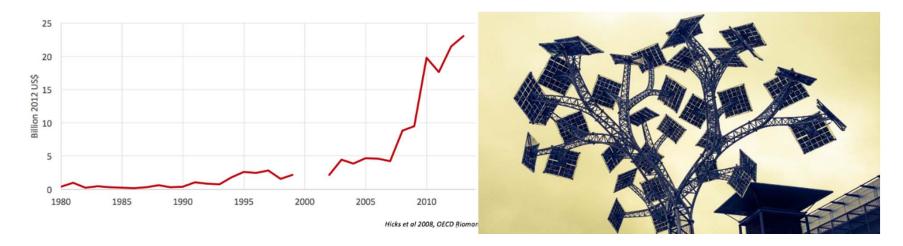
Double dividends of climate aid – an effective way forward?

// 21 MAR, 2016



Subhrendu K. **Pattanayak** (Duke University) with G **Köhlin**, E. **Mattsson**, M. **Ostwald**, A. **Salas**, E. **Sills**, D. **Ternald** (thanks to: EBA, Reference Group, CATIE, EfD)

Stockholm, 21 March 2016

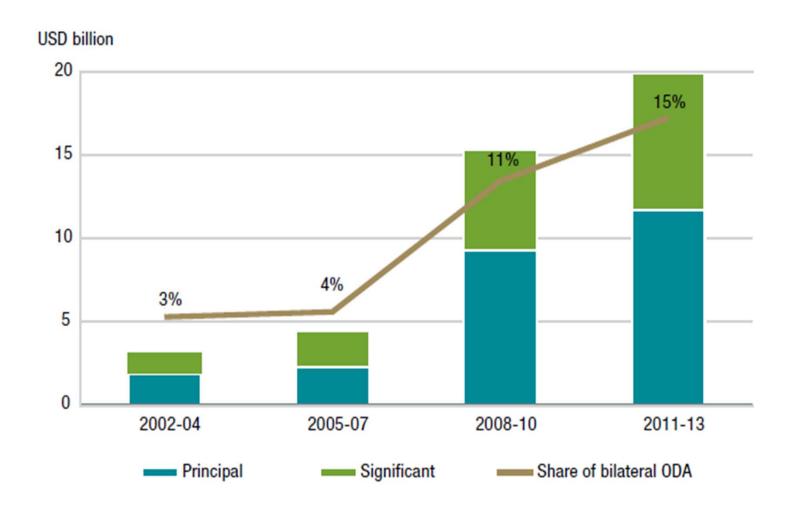
Questions

- what are the flows of climate aid, especially for Sweden?
- what do we know about the impact of climate interventions?
- how should they be evaluated to assess both their climate impacts and development co-benefits?

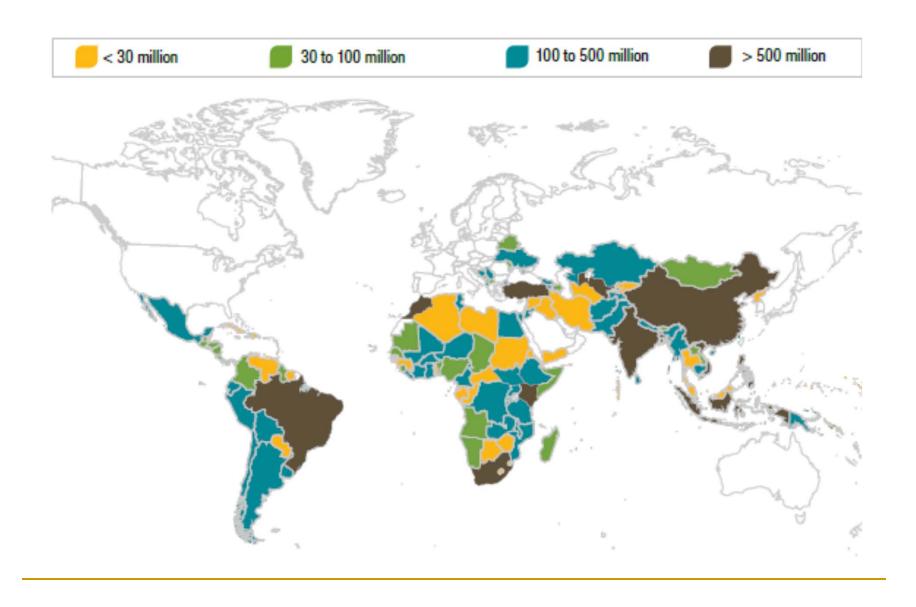
Road Map

- Brief summary of aid flows
- Systematic Review approach
- Findings
 - Forest conservation
 - Household energy transitions
- Summary conclusions
 - Recommendations
 - Promising initiatives ...

