Realizing Local Development in the Carbon Commodity Chain

Political Economy, Value and Connecting Carbon Commodities at Multiple Scales

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Occasional Paper Three

Social Dimensions of Green Economy and Sustainable Development

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Acronyms

CDCF	Community Development Carbon Fund
CDM	Clean Development Mechanism
CER	Certified Emissions Reduction
CSR	Corporate social responsibility
EU ETS	European Union Emissions Trading Scheme
GHG	Greenhouse gases
GS	Gold Standard
ICS	Improved cookstoves
MRV	Monitoring, reporting and verification
NAMA	Nationally Appropriate Mitigation Action
NGO	Non-governmental organization
PoA	Programme of activities
REDD+	Reducing Emissions from Deforestation and Forest Degradation
tCO_2e	Tonne of carbon dioxide equivalent
VER	Voluntary emissions reduction

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Summary

This paper provides an analysis of how local community development is connected to the global carbon economy through the creation of carbon commodities (offset credits) and the role of premium credit certification in assisting in local development. The paper shows that information on local conditions should be focused on political-economic processes and the interactions between actors to nuance the social benefits of carbon credit generation in developing country contexts.

International carbon finance markets are seen as tools to reduce global emissions at lowest cost and contribute to sustainable development in developing countries. Carbon finance can potentially create lasting development benefits, including the transition to—and scaling up of—low carbon sustainable economies that are pro-poor. However, the social benefits of carbon finance have so far been unevenly distributed. Carbon markets that are focused solely on carbon reductions tend to obscure local social development contexts. In order to redress these imbalances, pro-development carbon funds and standards to certify projects with local benefits have been created to help place a price on local social dimensions of projects. This paper, however, shows that although such premium carbon[1] certification may increase global carbon credit prices, it does not necessarily improve local conditions. Therefore, premium carbon should be seen within broader contexts:

- projects are "wired in" and connected through multiscalar political-economic structures that create both opportunities and constraints for local development within and outside of pro-development labels and funds;
- global carbon finance influences do not flow unidirectionally: local agency interacts with global structures of carbon finance, reworking it in local contexts and shifting the value placed on credits at global levels; and
- the communication and "unveiling" of local production of the carbon commodity does not necessarily change local outcomes, but provides some movement to include social dimensions in a more structured way.

Through illustrative case studies, this paper shows that the communication of local benefits to buyers of carbon credits does not outweigh the political economy of project implementation and the requirements for creating and calculating carbon reductions as commodities. Instead, local outcomes are determined by specific connections, and knowledge and power asymmetries that link buyers in carbon commodity chains with local people. For example, a small-scale hydro plant in Honduras provided local jobs, reforestation and some communities with electrification. The project was funded by pro-community development carbon funds, and retroactively registered to the Gold Standard to provide a price premium on the credits. Local benefits, however, were uneven and mediated by local power relationships between project developer and communities, and the agency of certain communities to renegotiate based upon their natural and social capitals independently of the project's status as premium carbon. On the other hand, pro-development carbon labels enabled integrated carbon-development technologies, such as cookstove projects, to be scaled up and communicated outside of more complex compliance markets by fostering local institutions and creating cross-scale connections and partnerships.

The conclusions of the study have specific policy implications:

1. *Local participation in globally financed mechanisms:* Ensuring interaction with local people in a systemic and integral way is important for premium or "ethical" carbon to work. Engagement with local people at all project stages—design, implementation and continued use—is important to ensure effective use and

[1] "Premium" carbon relates to the inclusion of certain carbon offset projects into standards, such as the Gold Standard (www.cdmgoldstandard.org), which aim to certify and communicate the social benefits of projects to buyers.

communication of benefits. This is especially the case in carbon reduction projects that are decentralized and rely on local capacity to scale up projects and monitor carbon reductions over time.

