

Meat from a Landscape Under Threat:

Testimonies of the Impacts of Unsustainable Livestock
and Soybean Production in Paraguay

Miguel Lovera



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Cover Photo: "Road blockade against soy in Paraguay" by Hugo Hooijer, Milieudefensie

Photo on page 8 by: Hugo Hooijer, Milieudefensie

Photo on page 9 by: Simone Lovera, Global Forest Coalition

Photo on page 11 from the community living in the area of the Pechugon facility in Capiatá, Paraguay

Photos on pages 12 and 13 by: Ronnie Hall, Critical Information Collective

This Report follows from a first report entitled, "The Environmental and Social Impacts of Unsustainable Livestock Farming and Soybean Production in Paraguay: A Case Study" April 2014. The first report was prepared by Dr. Miguel Lovera on behalf of the Centro de Estudios e Investigacion de Derecho Rural y Reforma Agraria de la Universidad Catolica de Asuncion, Paraguay. This series of reports focuses in particular on the environmental and social impacts of unsustainable livestock farming and soybean production in Paraguay, with this report featuring firsthand testimonies by the communities experiencing the impacts and by the organizations following and campaigning on the issues.

About the Author: Dr Miguel Lovera is an agronomist who dedicated his professional career to the conservation of agrobiodiversity and the conservation of forests with Indigenous Peoples and local communities. During the Government of President Lugo (2008 – 2012) he was appointed National Climate Change Advisor and he headed the national phytosanitary and seeds agency of Paraguay (SENAVE by its acronym in Spanish). Currently, he continues working on community rights, seed and forest conservation at the national and international level.

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Introduction

On November 28 and 29 of 2014, the Global Forest Coalition together with national organizations in Paraguay, organized a seminar in Asunción entitled “Threats to Community Conservation in Paraguay and International Strategy Meeting on the Impacts of Unsustainable Livestock and Feed Production”. Attended at least by 60 representatives from affected communities, social movements, and organizations from 20 countries, it also brought together peasants, indigenous peoples, farmworkers, campaigners and academics from different areas of Paraguay. The seminar featured several presentations by community and NGO representatives from Paraguay, which demonstrated the extent of the impacts of the fast-expanding cattle ranching and soybean export business in the country. This updated report on the social and environmental impacts of unsustainable livestock production focus on those testimonies presented at the workshop. These are more than just their stories, these are vivid examples of the impacts directly lived by communities.

A Brief Overview of Paraguay

“An island surrounded by land” is how Paraguay is sometimes described, partly because it is one of the two land-locked countries in the Western hemisphere (the other is Bolivia), but also because of its distinctive history and politics. Paraguay's economic activity centers on agriculture and livestock, and in terms of land tenure it represents the most unequal and unfair case of distribution worldwide.(World Bank, 2007)

Livestock and soy production (almost wholly of Monsanto’s Round Up Ready transgenic variety) are the most important primary production sectors. Most of the land in the country is privately controlled and devoted to these two commodities. Hence, most of the negative environmental and social impacts derive from these two activities. A vast proportion, about 96%, of the soybeans cultivated in Paraguay are destined for export as livestock feed. A majority of the cattle slaughtered each year in the country are also exported, with most of this trade controlled by a handful of multinational companies that form an oligopoly not only in Paraguay, but also around the world.

Source: Lovera, Miguel. 2014. “The Environmental and Social Impacts of Unsustainable Livestock Farming and Soybean Production in Paraguay: A Case Study”

Part 1

Lands of destruction: The cases of the Guarany Ñandeva, the Ayoreo, and the Huber Duré Community

Vertiginous Expansion Unchecked

In 2014, the Paraguayan Chaco, a semi-arid region in the west of the country, reported the highest deforestation rate in the world (Guyra Paraguay, 2014). This forest loss is fueled by the international demand for beef. Most of this deforestation is being undertaken to create cattle ranches (Guyra, Paraguay, 2014). These ranches are mainly established by investors from Brazil, Argentina and Uruguay who bring in millions of dollars to Paraguay that has been provided by public and private development banks, and by the sale of land in areas suited for the cultivation of soybeans. (Ultima Hora, February 12, 2013) These lands traditionally belonged to the Guarany Ñandeva, the Ayoreo and some six other communities of Indigenous Peoples. They have inhabited the northern Chaco area for thousands of years, but have been ignored by the State as far as their ownership of this ancestral territory is concerned. Until very recently, land here was handed out to “friends” of the regime of the Colorado Party, in power for more than 50 years (1954-2008) (Iniciativa Amatocodie, 2008). This created an abundance of land in the speculative market that is now being sold at prices that are on average six times less expensive than and in the “soybean territory” - an area suited with optimal soils, weather and water conditions to grow soybeans. (Ultima Hora, February 12, 2013).

