicago /Njala University/ Gola Forest Programme

This version: 08 May 2013

Contents

Overview of activities.....	2
Follow-Up Activity 1: Household Survey and AFEs	3
SCHEDULE OF ACTIVITIES DURING A VISIT	3
VILLAGE MEETING.....	3
GENERAL COMMENTS	4
RESPONDENT SURVEY	5
ACTIVITY #1: COORDINATION.....	5
ACTIVITY #2: SHARING WITH NGO	6
ACTIVITY #3: SHARING WITH NEIGHBOURS	6
ACTIVITY #4: SECRET DICE GAME.....	6
ACTIVITY #5: DISCOUNTING (HYPOTHETICAL).....	7
ACTIVITY #6: EARNED VS. GIVEN (HYPOTHETICAL)	7
STATUS ORDER.....	7
PAY-SLIP PAYMENT.....	8
Payment Protocol	9
PACKING LIST	9
VISIT PROTOCOL.....	9
Follow-Up Activity 2: NTFP Development and Rehabilitating Degraded Land.....	10
ACTIVITY PROTOCOL.....	10

Benefit of collaboration?

Mission accomplished: Gola is verified!

◀ REPLY ▶ REPLY ALL → FORWARD ⋮



Tubbs, Nicolas <Nicolas.Tubbs@rspb.org.uk>

Mark as unread

Thu 26/11/2015 17:33

Postvak IN

To: Jeremy Lindsell <jeremy.lindsell@gmail.com>; Voors, Maarten; Andreas Kontoleon <ak219@cam.ac.uk>;

- This message was sent with high importance.
- You forwarded this message on 26/11/2015 19:01.

Dear Jeremy, Maarten and Andreas,
I hope you're all well!
We're not communicating this externally quite yet but wanted to inform you personally.

Today is a milestone: After our validation a few weeks ago, today, Gola has 975,024 verified credits to the VCS and CCBA, all now for sale!

After 5 challenging years and a mammoth team effort.

There are too few words to express what all this means and represents, whether it be for all of us involved personally, Gola, Sierra Leone, RSPB, BirdLife and tropical forest conservation globally!

Thank **you** for making the impossible possible, this would not have been possible without you!

Mission accomplished.

And the timing is pretty sweet to, Paris CoP and Thanksgiving!

Congratulations,
Nicolas

- Descriptive data
- MnE within organisation
- RCT?