

## **Submission to the UNFCCC AWG-LCA: Views on new market-based mechanisms**

### **Leveraging market-based mechanisms for the advancement of REDD+ within agricultural commodity supply chains and the sub-national regulatory framework**

*February 2011*

IPAM welcomes the opportunity to present views on the establishment of new market-based mechanisms (decision -/CP.16, paragraphs 80-82) to enhance the cost-effectiveness of, and to promote, mitigation actions. This submission focuses on the use of market-based or linked mechanisms for REDD+.

Market-based or linked mechanisms for reducing deforestation and forest and land degradation are already being used as tools for sustainable development through sustainable agricultural practices; for enhancing the cost-effectiveness of state-level greenhouse gas (GHG) reduction regimes; and to transform patterns of production and consumption into sustainable practices that reduce emissions, protect food resources, and preserve forests. These mechanisms, along with national-level actions in many countries and multilateral REDD+ initiatives such as the UN-REDD Programme and the World Bank FCPF, are setting the stage for progress at the global level in reducing emissions from the second largest source of GHG emissions – forests and land use. We describe 2 examples of the innovative use of market-based and linked mechanisms to reduce emissions from deforestation and land degradation, reduce mitigation costs, and contribute to sustainable development: the global multi-stakeholder roundtable initiatives to remove deforestation from the production of soy, sugar cane, and palm oil; and the multi-region Governor's Climate and Forest Task Force to establish jurisdiction-wide REDD+ programs, link its member states to carbon market opportunities, and contribute to the legal and regulatory design of emerging GHG compliance markets such as that of the U.S state of California.

These market-based and market-linked mechanisms offer the UNFCCC REDD+ process and nations an opportunity to create sufficient flexibility in REDD+ design to allow the UNFCCC framework to benefit from these innovations. These benefits can be achieved through crediting linkages and credit fungibility, alignment of standards and verification requirements, and rules and guidelines that reflect the reality and importance of sub-national emission-reducing actions that support and are integrated into national emission reduction actions and accounting.

## **Transforming markets for agricultural products – the pioneering use of market-linked mechanisms by the Round Table for Responsible Soy, the Roundtable on Sustainable Palm Oil, and Bon Sucre**

The potential for REDD+ to achieve globally significant reductions in greenhouse gas emissions is currently diminished by the lack of a linkage with the principal driver of deforestation: agricultural expansion for the production of food, fiber, fuels, and feed. The importance of creating and strengthening this link is heightened by the rising prices of food commodities, which are likely to last for many years (OECD/FAO 2010, Cribb 2010), increasing the profitability of forest conversion to crops and livestock (Nepstad 2011). A number of recent studies point to the potential for the growing demand for biofuels, animal feed, food, and fiber to increase pressure to convert tropical forests into crop lands and pastures (Searchinger et al. 2008, Fargione et al. 2008, Nepstad & Stickler 2008, Nepstad et al 2008 [Phil Trans].) This threat is illustrated in Brazil, where the official greenhouse gas reduction target for 2020 features a reduction of deforestation in the Amazon and Cerrado regions by 80% and 40%, respectively. This target is threatened by industry's plans to increase Brazil's production of beef (40%), sugar cane (270%), and soy (60%) over the same period (Nepstad et al. 2009). Around the world, as in Brazil, the success of REDD+ in mitigating devastating climate change will depend upon re-directing agricultural expansion in developing nations away from tropical forests toward lands that are already cleared, but below their productive potential.

One key opportunity for linking REDD+ with the drivers of deforestation is through credible agricultural commodity certification programs, particularly through existing global programs that are science-based and created through transparent, multi-stakeholder processes. The Roundtable on Sustainable Palm Oil (RSPO), the Round Table for Responsible Soy (RTRS), and Bon Sucre represent a concerted attempt to agree on and measurably reduce the key environmental and social impacts of agricultural production through the development of commodity roundtables.

Each of these processes has developed and field-tested criteria and indicators that improve the environmental and social performance of soy, sugar/ethanol, and palm oil production. For each commodity, certification prohibits planting on land recently cleared of native vegetation. In other words, these certification systems create a powerful global incentive for future agricultural expansion to take place on lands that were already cleared, increasing the amount of forest carbon stored on farms and rural landscapes.

