

Views by the Global Forest Coalition and Brighter Green on methodological guidance for non-market-based approaches related to the implementation of the activities referred to in decision 1/CP.16, paragraph 70.

Summary

In response to decision FCCC/SBSTA/2013/3, paragraph 40, in which the SBSTA invited Parties and admitted observer organizations to submit to the secretariat, by 26 March 2014, their views on methodological guidance for non-market-based approaches the Global Forest Coalition and Brighter Green would like to submit their views on potential non-market based approaches to address unsustainable livestock farming as one of the main drivers of forest loss and climate change.

A range of non-market based approaches can be used to address the impacts of livestock production on forests and climate change. They include:

1. Eliminating perverse legal, fiscal and other incentives for commodity chains like unsustainably produced beef and animal fodder that form a major driver of forest loss
2. Redirecting subsidies and other forms of economic support for unsustainable livestock production, in line with the Aichi targets of the Convention on Biodiversity. The redirection of these subsidies would free up significant amounts of financial support for more sustainable forms of agricultural production that do not only contribute to climate change mitigation, but also to climate change adaptation.
3. Recognizing and supporting territories and areas conserved by pastoralists and their traditional knowledge related to climate change mitigation and adaptation
4. Developing and implementing strict legislation prohibiting livestock practices that involve environmental pollution, weak labor standards, land grabbing, health risks and maltreatment of animals
5. Halting negotiations on bilateral and multilateral trade agreements that weaken national standards related to the livestock sector.
6. Promoting consumer campaigns about the benefits of dietary change, and
7. Fiscal reform that supports sustainable forms and levels of livestock production and consumption.

This submission is based on a 2013 briefing paper on [Livestock Farming, Communities, Biodiversity and Climate Change](#) and a recently released initial report on the [impacts of unsustainable livestock production in Paraguay](#), the country which currently faces the highest deforestation rates on the planet. It starts with an introduction offering a suggestion about how to distinguish non-market based approaches from market-based approaches, and why non-market based approaches are at the heart of effective policies to address deforestation and its main drivers. Subsequently, it highlights the importance of addressing unsustainable livestock farming as the main driver of forest loss in the continent with the highest deforestation rates on the planet, Latin America, using Paraguay as a case study. It elaborates on a number of complementary non-market based approaches to enhance the sustainability of livestock production and

consumption, including regulatory frameworks and the redirection of subsidies and other forms of public support. It briefly elaborates on the phenomenon of international leakage pointing at the need for dietary changes and other quantity-related measures to address the impacts of commodities. The paper concludes by highlighting the limits of a quantified emissions reductions approach for the livestock sector and the need to promote more holistic joint mitigation and adaptation approaches that take into account all the non-carbon related aspects of the livestock sector instead.

Introduction: The difference between market mechanisms and non-market based approaches to addressing the drivers of forest loss.

The discussions on non-market based approaches under the UNFCCC have been hampered by the lack of clarity on the definition of the term “non-market based approaches”. Of course, markets and public governance are closely linked. Markets are a reality in practically every country in the world, and regulatory frameworks, fiscal regimes, incentive schemes and other public policies will almost per definition impact on one or more markets. Thus, public policy is almost always market-related to one degree or another. The discussion has been further complicated because there has been a tendency to qualify Payments for Environmental Services schemes as a market mechanism, even though an estimated 97% of these schemes are financed by governments¹, including as part of publicly funded REDD+-schemes.

At a recent conference on “Scaling Up Sustainable Commodity Supply Chains” organized by the Katoomba Group in Brazil, several livestock and feed producers involved in sustainability initiatives explicitly asked for greater government involvement, including stronger regulation and law enforcement. They pointed out that government action was an essential condition to scale up often worthwhile initiatives and avoid them to remaining economically marginalized in an otherwise unsustainable market. It is also clear regulatory approaches and other public policies play a valuable role in steering markets. They can discourage unsustainable forms of production by making them illegal, which is often the most straightforward and practical way of ensuring sustainable commodities become the norm on markets.