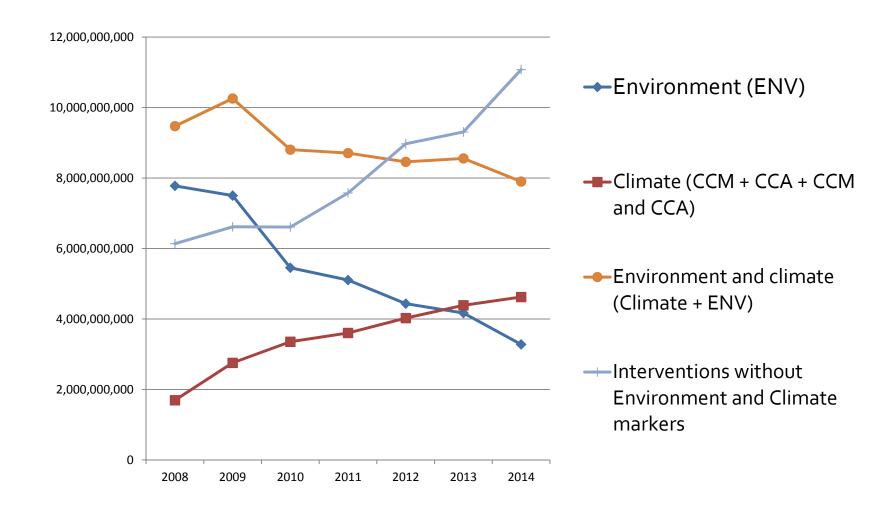
Rising share of bilateral ODA



Global distribution of climate finance



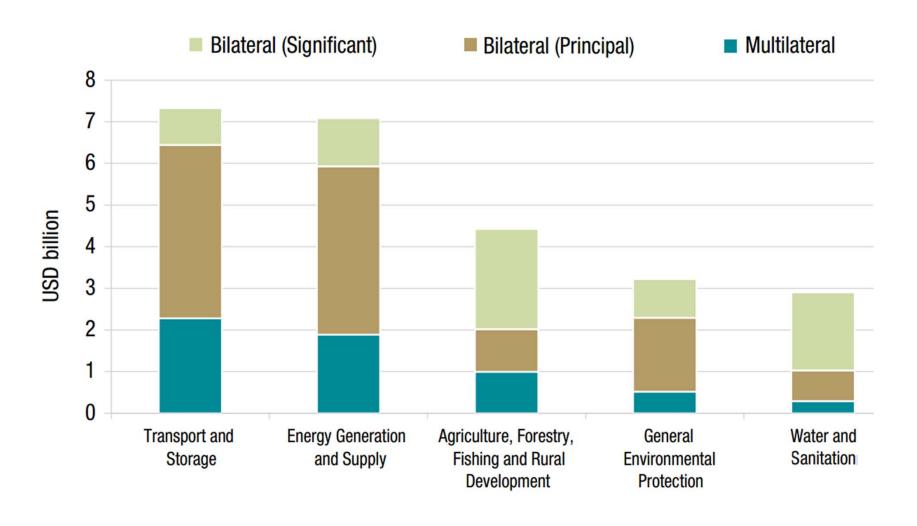
Environmental aid displaced by climate aid

