Title: Constructing National REDD+ Architecture with Political Ecology

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Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+) represents a form of environmental governance that transcends multiple structures of decision-making and organizations, assembles actors with diverse interests, and translates into numerous implementation procedures. At its core, REDD+ are policy approaches and positive incentives that aim to simultaneously address climate change and rural poverty, while conserving biodiversity and sustaining vital ecosystem services (Parker, Mitchell et al. 2009). The idea behind REDD+ is simple: countries that are willing and able to reduce emissions from deforestation and forest degradation should be financially compensated for doing so. According to Scholz and Schmidt (2008), previous approaches to reduce global deforestation and forest degradation have so far been unsuccessful, and REDD+ should provide an innovative framework to allow countries to end this destructive historical trend.

Despite its importance on the design of national implementation scheme, the nature of the global REDD+ architecture is yet to be universally institutionalized. Angelson (2009) argued that this is because the landscape of REDD+ varies significantly across participating countries depending on the differences in land tenure systems, drivers of deforestation and forest degradation, previous experiences with conservation programs and governance capacity. To proceed with REDD+, participating countries thus adopt flexible mechanisms

and implement the project in three overlapping phases. Sources of funding vary depending on the phase of the project. For example, while voluntary financial contributions from the World Bank's Forest Carbon Partnership Facility (FCPF), the United Nations Collaborative Program on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD Programme), or bilateral initiatives are the main funding sources for phase one. Funding for phase two comes from the bilateral and multilateral agreements and the UNFCCC-COP mandated fund-based financing scheme. These funds may generally be spent on national capacity building and readiness, broad policies to address the drivers of deforestation and forest degradation, and project performance. Involvement of funding from private sectors and other independent sources will be more visible in the third phase (Streck, Gomez-Echeverri et al. 2009).

Thirty-seven countries with approximately 150 projects have applied and been approved to participate in the World Bank's FCPF for support to prepare for a future REDD+ mechanism (World Bank 2011). While more than US$3.5 billion has already been spent on REDD+ preparation since June 2008, the current contributions and pledges to the FCPF as of March 15, 2011 was US$ 157 million (World Bank 2011a). It should be emphasized that this amount of funding forms only a fraction of the total global carbon market which according to Turner and Sjardin (2011) is estimated at US$160 billion. Even so, this multilateral funding for early REDD+ has significantly changed the debates and approaches to tropical forest management (Phelps, Guerrero et al. 2010), and the academic community has been pressed to keep pace with this rapidly evolving environmental science and policy field (Campbell 2009). Academic interpretation and research on REDD+ might be

categorized into two themes. While critical social science research on the subject represents the first (Bulkeley 2005; Bumpus and Liverman 2008; McGregor 2010; Bumpus and Liverman 2011; Peet, Robbins et al. 2011), technical reports that focus on preparing the project for implementation make up the second (Scholz and Schmidt 2008; Angelson 2009; Johns, Johnson et al. 2009; Parker, Mitchell et al. 2009; Streck, Gomez-Echeverri et al. 2009; Wertz-Kanounnikoff and Angelson 2009; Phelps, Guerrero et al. 2010).

Bulkeley (2005) argued that new forms of environmental governance are being scaled and rescaled through the issue of climate change to include new politics of scale and the emergence of networks that include management from state and non-state actors taking on a variety of roles. In addition, Liverman (2004) identified the commodification of nature and the reworking of environmental governance to include consumers, corporations, environmental groups, and transnational institutions. REDD+ sits at the juncture of these two themes in commodifying the atmosphere with new governance mechanisms and creating markets among multiple actors, and consequently pose interesting avenues of investigation in critical research. Therefore, studying the creation, consumption, and governance of REDD+ should draw on work that has focused on regulation and nature under neoliberalism (Peck 2001; Bridge 2002; McCarthy and Prudham 2004; Bakker 2005; Liverman and Vilas 2006; Bumpus and Liverman 2008)