Strong regulatory frameworks can also ensure that indigenous peoples’ and local communities conserved territories and areas (ICCAs) are being protected against destructive corporate practices like large-scale monocultures or mining and that the Free Prior and informed Consent of the Indigenous Peoples and communities involved is fully respected. Public policies can steer markets by imposing significant levies on unsustainable practices, or by providing fiscal advantages, subsidies or other forms of economic support for sustainable practices. Such economic incentives and disincentives use market dynamics by influencing the price of products, but that does not necessarily imply that they should be defined as a market-based approach. Rather, it would be more appropriate to restrict the definition of a market-based approach to policies and projects that explicitly create a new market where such a market does not exist yet. Carbon trading is the most classical example of such a newly established market. This definition of non-market based approaches would be in line with the legalistic history of the term in

¹ Vatn, A., Barton, D., Lindhjem, H., Movik, S., Ring, I and Santos, R., 2011. Can Markets Protect Biodiversity? An Evaluation of Different Financial Mechanisms. Noragric Report no 60. University of Life Sciences, Norway

the UNFCCC negotiations, since the term 'non-market based approaches' was always intended as an alternative to the carbon market and other new and old market mechanisms.

The Drivers of Forest Loss and the Importance of Non-Market Approaches

As described in the 2010 GFC report [Getting to the Roots: Underlying causes of deforestation and forest degradation](#), and recognized by the 2013 Conference of the Parties of the UNFCCC, addressing the drivers of forest loss is a pre-condition for reducing emissions from deforestation and forest degradation. However, the 2013 report [REDD+ and the Underlying Causes of Deforestation and Forest Degradation](#) concluded that voluntary forest carbon markets, and the REDD+ mechanism itself, do not provide an appropriate framework to address these drivers as they provide incentives to specific area-based projects or countries only, while most drivers are of an international nature.

International commodities like beef, soy, palm oil and wood have been recognized as some of the most important drivers of forest loss.² Policies to make these commodity chains more sustainable in terms of quality and quantity cannot be the responsibility of the producing countries only. As pointed out by several Parties during the REDD+ debate and described later on in this submission, measures to reduce deforestation triggered by commodity trade in one country will almost per definition lead to transboundary leakage of emissions if no measures are taken to address the levels of consumption of that product. Such policies also lead to unfair competition between more responsible producers and countries and less responsible producers and countries. Broad participation in the REDD+ mechanism has been suggested as a means to mitigate this leakage, but as concluded in the 2013 report most countries receiving REDD+ (readiness) funding have not adopted or even developed policies to address the real drivers of forest loss yet, and it is increasingly clear that there will not be sufficient funding available for REDD+ to allow broad participation of countries in the results-based payments phase, even after 2020.

Happily, as concluded in the report [Non-Market-based Approaches to Reducing Deforestation and Forest Degradation](#), which was submitted by the Global Forest Coalition, Econexus and the ICCA Consortium in March 2013, there are many alternative non-market based approaches that can be applied to address the drivers of forest loss. One promising approach to addressing the drivers of forest loss is the appropriate recognition of territories and areas conserved by Indigenous Peoples and local communities, and the legal recognition of Indigenous territorial rights and community land tenure in general.³ Another important non-market based approach is to eliminate perverse legal, fiscal and other incentives for commodity chains like unsustainably produced beef and animal fodder that form a major driver of forest loss. While consumer choices play a primary role in sustaining these chains, governments have a key responsibility and opportunity to address the negative impacts of these commodities, also because consumers are often not properly informed of all the environmental, social, health and animal welfare aspects of the meat and dairy products they consume.

²http://www.ucsusa.org/assets/documents/global_warming/UCS_RootoftheProblem_DriversofDeforestation_FullReport.pdf and <http://www.globalcanopy.org/LittleBookofDrivers>

³ For more information see <http://www.iccaconsortium.org> and <http://naturaljustice.org/library/our-publications/legal-research-resources/icca-legal-reviews>

Impacts of Unsustainable Livestock Farming

As described in the case study from Paraguay and highlighted by the recent report of the UN Rapporteur on the Right to Food, the small farmer running a family farm is rapidly giving way to the large-scale, factory farm model. This is particularly prevalent in the livestock industry, where millions of animals are raised in inhumane, unsanitary industrial conditions. These operations, along with the resources needed to grow the grain and oil meals (principally soybeans and corn) to feed these animals place intense pressure on the world's most vulnerable ecosystems and human communities.