There are some 70 different export markets open to Paraguayan beef, but three are key to the maintenance of this business bonanza: Russia, Chile and Peru. However, as the Russian ruble is losing purchasing power, fewer exports of beef are destined for Russia. But because this devaluation of the Russian currency is still recent (having begun in late 2014), the effects on the ranching expansion in the Chaco is not yet perceivable. (ABC, September 20, 2014)

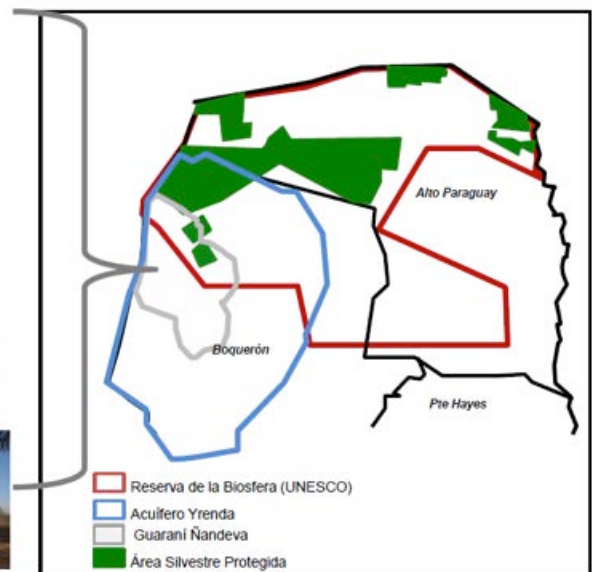


The Case of the Guarany Ñandeva and the Ayoreo

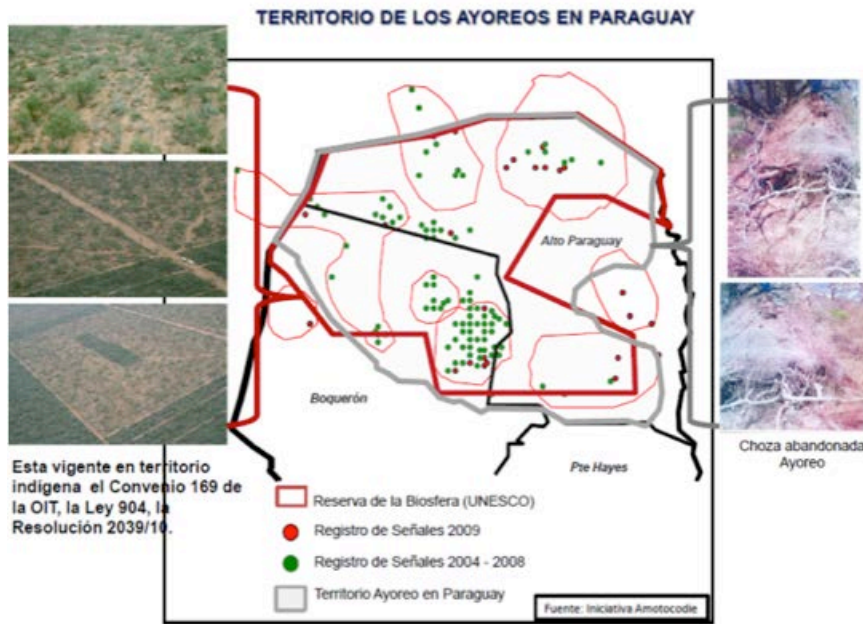
As reported by the Guarany Ñandeva representative who spoke at the November 2014 seminar in Asunción, the Guarany Ñandeva People have several communities that still live scattered across their ancestral territory. This area is located in the Chaco and has been, since the 1950s, subject to hydrocarbon prospecting (oil exploration) and to the establishment of military bases. The main impact of these activities has been the fragmentation of the territory, which causes significant disruption of habitats and the ecosystems the communities depend on. At present, the Guarany Ñandeva are established on several plots of land, but do not have free access to the part of their ancestral territory that is not officially recognized by the Government. Much of the surrounding land is, by now, privately held or are military facilities.