Each roundtable was created by actors from the entire value chain as well as civil society. Researchers and academics were brought into the discussion to help build science-based consensus about the key negative impacts of producing each commodity as well as the range of performance globally. In addition, each



roundtable supported work to assess the overall impact of compliance on the financial bottom line. Roundtable standards were established using ISEAL guidelines, a globally credible standards body. The ultimate goal of each roundtable was to develop a set of standards that define acceptable performance against key impacts and use these standards to transform global markets. Toward this end, at least 20 percent of global demand is represented in each roundtable and 20 to 50 percent of global production. Because each of these initiatives provides specific resources and targeted support to smallholders and family farms, these stakeholders are able to use roundtable membership as a means to increase productivity and develop sustainable land management practices.

The RSPO has more than 400 members, with membership covering roughly 50 percent of global palm oil production, which is estimated at 45 million tons of Crude Palm Oil (CPO) produced every year. As of end 2010, 3.6 million tons of palm oil production was certified—8 percent of world production. In 2010, about 2.3 million tons of CSPO (Certified Sustainable Palm Oil) was produced. Just over 50 % percent of that was taken up by the market as sustainable.

The RTRS, with 150 members globally, includes the main stakeholders from throughout the soy value chain as well as civil society organizations including both social and environmental non-governmental organizations. The RTRS Principles and Criteria have been field tested in Argentina, Brazil, India and Paraguay. Initial indications are that 1 million tons of the 2009-2010 crop (0.4% of global production) are achieving the standards baselines. Approximately 500,000 tons of soy are expected to be certified and traded in 2011.

Bon Sucro now represents 28 percent of world production of sugar cane and more than 20 percent of end and intermediate user demand. The first sugar cane mills were audited using Bon Sucro standards at the end of 2010. By the end of 2011 significant certification of producers and mills for both ethanol and sugar is expected. The first ethanol from mills where the standards have been field tested arrived on the EU market by the end of 2010.

Because these initiatives have, in a remarkably short time, captured significant portions of their respective markets, developed multi-stakeholder standards that remove deforestation from member production, and are growing at significant rates in membership and influence, they have the tools necessary to transform these markets and turn their commodity processes into low-carbon, socially responsible, sustainable processes for the long term.

Currently the synergies between the work of these initiatives and the goals and actors in the REDD+ process, have not been realized. However, their success and ongoing efforts present a great opportunity to build upon their momentum in effectively reducing emissions from deforestation and land degradation to

strengthen REDD+ at the national and international levels. Many of the countries where these processes are most active are also REDD+ countries, at some level of REDD+ program design and implementation (e.g. soy and sugar cane in Brazil, sugar cane in Argentina, palm oil in Indonesia, and many other examples). These initiatives offer countries a tested and effective pathway for reducing the emissions associated with forest clearing and land degradation from agricultural practices. Using complementary processes, which are already available, countries can contribute to the transformation of the markets for these commodities, thereby instituting low-emission agricultural practices, supporting vetted social safeguards, and encouraging sustainable development of agriculture and the many farmers and families engaged in these commodity supply chains.

### **Innovation and Demonstration on the ground – using markets to capture state-level momentum in climate mitigation**

Top-down approaches to REDD+ architecture, such as the UNFCCC process, need to be complemented with attention and support to important tactical opportunities happening in real-time all over the world. One important beacon of progress in this respect is the Governors' Climate and Forest task force (GCF): a unique sub-national collaboration between 16 states and provinces from the United States, Brazil, Indonesia, Nigeria, and Mexico that seeks to integrate Reducing Emissions from Deforestation and Forest Degradation (REDD) and other forest carbon activities into emerging GHG compliance regimes in the United States and elsewhere. These nations comprise more than 20% of the world's tropical forests and account for some 75% of Brazil's and more than half of Indonesia's tropical forests. Over the last two years, the GCF has been designing the architecture for linking GHG compliance systems, with an immediate focus on California's emerging cap-and-trade system, with state- and province-level REDD+ programs in Brazil, Indonesia, Africa, and Mexico. Launched by California Governor Arnold Schwarzenegger in November 2008, the GCF is building a platform to synchronize efforts across tropical forest jurisdictions to develop policies and programs that provide realistic pathways to forest-maintaining rural development and that can generate compliance-grade REDD+ assets that can plug into various market opportunities—from GHG compliance markets to the ongoing efforts to de-carbonize agro-food supply chains. To date, GCF governments have imposed logging bans, wall-to-wall land-use zoning, and rural law enforcement programs (<http://www.gcftaskforce.org>). Some of the GCF states and provinces are also in the process of adopting comprehensive state-level REDD+ programs and enacting novel legislation that creates incentives for forest protectors and penalizes forest destroyers, as they build economies that are gradually increasing the value of standing forests through forest-dependent industries.