Estimations of the total percentage of global greenhouse gas emissions triggered by the livestock sector vary from 14.5%⁴ to an astonishing 51%⁵. Each year, more than 60 billion animals are raised for human consumption. Meat and dairy production already uses 30% of Earth's land surface, and 70% of agricultural land, and accounts for 8% of the water humans use, mostly to irrigate feed crops. The global livestock industry is, according to the FAO, "probably the largest sectoral source of water pollution," and one of the key agents of deforestation and biodiversity loss.⁶

Unaddressed meat and dairy consumption will also make it impossible to feed the world's population in the coming decades. As the UN Special Rapporteur on the Right to Food points out: *"Over one third of the world's cereals are already being used as animal feed, and if current trends continue, this will rise to 50 per cent by 2050. Demand for meat diverts food away from poor people who are unable to afford anything but cereals. Concentrated animal feeding operations, in which industrial quantities of meat are produced, have widely reported negative environmental impacts. Continuing to feed cereals to growing numbers of livestock will aggravate poverty and environmental degradation."*⁷

Unsustainable Livestock Production as a Driver of Forest Loss: The Case of Paraguay

Livestock and soy production in Paraguay are the most important primary production sectors. Most of the land in the country is privately controlled and devoted to the production of these commodities. Hence, most of the negative environmental impacts derive from these productive activities. 2% of the owners hold 80% of the land, making it one of the countries with the most unequal land distribution. Lands once destined for agrarian reform have now been conquered by agribusiness for soybean and cattle production. According to the "Comision Verdad y Justicia" (Truth and Justice Commission in Spanish, 2010) some 7,851,295 hectares were sold illegally to agribusiness farmers and, in many cases, the preceding owners were evicted by force or by deceit. Although most of the land is not intensively used and speculation is high, owners usually clear large extensions of the land plots to justify its apparent use to avoid intrusion by landless peasants.

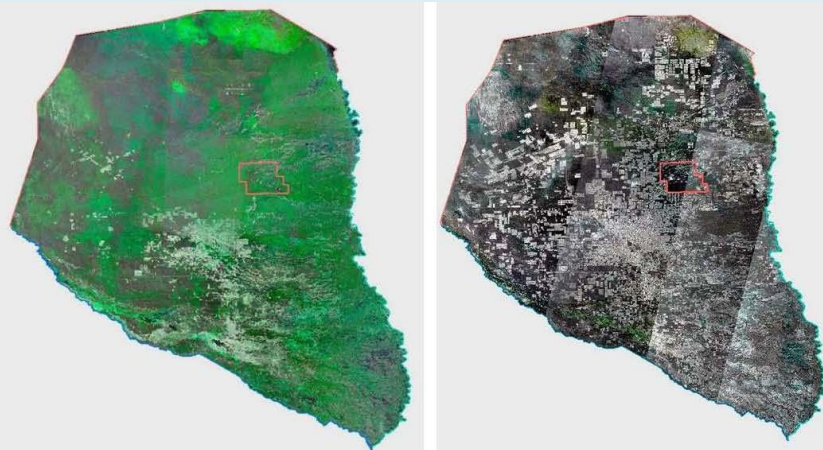
Cattle ranching occupies more than half of the Paraguayan territory, some 31,000,000 hectares. Paraguay is the world's ninth main exporter of bovine meat. A total of 1.03 million animals are slaughtered for export every year and 240,000 more are slaughtered for the internal market.

⁴ United Nations Food and Agriculture Organization (FAO), Livestock Impacts on the Environment, Spotlight, 2006. <http://www.fao.org/ag/magazine/0612sp1.htm>.

⁵ R. Goodland and J. Anhang, "Livestock and climate change: what if the key actors in climate change are cows, pigs, and chickens?", World Watch, November/December 2009.