2. *A focus on political-economic processes:* Reporting on systemic local inclusion should focus on political-economic processes and be communicated through monitoring, reporting and verification (MRV). The power tools of carbon finance—MRV—could be adapted to systematically incorporate reporting on processes for local social development in addition to carbon at the verification stage. The prevalence of MRV in current climate debates could be also used as a hinge for better incorporation of social dynamics into future international climate finance mechanisms (such as the United Nations collaborative initiative on Reducing Emissions from Deforestation and Forest Degradation/REDD+ and the development of Nationally Appropriate Mitigation Actions/NAMAs). This builds on existing efforts from organizations like the Gold Standard.
3. *Meeting in the middle: meso-level analysis and transparent information:* Linking political economy information and analysis with an actor-oriented approach at micro, meso and macro levels (that is, including intermediary actors in addition to global analysis and detailed local case studies) will provide tools for both analysis and participation throughout the carbon commodity chains. Structuring possibilities for local participation and information generation through carbon standards and regulation would facilitate this broader research-based accountability mechanism.
4. *The limits and possibilities of pro-development carbon labels*: Aiming to reveal local social relations to the fullest extent possible may a priori render the use of markets inappropriate because of increased transaction costs and inherent uneven development characterized by market expansion. Moreover it is not possible for labels to convey completely local conditions of production. As a result, labels could potentially undermine local processes. Despite this, investors are focusing on high quality offsets and multiple layering of benefits. Therefore more information, accurately collated and presented, may help in this broader sea change to high quality offsets, especially in light of the movement toward process information in addition to tick-box outputs. New media, communications and crowd-sourced data (associated with social benefits and carbon MRV) are interesting avenues for continued research and policy innovation to support this movement pushed by pro-development labels and standards.

A more inclusive social development component in carbon finance would therefore require three "I"s: **information** on benefit and power asymmetries; **inclusion** of local agency by structuring participation at systemic levels; and **innovation in communication** of participation in the carbon commodity chain. These components would help provide an understanding of the interconnections that mediate social-carbon relations, and foster social inclusion in connecting greening economies.

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Introduction

The global green economy will be characterized by connections between communities, companies, markets and governments across space and scale. International carbon and climate finance are already creating emissions reductions that link buyers in developed countries with carbon-reducing activities in developing countries. These emissions reductions are used as legal compliance tools (for example, under Kyoto), voluntary actions (such as for corporate social responsibility initiatives) or creating broad-based bilateral or multilateral emissions reductions agreements (such as climate finance[2]). This paper examines the effect of international carbon finance mechanisms on local development through an examination of the political economy of projects, the creation of carbon commodity and the use of "premium" carbon labels, and broader carbon governance processes.

Carbon finance creates new commodity chains that transcend traditional economic barriers and link developed country emitters with developing country communities and projects (Bumpus and Liverman 2008). The paper focuses on global-local institutional linkages along carbon commodity chains and shows how socio-ecological relations affect the commodification of carbon and its communication in global markets. Following examples of Fair Trade commodities, the paper asks questions about the politics, interests and material nature in creating offsets that link global spheres of influence to local places (Bacon 2010; Newell and Bumpus, forthcoming). The paper examines how locales are wired in to broader political economies by exploring North-South links, how "value" is interpreted and created in the commodification of carbon, and its effect on access to development benefits in local contexts.[3] The paper examines local use values (local benefits associated with the utility of a project creating carbon credits) and their relationship to global exchange values (the price of the carbon commodities from a project). Key to understanding how the social dimensions of carbon offsets may be improved is, therefore, examining the institutional, material and social dimensions involved in creating a tonne of carbon dioxide equivalent (tCO_2e) as a commodity, and the relative importance of how local benefits are incorporated into global carbon prices. The paper asks: given that carbon finance creates additional[4] opportunities for project development, what then mediates local social benefits?

Premium carbon—carbon credits with high local development benefits that have been certified by organizations such as the Gold Standard (GS)[5] or Climate Community and Biodiversity Standards[6]—command a higher price in the carbon markets when buyers value development stories associated with carbon reductions (Nussbaumer 2009; Parnphumeesup and Kerr 2011). They include a wide variety of projects, including improved wood cookstoves, efficient light bulb installations and small-scale hydroelectricity and agroforestry. Common to these projects is the certification of local benefits and their communication in global markets, not dissimilar to Fair Trade products such as coffee, which create an "ethical formation" of both product and associated social benefits (Mutersbaugh and Lyon 2010:28). Focusing on information and transparency in commodities, fair trade analyses critically examines the commodity chains or