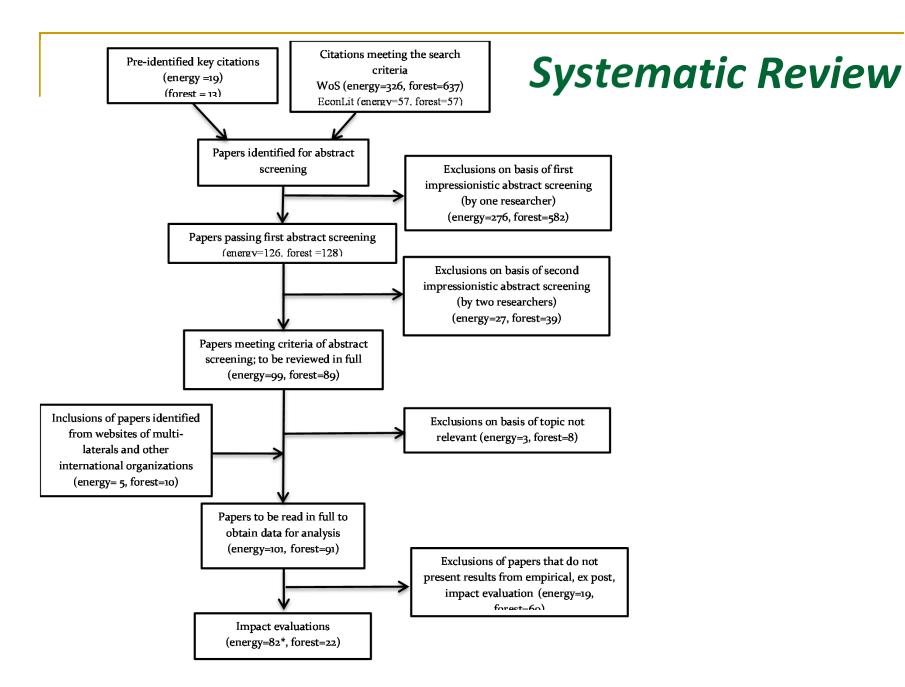


Nordic ODA focusing on different aspects

Sweden		Norway		Denmark		Finland	
Top 5 funds		Top 5 funds		Top 5 funds		Top 5 funds	
CTF	86.6	Amazon Fund	1049.5	LDCF	31.7	LDCF	30.9
LDCF	74.3	UN-REDD	225.7	CGIAR	31.6	GEF 5	29.1
AF	57.7	FCPF-CF	179.8	GEF 5	27.3	CGIAR	20.9
GEF 5	43.9	FIP	161,6	PPCR	24.1	FCPF-RF	20.9
SREP	41.1	CGIAR	119.9	SREP	12.6	SCCF	10.5
Total	303.6	Total	1736.5	Total	127.3	Total	112.4

Top 5 sectors of climate finance





Systematic Review: Exclusion & Inclusion

- Empirical field-based evidence
- Attempt to address causality
 - Confounding & counterfactuals
 - Baseline, control, covariates
- Keywords: intervention, location, co-benefits, climate, evaluation
- Programs, projects in the sector currently receiving climate-aid; though aid flow itself has not been evaluated ...

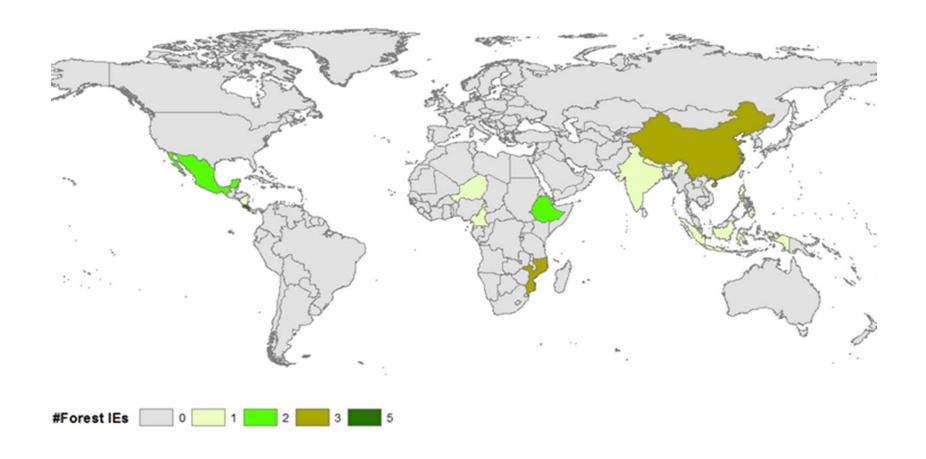
Sector 1: Forest Conservation





Payments for Ecosystem Services (PES), Protected Areas, Decentralized forest management, FSC, ICDPs