⁶ FAO, *ibid*

⁷ Report of the Special Rapporteur on the Right to Food, Olivier De Schutter to the UN Human Rights Council, A/HRC/25/57



Deforestation in Paraguayan Chaco, 1990 - 2013. © Survival International

In the Chaco region, most of the deforestation is undertaken to plant pastures and establish ranches. In 2013, 268,000 hectares were destroyed. Deforestation rates in this region are the highest in the world, reaching up to 2,000 ha/day. Most of this deforestation is being fuelled by investments by Brazilian and Uruguayan investors.

The Ayoreo People has lived in the Chaco for about 3,000 years. They have adapted to the harsh conditions of the region and developed a lifestyle, which allows them to obtain all the material resources needed for their survival. At present, there are still groups of the Ayoreo People living in voluntary isolation, mainly in the band of territory that is not converted to cattle ranching or national parks yet. This territory, however, is the area where most of the deforestation is taking place. Due to their vulnerability to common diseases, up to 80% of the population in voluntary isolation might die if forest conversion breaks their isolation and destroys their livelihoods.

The concentration of land has also been accompanied by an exponential increase in the area devoted to genetically manipulated (GM) soybean production, which currently stands at 3.15 million of hectares. Multinational corporations and foreign immigrants from, especially, Brazil, largely control the soybean business in Paraguay. Paraguay is the country in South America with the highest proportion of agricultural land devoted to soybean monoculture. Most of the soy involves a GM seed-pesticide technology package, a model of extensively mechanized, export-oriented production, minimal labor demand and high use of pesticides, prompting an annual discharge of 25 million liters and 1.5 million kilograms of pesticides. This model has caused the degradation of fertile lands, loss of biodiversity, the disappearance of forests, a high degree of air and water pollution and increasing cases of chronic and acute poisoning amongst the rural population, particularly affecting women. These factors make the survival of family farming, as well as indigenous peoples' livelihoods, increasingly difficult and trigger expulsion and land abandonment.

Most of the soybeans produced, 72%, are exported as grain without paying any taxes to the State. This makes Paraguay a tax haven, as few investments in the world yield as much as planting transgenic soybeans in this country. Estimating conservatively the prices at about US\$ 500/ton, production costs in the order of US\$ 400/ha and yields reaching averages of 2.4 ton/ha (crop year 2013/2014), the operation would leave net profits of US\$ 800/ha per crop cycle; at two cycles per year the profits rise to US\$ 1,600. In 2012, the whole of the agribusiness sector contributed only US\$ 31 million in taxes, a total contribution of 2% to the national tax revenue, while its export value was estimated at US\$ 3,000 million.

Source: [impacts of unsustainable livestock production in Paraguay](#) Global Forest Coalition, 2013

There are more sustainable forms of livestock production. The Lanzur Rangelands in Iran, for example, are regulated by several tribes and used for livestock rearing based on

a traditional annual rotating grazing system that ensures the pastures are not overexploited and benefits and responsibilities are distributed equitably amongst the participating clans. The Maasai owning the Naboisho Conservancy area in Maasai Mara have set aside part of their lands for wildlife protection while the remaining lands are used for their cattle. In Paraguay, the Alianza Pastizal is trying to promote sustainable cattle ranching on the many natural pasture lands in the country, thus demonstrating that cattle ranching does not need to trigger deforestation. Indigenous and other traditional communities in countries like Finland and Spain are trying to revive traditional herding practices that not only sustain age-old cultures but also enhance biodiversity, including in forest areas. However, it should be highlighted that quantity is a determining factor in the sustainability of most of these practices. If the number of livestock per hectare becomes too high, there is a significant risk of ecosystem degradation undermining the livelihoods of the pastoralists themselves.

Non-market based approaches to addressing unsustainable livestock production

There are numerous viable options to diminish the negative impacts of unsustainable livestock production and support more sustainable forms and levels of livestock production. One very promising approach is the redirection of subsidies and other forms of economic support for unsustainable livestock production, in line with the Aichi targets of the Convention on Biodiversity.