Two national parks also comprise part of the ancestral territory, to which the Guarany Ñandeva population reportedly has only limited access.

TERRITORIO Y TIERRA DE LOS GUARANI ÑANDEVA



Source: Alter Vida, 2014



Source: Alter Vida, 2014

Since the area is designated a Biosphere Reserve, this status is being used by the Guarany Ñandeva and their allies to try and defend their legal rights to their territory against the pernicious effect of other activities, actors and governmental institutions.

Representatives of the Union of Ayoreo Peoples in Paraguay also presented a testimony about the current situation of the Ayoreo at the seminar. The Ayoreo were a warrior people who used to hold most of the territory of the northern Paraguayan Chaco, which extended well into the south of Bolivia. But they have been violently removed from their traditional territories, which is mainly covered by dense, dry forests. This process took centuries, but intensified throughout the 20th century. At the moment most of the Ayoreo are living in so-called “reductions”, established for them by the Government, the Catholic Church and, mainly, by Mennonite settlers from Central Europe who took over much of the Ayoreo land for large-scale agriculture (Iniciativa Amotocodie, 2008).

Most of these Ayoreo settlements are located near Mennonite centers of economic activity and towns. The living conditions here are deplorable, with the Ayoreo living in a situation of apartheid among the Mennonites. Many Ayoreo are employed as farm hands for Mennonite owners in conditions that were described as “forced labour” by United Nations officials (UNPFII, 2011).

Late in 2012, during the de facto government of Federico Franco, a parcel of land belonging to the Ayoreo community of Cuyabia was sold to an individual investor whose intent was to establish a cattle ranch (ABC, November 29, 2012). This sale astounded national and international opinion since the 25,000 ha plot had traditionally been part of the patrimony of indigenous communities, and they secured tenure legalization decades ago.

Cattle ranches established in the traditional Ayoreo areas are set on land plots of 4,000 ha and usually adjoin more than one such plot. Under Paraguayan law, each productive unit must preserve 25% of the forest cover, but there is no clear definition of forest or precise stipulation as to what vegetation type is to be conserved. As a consequence of this lack of clarity, the whole ancestral Ayoreo territory is being stripped of the native vegetative cover. The other critical problem is fragmentation of the area. Large swathes of land being cleared to allocate to the cattle ranches, replacing the wilderness, which the Ayoreo depend on for hunting to ensure their food supply. (Iniciativa Amotocodie, 2008, op. cit.)

Another threat to the territories of both the Guarany Ñandeva and the Ayoreo peoples is the cultivation of genetically modified soybeans. In November 2014, the Paraguayan Government authorized large-scale field trials of heat- and drought- tolerant varieties of soybeans suitable for cultivation in the northern Chaco. Some 300 varieties have been introduced. This massive experiment is being done in collaboration with the United States Department of Agriculture and several U.S. and Paraguayan universities (Ultima Hora, November 30, 2014). If these trials are successful, more land will be claimed to grow the heat- and drought-resistant soybeans, and all the negative impacts seen in the east of the country will be present here as well.

Considering that the current system of agricultural production being implemented in the Paraguayan Chaco (specifically in the Biosphere Reserve) does not ensure socio-environmental or cultural sustainability, the Guarany Ñandeva, the Ayoreo

and their allies presented the following proposals:

- Achieve real recognition of Guaraní Ñandeva and Ayoreo peoples' territories to defend these territories from deforestation and to ensure their traditional use, according to the communities' cosmovision.
- Undertake land use, zoning and a cadastral update with the participation of indigenous communities as subjects of rights enshrined in the National Constitution of Paraguay, international conventions and national laws.
- Monitor and supervise agricultural enterprises so that they respect indigenous rights and existing environmental regulations.
- Suspend all licenses issued by the Secretariat for the Environment (SEAM is its acronym in Spanish) within the Biosphere Reserve until indigenous peoples grant free, prior and informed consent or not.