On the contrary, McGregor (2010) argued that both the dominant global managerialist perspective, that sees REDD+ as an apolitical technical and programmatic challenge (Sandbrook, Nelson et al. 2010), and the oppositional populist response, that sees REDD+

as another form of neoliberal expansionism infringing on forest people's rights, failed to capture the complexity in the conceptualization of REDD+ and its manifestation in particular place. McGregor's (2010) analyses of the ongoing evolution of REDD+ in Indonesia suggested that perspectives in critical political ecology should be drawn from as a framework of analysis to highlight the importance of place and its significance on the implementation of REDD+. In addition, Bumpus and Liverman (2011) argued that the interaction between human livelihoods and international political negotiations on trading mechanisms, and the variable definitions of forests and local implementation of conservation through REDD+, make it a key issue for a political ecology analysis to understand the translocal impacts of the policy, the increasing mobilization, and differentiated knowledge politics of indigenous groups and supporting REDD+ initiatives. Political ecology's long concern with questions of forest governance suggests that it can offer important insights into the debates over REDD+ including the governmentality of forest definition, measurement, and certification, the struggle over property and indigenous rights, the causes of deforestation and most effective solutions, and the institutional roles of the World Bank, environmental NGOs and other actors (Peet and Watts 1993; Backstrand and Lovbrand 2006; Coomes, Grimard et al. 2008; Turner and Robbins 2008; Peet, Robbins et al. 2011).

The main objective of the World Bank's FCPF is to help inform the global negotiations on REDD+ at the UNFCCC-COP annual conference with early lessons learned from the thirty-seven REDD+ participating countries. To do so, the funding from FCPF has primarily been spent in the participating countries on activities that will assist the

development of national REDD+ implementation scheme (World Bank 2011a). As one of the participating countries, a significant amount of technical, social, political discussions and negotiations have taken place in Cambodia drawing on experiences from the current REDD+ demonstration projects. As of 2011, there are five REDD+ demonstration projects, two of which have already begun sale of carbon credits on the volunteer carbon market since 2010, in Cambodia making it one of the two most prioritized countries in Southeast Asia (another being Indonesia) for research on REDD+ development and implementation (Phelps, Guerrero et al. 2010).

Cambodia is classified as a 'high forest cover, high deforestation' country (Griscom, Shoch et al. 2009), with approximately 10.7 million hectares of forest in 2006, and an annual deforestation rate of 0.8 percent between 2002 and 2006; approximately 379,485 hectares of forest were lost during this period (Forestry Administration 2007). The Forestry Administration of the Ministry of Agriculture, Forestry and Fishery is the responsible authority of REDD+ acting as the national REDD+ focal point in Cambodia. The Technical Working Group on Forest and Environment also plays a key role in REDD+ development in Cambodia. The body is the formal coordination mechanism and high level coordination for multi-stakeholder dialogues on forest and environmental issues among the Royal Government of Cambodia represented by different ministries/ agencies and development partners, civil society and the private sector. It is responsible for preparing the national REDD+ strategy, including policies on the distribution of financial flow from REDD+ projects (Omaliss 2010).

In January 2011, Cambodia with its partners published its third draft on the Cambodia REDD+ national roadmap that establishes the activities to be implemented over the next few years. The taskforce comprises of relevant agencies such as Forestry Administration, Ministry of Environment, Ministry of Land Management and Urban Planning, United Nations Development Programme, United Nations Environmental Programme, Food and Agriculture Organization of the United Nations, Wildlife Conservation Society and Regional Community Forestry Training Centre for Asia Pacific (Royal Government of Cambodia 2011). Additional to the supports from the World Bank's FCPF, the UN-REDD Programme has worked closely with Cambodia to assist the process by providing over US$1 million in 2010 (UN-REDD Programme 2010) and over US$ 3 million in 2011 (UN-REDD Programme 2011). The Cambodian REDD+ Roadmap includes discussions on the management of national REDD+ readiness plan, development of the REDD+ strategy, reference emission level for REDD+, monitoring system, implementation framework, social and environmental safeguard policies and consultation and awareness raising of stakeholders (Royal Government of Cambodia 2011).