Direct subsidies for animal products and feed in industrialized countries (OECD members) in billion dollars⁸	
Beef and Veal	18
Milk	15.3
Pigmeat	7.3
Poultry	6.5
Soybeans	2.3
Eggs	1.5
Sheep	1.1

The overwhelming majority of OECD subsidies to the livestock sector continue to support production systems that are highly dependent upon imported feedstocks like soy, as well as being highly questionable from a climate, environmental, social, health, and animal welfare point of view. In November 2002, Nicholas Stern, then Chief Economist at the

World Bank, calculated in a speech at the Munich Center for Economic Studies that the average cow in the EU gets US\$2.50/day in subsidies, and the average cow in Japan gets US\$7.50/day, while 75% of people in Africa live on less than \$2/day.⁹ Non-OECD countries are increasingly subsidizing intensive livestock systems as well. China, for example, which has become the main destination of Latin American soy, provides more than 500 million US\$ in subsidies to promote “scale” livestock and poultry farms, on top of an estimated 564 million dollars in “award” payments for major hog-producing counties.¹⁰ The Brazilian development bank provides generous soft loans to cattle and soy producers, including for investments in neighboring Paraguay. The total amount of credit provided through the Brazilian government’s 2010 Agriculture and Livestock Plan was 61 billion US\$, of which only 8.5 billion US\$ was directed towards small family farms, which produce an estimated 60% of Brazil’s food.¹¹

⁸ Chemnitz, C. and Becheva, S., 2014. Meat Atlas, Facts and figures about the animals we eat. Heinrich Boell Foundation and Friends of the Earth Europe.

⁹ Source: [World Bank news](#)

¹⁰ <http://dimsums.blogspot.com/2013/07/chinas-livestock-support-policies-2013.html>

¹¹ “Financing Brazilian Farmers up 7% to US \$61 Billion in the Next Crop,” *BrazzilMag*, June 8, 2010, www.brazzilmag.com

The redirection of these subsidies would free up significant amounts of financial support for more sustainable forms of agricultural production that would not only contribute to climate change mitigation, but also to climate change adaptation. Other non-market based approaches to address forms and levels of unsustainable livestock production include the promotion of consumer campaigns about the benefits of dietary change, and fiscal reform that supports sustainable forms and levels of livestock production and consumption. The recognition of territories and areas conserved by pastoralist Indigenous Peoples and communities and support for their sustainable practices can play an important role in enhancing the resilience and socio-economic viability of sustainable forms of livestock production. Last but not least, strict regulations are often the most effective way to avoid the externalization of environmental and social costs like deforestation, water contamination, climate change, rural depopulation and negative animal welfare impacts that are triggered by unsustainable forms of livestock.

Conclusion

Unsustainable livestock farming is a major driver of forest loss and climate change. As with other commodity-chain related drivers, policies and projects that address the impacts of unsustainable livestock farming in one country or area only will unavoidably lead to leakage as long as the overall demand for livestock products is not addressed. While sustainable forms of livestock production are possible, they require quantitative restrictions regarding the number of animals per hectare to prevent overgrazing or other negative impacts on ecosystems.

A range of non-market based approaches can be used to address the impacts of livestock production on forests and climate change. They include:

- The redirection of financial and technological support for unsustainable livestock production to environmentally and socially sustainable, small-scale farming systems and traditional forms of pastoralism that conserves and enhances natural ecosystems like native grasslands, wetlands and open forests.
- The recognition of pastoralist ICCAs
- The promotion of educational campaigns that encourage responsible dietary change
- Fiscal reform that promotes sustainable forms and levels of meat and dairy in production and consumption countries
- The development and implementation of strict legislation prohibiting practices that involve environmental pollution, weak labor standards, land grabbing, health risks and maltreatment of animals
- To halt negotiations on bilateral and multilateral trade agreements that weaken national standards related to the livestock sector

Lastly, it should be pointed out that many of these approaches cannot be easily framed within REDD or other quantified greenhouse gas emission reduction approaches. In particular, they require policies and measures to be taken in producer as well as consumer countries. Without such demand-side action, international leakage of emissions will be unavoidable. For that reason, joint mitigation and adaptation approaches that build on mutual cooperation between production and consumption countries are a more suitable approach to addressing these and other drivers of forest loss. It is important any future climate regime provides significant support for such approaches.