In November of 2010, the GCF took an important step towards the formalization of a regulatory market for REDD, when California signed an agreement with the Brazilian state of Acre and the Mexican state of Chiapas to link the international offset provision of California's cap-and-trade policy (AB32) with the REDD programs under development by these tropical states in the context of the GCF. If successful, this CA-Acre-Chiapas process will establish the first regulatory framework through which regulated entities (in this case, emitting, compliant industries in California) can achieve a portion of their mandatory emissions reductions by acquiring offsets from the REDD programs. The governments that are participating in the GCF are developing the architecture that will link these state programs in a way that is compatible with the national emissions reduction frameworks under development at the national level and within the UNFCCC.

Over the past two years, the GCF has worked to:

- Mobilize and advance financing for REDD+ activities on a pay-for-performance basis;
- Provide input to the legal and regulatory design of emerging GHG compliance markets such as California;
- Develop high-quality sub-national REDD+ frameworks and capacity in large sub-national jurisdictions in key tropical forest countries; and
- Develop institutions and frameworks for linking sub-national REDD+ activities with ongoing national and international efforts.

The effectiveness of these efforts is apparent in the adoption of innovative REDD+ programs and activities across GCF states and provinces and in the ongoing elaboration of REDD+ architectures through the GCF process with stakeholders and partners from all over the world.

The GCF, as a pioneer of market-based mechanisms for REDD+, offers significant opportunities for information sharing, integration, and collaboration with the UNFCCC REDD+ process. It also provides a concrete example of how: (a) market mechanisms can be used to enhance participation, and therefore effectiveness of mitigation efforts; (b) sub-national activities can contribute to broader national and international mitigation efforts; as well as (c) providing a laboratory for testing the effectiveness of different market and non-market mechanisms that can be used in concert to enhance mitigation efforts.

### **Examples and Opportunities**

The 3 multi-stakeholder commodity roundtable initiatives and the GCF provide both real-world examples of how market mechanisms can be used to encourage, enhance, and incentivize mitigation actions in developing countries; as well as opportunities for the UNFCCC REDD+ process to both encourage and benefit from mitigation

actions at the level where they are occurring, within the context of a national and global framework. The REDD+ framework under development can provide recognition and support to these processes that will greatly increase their ability to continue progress toward the mutual goal of avoiding the most dangerous impacts of human-induced climate change. Rather than processes operating separately with no connection to the international REDD+ process, they should be seen as partner processes, with mutual benefits to be gained from sharing lessons learned, aligning efforts, maximizing synergies, and providing examples of innovative market approaches like those that will be necessary for the UNFCCC REDD+ process to achieve its goals.

## REFERENCES

- Cribb, J. 2010. *The Coming Famine. The Global Food Crisis and What We Can do to Avoid It.* U of California Press, Berkeley. 248 pp.
- Fargione JE, J Hill, D Tilman, S Polasky, P Hawthorne. 2008. Land clearing and the biofuel carbon debt. *Science* 319: 1235-1238
- Nepstad, D., B. Soares-Filho, F. Merry, A. Lima, P. Moutinho, J. Carter, M. Bowman, A. Cattaneo, H. Rodrigues, S. Schwartzman, D. McGrath, C. Stickler, R. Lubowski, P. Piris-Cabezas, S. Rivero, A. Alencar, O. Almeida, O. Stella. 2009. The end of deforestation in the Brazilian Amazon. *Science* 326: 1350-1351.
- Nepstad, D. C., and Stickler, C. M., 2008, Managing the Tropical Agriculture Revolution: *Journal of Sustainable Forestry*, v. 27, p. 43-56.
- Nepstad, D. C., Stickler, C. M., Soares Filho, B. S., and Merry, F., 2008, Interactions among Amazon land use, forests and climate: prospects for a near-term forest tipping point.: *Philosophical Transactions of the Royal Society*, v. 363, p. 1737-1746.
- OECD/FAO. 2010. *Agriculture Outlook, 2009-2019.*
- Searchinger, T., R. Heimlich, R.A. Houghton, F. Dong, A. Elobeid, J. Fabiosa, S. Tokgoz, D. Hayes, T. Yu. 2008. Use of U.S. Croplands for Biofuels Increased Greenhouse Gases Through Land Use Change," *Science Express* (Feb. 7)

## Contact details:

Tracy Johns  
International Policy Lead  
International Program  
Amazon Environmental Research Institute  
Secretariat, The Forum on Readiness for REDD  
Phone: +1 602-349-6200  
[tjohns@ipam.org.br](mailto:tjohns@ipam.org.br)  
<http://www.ipam.org.br>