One of the key features explicitly emphasized in the REDD+ roadmap draft was that the procedures to construct this roadmap included democratic processes, transparency, accountability, broad participation, respect for national sovereignty from global partners, and inclusive consultations for local forest owners and indigenous rights. In addition, it was evident from the roadmap that the role of state institutions is extremely vital in mediating the negotiations between the various scales of actors from the World Bank's FCPF through to local owners of forested lands. A growing body of research and evaluation of national

REDD+ roadmap suggest that in order to be positively engaged in national REDD+, rural populations require secure tenure, economic incentives for conservation, and the opportunity to equitably participate in program design and implementation (Peskett and Brockhaus 2009). In short, there are two major concerns in the national roadmap. On the one hand, the role of state's institutional approach to identifying, recognizing and enforcing local communities' rights to resources and tenure, allocation of carbon rights, and in particular the mechanism to distribute international REDD+ payments for different implementation schemes. On the other, given that the scientific technicalities and requirements (additionality, baseline, permanence, leakage, and implementation approach) in the monitoring, reporting and verification of REDD+ are yet to be settled (Vatn and Angelson 2009). How then should the Cambodian final national REDD+ implementation scheme look like taking into account these two major challenges?

But first, how should this national endeavor to establish REDD+ roadmap be conceptualized? As demonstrated by Angelson (2009), the landscape of REDD+ participating countries varies significantly both in terms of ecological and socio-political characteristics. Thus, this research paper limits its analysis to focus only on Cambodia. Based on other research projects reviewed earlier in this paper, it has been hinted that the theoretical and conceptual toolkit embedded in a critical political ecology might be able to contribute constructive insights to this endeavor to finalize the national REDD+ implementation architecture for Cambodia. The question remains: from what perspectives in political ecology should this research draw its analysis since political ecology as a field is broad and dynamic offering a multitude of ways of approaching REDD+?

As a field of investigation and a form of constructive criticism, according to Bumpus and Liverman (2011), political ecology has much to offer in the analysis of the international climate regime including the political economies of responsibility for emissions, the distribution of vulnerability to climate changes, the decisions to use market solutions, the agency of state and non-state actors, the governmentalities of climate science and monitoring, and the interactions of climate policy and development. In addition, Robbins (2004) stated that political ecology provides a framework that identifies the changes in political and economic structures, power relations in markets and property rights, as well as ideas and discourses that promote neoliberal policies. Areas of investigation in political ecology include research on the sociology of science and knowledge, on the history of institutions and policy on environment and development and, most importantly, on the globalization of environmental discourses in relation to 'new languages and institutional relations of global environmental governance and management' (Peet and Watts 1996). Likewise, Stott and Sullivan (2000) argued that the key issue within political ecology is the exploration of multi-level connections between global and local phenomena, not only in environmental functions but also in decision-making and hierarchies of power.

With some certainty, Peet and Watts (1993) traced the beginning of political ecology to the 1970s, when it emerged as a response to the theoretical need to integrate land-use practice with local-global political economy (Wolf 1972) and as a reaction to the growing politicization of the environment (Cockburn and Ridgeway 1979). Political ecology emerged as a mode of explanation when analysts became impatient with the largely

apolitical forms of explanation that perceived environmental problems as a reflection of population growth, inappropriate technology, or poor management (Watts 1983; Blaikie and Brookfield 1987; Robbins 2004). By the late 1970s, propelled by the appeal of Marxism and political economy in development studies in the third world, ecologically concerned social scientists attempted to link together the compelling questions of the relations of production in a global economy with resource management and environmental regulation (Grossman 1984; Peet and Watts 1993).

Extending political ecology defined by Blaikie and Brookfield (1987) as a combination of the concerns of ecology and a broadly defined political economy, according to Peet, Robbins et al. (2011) the field of political ecology coalesced around investigations into the impact of capitalist development on the environment, the social and political implications of environmental governance, and the political economy of the way new natures are produced. Political ecology is therefore predicated on an understanding of the production of environmental change and risk, and their attendant politics via the articulation of broad political economic tendencies and the actions of local environmental managers and decision makers in relation to particular biophysical environments (Peet, Robbins et al. 2011). In a nutshell, from its roots in Marxist and structuralist theories, political ecology as a field has grown to incorporate post-structural insights and Foucauldian concepts of power to explore the role of discourses in normalizing ecologically harmful activities (Peet and Watts 2004; Peet, Robbins et al. 2011).