Global distribution of Forest Conservation IE



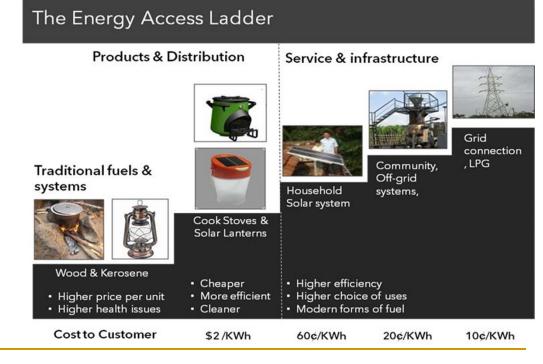
Forest Conservation IE: Findings

- PES programs are successful; essentially in improving environmental outcomes (forests) and improving incomes of participants, particularly in LAC
- Some evidence that PAs and decentralization efforts are effective
- Insufficient evidence on other conservation initiatives
- Few IE of forest conservation in the context of climate change;
 - those that do focus on REDD+ (but no results yet)
 - carbon & non-carbon outcomes carried out by different teams and assumptions
- Most IEs focus on a few countries; not those with the most forest carbon or forest-based climate aid
- Most studies are retrospective reflecting tendency to initiate interventions without the groundwork for later evaluations

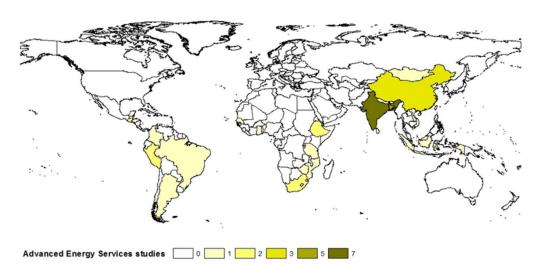
Sector 2: Energy Transition



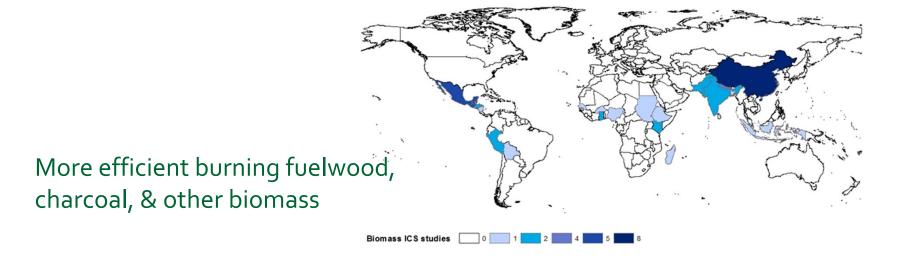
Rural
electrification –
grid, off-grid;
Wind, solar,
biogas
More efficient
burning
fuelwood,
charcoal, &
other biomass



Global distribution of energy transition



Rural electrification – grid, offgrid; Wind, solar, biogas



Energy IE findings

		AIR POLLUTION	HEALTH	FUELWOOD	INCOME
Biomass Stoves	Rigorous	4	3	3	1
	Basic	11	7	4	1
Advanced Energy Services	Rigorous	3	6	4	7
	Basic	9	14	5	4

Energy IE: Findings

- ICS most studied energy intervention
- Greater focus on environmental health outcomes, rather than social (fuelwood & income) outcomes
- Robust evidence that AES (rural electrification, solar, ...) deliver health & income benefits

Why so few rigorous IE? The know-do gap

- Market failure
 - Adverse selection because consumers not discriminating
 - poorly done evaluation crowds out high quality
 - Monopsonistic program managers choose
 - what gets evaluated & how much is spent
 - Externalities of evaluation ...
 - ...may not directly benefit specific project
 - ...will likely be completed after project cycle
 - Ignore projects with diffused, distant impacts
- Differences in evidentiary standards ...
 - Scholars protecting credibility (99% significance)
 - Policy makers minimize political costs associated with inaction
- IE 2.0: make them more useful
 - Why? For whom? When?
 - Mixed methods, mixed disciplines