With this version of political ecology, three conceptual approaches might be developed to contribute to the overall understanding of REDD+. This in turn would later contribute to the negotiations in the construction of the final version of Cambodia national REDD+ roadmap, one that shall be efficient, effective and equitable. First of all, REDD+ represents a new form of eco-governmentality, derived from Foucault's governmentality (Foucault 1978), that has introduced global discourses based on international carbon economies to local human-forest relationships. By examining REDD+ as a form of biopower, analysis is directed to the processes through which certain institutions, concepts, people and relationships empowers some at the expense of others. Experiences from the REDD+ projects in Cambodia have demonstrated that socialization processes with local communities after provincial scale deals have been agreed upon, suggesting such consultations are technologies of biopower oriented at normalizing particular human-nature interactions while also soliciting views to ensure the project works. As with other forms of ecological modernization, the narratives emerging from REDD+ legitimize particular institutions, spaces and languages at the expense of others (Hajer 1995). Therefore, the analyses in political ecology are as concerned with the modalities of eco-governmentality, where forms of rule are instantiated that both produce subjectivities and environmental outcomes, as much as the way in which it is abused (Peet, Robbins et al. 2011).

Secondly, political ecology can unpack the interconnected set of considerations included in the concepts of environmental justice and the distribution of environmental costs and benefits amongst various participating groups. At the international scale, critics of REDD+ have pointed to the perverse rewards countries with historically high rates of deforestation

have over those that have managed their forests more sustainably (McGregor 2010). Similar to the grandfathering of pollution permits which rewards polluting industries with larger numbers of permits (Charman 2008), REDD+ is prone to similarly risks of rewarding countries and companies for pursuing deforestation, rather than protection, in the past. The technical questions concerning leakage and permanence create further challenges for environmental justice. Such approaches according to Okereke (2008) ensure core climate change policies remain rooted in market-based mechanisms, which not only have the potential of allowing developed countries to increase actual emissions but also the opportunity to strategically increase their capitals while creating the impression that they are assisting developing countries in this fight against climate change.

This leads to the third, and most important, argument that political ecology rooted in Marxism has repeatedly shown that environmental degradation is not an unfortunate accident under advanced capitalism; it is instead a part of the logic of that economic system. Environmental degradation is a consistent symptom of various logics and trajectories of accumulation and the deadly operations of markets worked out on the land and for specific resources (Peet, Robbins et al. 2011). Therefore, rather than drawing simple links between population and degradation, or blame lack of knowledge among land managers, political ecology connects local environmental degradation with national and international systems of capital accumulation and governance. At the state scale Sandbrook, Nelson, et al. (2010) have identified a paradox that REDD encourages a re-centralization of forest management in order to trade in, and profit from, carbon finances, despite well established research proving that decentralized management is the best way to conserve

forests. This is the sharp edge of REDD+, where conservation capital and extractive capital clash, heightening histories of conservation-based violence (Peluso 1993) and expanding the spaces of corruption. While the attractiveness of REDD+ is that it reverses current political and economic structures that encourage deforestation, the improved conditions for conservation will only apply and be accessible to some (McGregor 2010).

To sum up, this paper has provided a segue way into a broader environmental science and policy question pertaining to the construction of national REDD+ architecture in the context of Cambodia. Thus, the goal of this paper has been an attempt to seek the philosophical and social-theoretical grounding that might constitute the understanding of REDD+ projects taking into account the projects' rapidly changing nature and uncertainties in both ecological and political fronts. It appears that political ecology seems to be the best fit for this work because as Peet, Robbins et al (2011) demonstrated the central themes of political ecology include the grounding of environmental degradation in the trajectories of accumulation and the operations of market-based power; the interlacing of environmental conservation with struggles over environmental control; and the continuing emergence of new ecologies, developing from human productive activity, with implications both for environmental destruction and creative environmental alternatives.

References:

Angelson, A. (2009). Realizing REDD+: National strategy and policy option. Denmark, Center for International Forestry Research.

Backstrand, K. and E. Lovbrand (2006). "Planting Trees to Mitigate Climate Change: Contested Discourses of Ecological Modernization, Green Governmentality and Civic Environmentalism." Global Environmental Politics **6**(1): 50-75.

Bakker, K. (2005). "Neoliberalizing Nature? Market Environmentalism in Water Supply in England and Wales." Annals of the Association of American Geographers **95**(3): 542-565.

Blaikie, P. and H. Brookfield (1987). Land degradation and society. London, Methuen.

Bridge, G. (2002). "Grounding globalization: The prospects and perils of linking economic processes of globalization to environmental outcomes." Economic Geography **78**: 361-386.

Bulkeley, H. (2005). "Reconfiguring environmental governance: Towards a politics of scales and networks." Political Geography **24**: 875-902.

Bumpus, A. and D. Liverman (2008). "Accumulation by Decarbonization and the Governance of Carbon Offsets." Economic Geography **84**(2): 127-155.

Bumpus, A. and D. Liverman (2011). Carbon colonialism? Offsets, greenhouse gas reductions, and sustainable development. Global Political Ecology. R. Peet, P. Robbins and M. Watts. London and New York, Routledge.

Campbell, A. (2009). "Beyond Copenhagen: REDD-plus, agriculture, adaptation strategies and poverty." Global Environmental Change **19**: 397-399.

Charman, K. (2008). "False starts and false solutions: current approaches in dealing with climate change." Capitalism, Nature, Socialism **19**(3): 29-47.

Cockburn, A. and J. Ridgeway, Eds. (1979). Political ecology. New York, Times Books.

Coomes, O. T., F. Grimard, et al. (2008). "The fate of the tropical forest: Carbon or cattle?" Ecological Economics **65**(2): 207-212.

Forestry Administration (2007). "Forest Cover Changes in Cambodia, 2002-2006." Paper prepared for the Cambodia Development Cooperation Forum **Forestry Administration, Phnom Penh**.

Foucault, M. (1978). The History of Sexuality (R. Hurley, Trans. Vol. 1. An introduction). New York, Pantheon Books.

Griscom, B., D. Shoch, et al. (2009). "Sensitivity of amounts and distribution of tropical forest carbon credits depending on baseline rules." Environmental Science and Policy **12**: 897-911.

Grossman, L. (1984). Peasants, subsistence ecology and development in the Highlands of Papua New Guinea. Princeton, Princeton University Press.

Hajer, M. (1995). The politics of environmental discourse: ecological modernisation and the policy process. Oxford, Clarendon Press.

Johns, T., E. Johnson, et al. (2009). An Overview of Readiness for REDD: A compilation of readiness activities prepared on behalf of the Forum on Readiness for REDD. Falmouth, MA, The Woods Hold Research Center.

Liverman, D. (2004). "Who Governs, at What Scale and at What Price? Geography, Environmental Governance, and the Commodification of Nature." Annals of the Association of American Geographers **94**(4): 734-738.

Liverman, D. and S. Vilas (2006). "Neoliberalism and the Environment in Latin America." Annual Review of Environment and Resources **31**: 327-363.

McCarthy, J. and S. Prudham (2004). "Neoliberal nature and the nature of neoliberalism." Geoforum **35**: 275-283.

McGregor, A. (2010). "Green and REDD? Towards a Political Ecology of Deforestation in Aceh, Indonesia." Human Geography **3**(2): 21-34.

Okereke, C. (2008). Global Justice and Neoliberal Environmental Governance: Ethics, Sustainable Development and International Co-operation. London, Routledge.

Omaliss, K. (2010). "REDD Development in Cambodia." Powerpoint Presentation (March 10, 2010) **Tokyo, Japan**.

Parker, C., A. Mitchell, et al. (2009). The Little REDD+ Book: An updated guide to governmental and non-governmental proposals for reducing emissions from deforestation and degradation. Oxford: UK, Global Canopy Programme.

Peck, J. (2001). "Neoliberalizing states: thin policies/ hard outcomes." Progress in Human Geography **25**(3): 445-455.