Conclusions

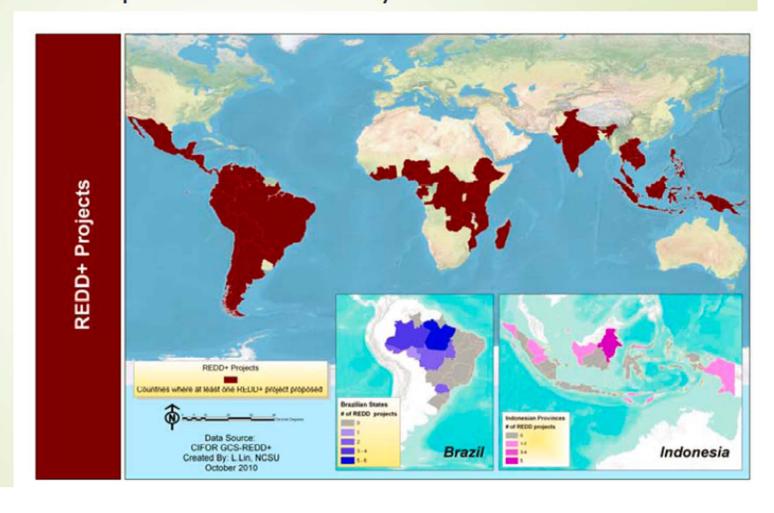
- Climate finance is increasingly bilateral, fragmented and discretionary
 - although very hard to map funds to sectors
- ODA more focused on climate, particularly mitigation, which can be risky
- Few rigorous evaluations of landuse policies, more of energy but focused in some regions and subsectors
- Signs of change of closing know-do gap .. e.g.,
 - Pantropical GCS REDD+ (CIFOR)
 - Climate Resilient Green Economy Strategy (EDRI, Ethiopia)

Recommendations

- Fragmentation of climate finance
 - Coordination among donors
 - Evidence-based aid
- Expand support for advanced energy services
 - cautious support for biomass ICS & forest conservation
- Help close "know-do" gap
 - Incentivize scholars to pursue practice-based-evidence
 - Allow experimentation and learning in climate finance
 - Better targeting of climate finance spatially & topically
 - Evaluate climate and welfare (poverty) outcomes

Promising Initiative 1: REDD+ GCS (CIFOR)

Global Comparative Study on REDD+

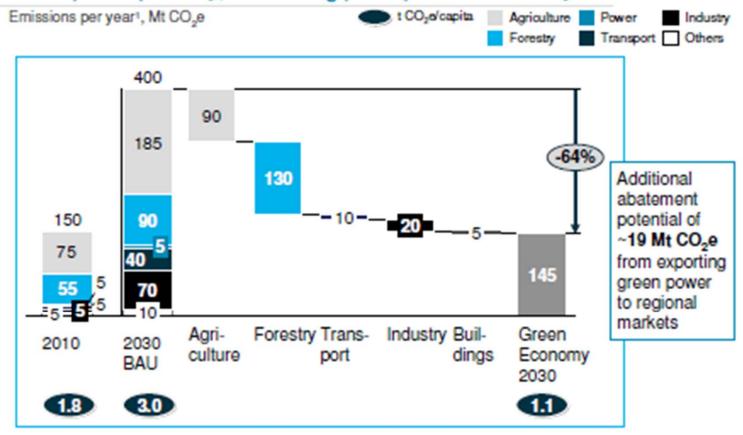


Promising Initiative 1: REDD+ GCS (CIFOR)

- 6 country, pan-tropical evaluation of subnational initiatives (UNFCC: demonstration projects)
- NORAD-CIFOR partnership
 - well funded, long lived
 - researchers involved at start
 - baseline surveys incomes, livelihoods, perceptions, opinions
 - ecological measures
 - stakeholders involved from beginning to align scholar and proponent (program manager) incentives
 - working with pilot projects & practices at planning stage

Promising Initiative 2: EDRI

CRGE implementation could ensure a low-carbon economic development pathway, decreasing per capita emissions by 60%



¹ Rounded numbers

² Currently estimated emissions form buildings and waste

Promising Initiative 2: EDRI

- Autonomous with mandate to carry out impact evaluations of climate interventions
- Responsible for relevant baseline data to enable later impact studies.
- Multi-disciplinary teams to ensure both climate and welfare foci
- Local capacity to ensure long-term feed-back to policy processes

Not arguing that easy or cheap solutions

- On the contrary, our systematic reviews of the literature leads us to four strong recommendations summarized in the previous section
 - more sponsorship of evaluators who will study real life programs, policies and practices,
 - involving evaluators in the design stage,
 - better topical and geographic matching of evaluations and policy needs,
 - multi-disciplinary evaluation teams, likely requiring elaborate and often expensive designs over long periods of time.
- Unfortunately, these prerequisites are difficult for donors and implementing agencies to meet, which is probably why there are few high quality impact evaluations found for the systematic reviews.
- However, given the high stakes, in terms of both short-term poverty reduction and long-term climate implications, we hope and urge donors, implementing agencies, scholars and evaluators all rise to the occasion and address these challenges.
 - by strengthening domestic capacity in the recipient countries and that domestic, independent research institutes are given the mandate, and necessary resources, to fulfill this important role.