Peet, R., P. Robbins, et al. (2011). Global nature. Global Political Ecology. R. Peet, P. Robbins and M. Watts. London and New York, Routledge.

Peet, R. and M. Watts (1993). "Introduction: Development Theory and Environment in an Age of Market Triumphalism." Economic Geography: Environment and Development, Part 1 **69**(3): 227-253.

Peet, R. and M. Watts (1996). Liberation Ecology: Development, Sustainability, and Environment in an Age of Market Triumphalism. Liberation Ecologies: Environment, Development, and Social Movements. R. Peet and M. Watts. London, Routledge.

Peet, R. and M. Watts, Eds. (2004). Liberation Ecologies: Environment, Development, Social Movements. London, Routledge.

Peluso, N. (1993). "Coercing conservation? The politics of state resource control." Global Environmental Change **3**(2): 199-218.

Peskett, L. and M. Brockhaus (2009). When REDD+ goes national: A review of realities, opportunities and challenges. Realizing REDD+: National strategy and policy option. A. Angelson. Denmark, Center for International Forestry Research.

Phelps, J., M. C. Guerrero, et al. (2010). "What makes a `REDD' country?" Global Environmental Change **20**(2): 322-332.

Robbins, P. (2004). Political ecology: a critical introduction. Oxford, UK, Blackwell Publishing.

Royal Government of Cambodia (2011). Cambodia Readiness Plan Proposal on REDD+ (Cambodia REDD+ Roadmap). Phnom Penh, Forestry Administration: Technical Working Group.

Sandbrook, C., F. Nelson, et al. (2010). "Carbon, forests and the REDD paradox." Oryx, Fauna and Flora International **44**(3): 330-334.

Scholz, I. and L. Schmidt (2008). "Reducing Emissions from Deforestation and Forest Degradation in Developing Countries: Meeting the Main Challenges Ahead." Deutsches Institut fur Entwicklungspolitik.

Stott, P. and S. Sullivan, Eds. (2000). Political Ecology: Science, Myth and Power. London, Arnold.

Streck, C., L. Gomez-Echeverri, et al. (2009). REDD+ Institutional Options Assessment: Developing an Efficient, Effective, and Equitable Institutional Framework for REDD+ under the UNFCCC. Washington, DC, Meridian Institute.

Turner, B. and P. Robbins (2008). "Land-change science and political ecology: Similarities, differences, and implications for sustainability science." Annual Review of Environment and Resources **33**: 295-316.

Turner, G. and M. Sjardin (2011). Carbon market in 2010 at $160bn. London, Bloomberg: New Energy Finance.

UN-REDD Programme (2010). Supporting REDD+ Readiness in UN-REDD Partner Countries. Accessed date: July 16, 2010, Retrieved from: http://www.un-redd.org/NewsCentre/Supporting_REDD_Readiness/tabid/4826/language/en-US/Default.aspx.

UN-REDD Programme (2011). "US$15.2 Million Approved for 5 Countries at the UN-REDD Policy Board Meeting." UN-REDD Programme Newsletter **14**: Retrieved from: http://www.un-redd.org/Newsletter14/15Million_Approved_PB15/tabid/6600/Default.aspx.

Vatn, A. and A. Angelson (2009). Options for a national REDD+ architecture. Realizing REDD+: National strategy and policy option. A. Angelson. Denmark, Center for International Forestry Research.

Watts, M. l. (1983). On the poverty oftheory: Natural hazards research in context. Interpretations of Calamity. K. Hewitt. Boston, MA, Allen and Unwin**:** 231-262.

Wertz-Kanounnikoff, S. and A. Angelson (2009). Global and national REDD+ architecture. Realizing REDD+: National strategy and policy option. A. Angelson. Denmark, Center for International Forestry Research.

Wolf, E. (1972). "Ownership and political ecology." Anthropological Quarterly **45**: 201-205.

World Bank (2011). Dashboard of Country Status. Readiness Progress Dashboard, World Bank's Forest Carbon Partnership Facility.

World Bank (2011a). Session 5a. Update on the Carbon Fund: Eighth Meeting of the Participants Committee (PC8). Dalat, Vietnam, World Bank's Forest Carbon Partnership Facility.