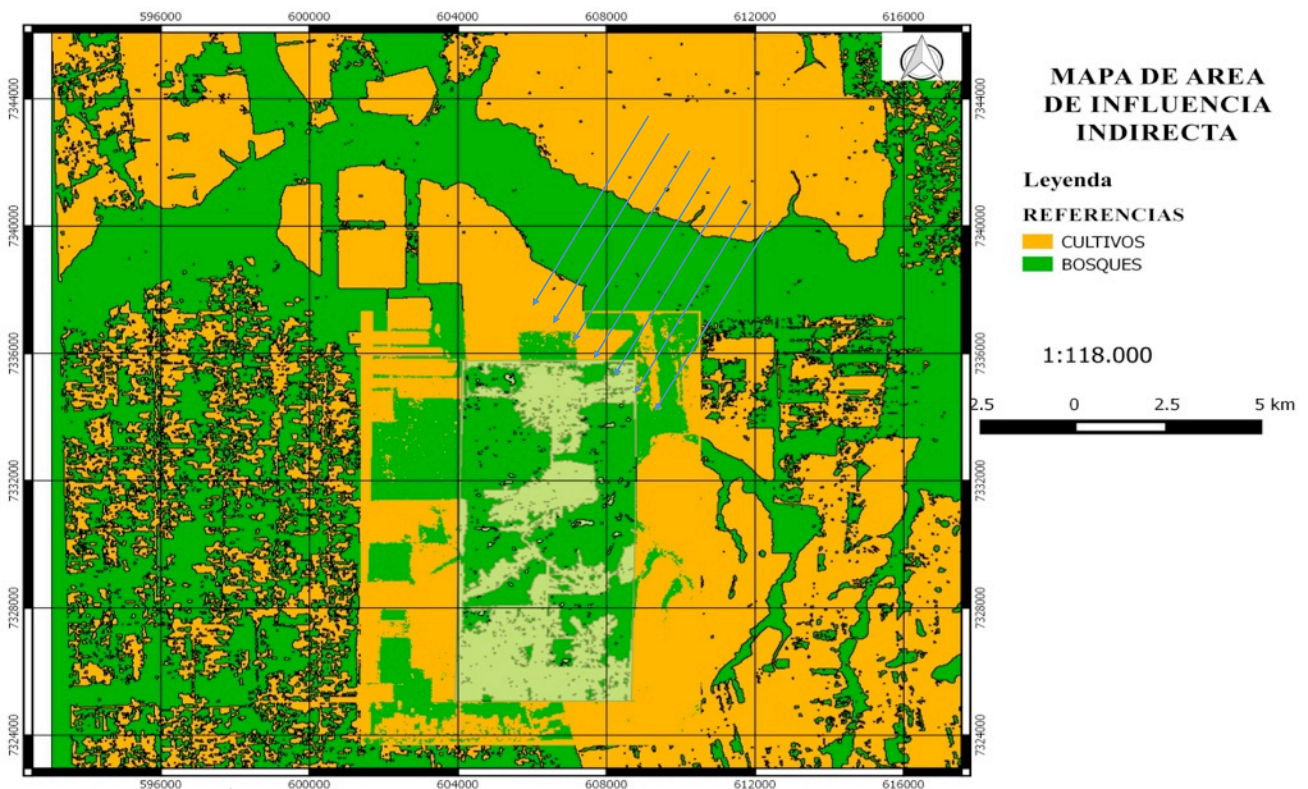
The Case of the Huber Duré Community

*"La única guerra que se pierde es la que se abandona.
La lucha continúa. Venceremos."
("The only war that is lost is the one you abandon.
The struggle continues. We shall overcome.")*

Representatives of the National Federation of Peasants (FNC) and the National Coordination of Indigenous and Rural Women (CONAMURI) spoke at the November 2014 workshop about the impacts of soy cultivation in the east of Paraguay. They particularly highlighted the case of the Huber Duré community. This community was established by peasants who fought for land reform during the decades after the fall of the dictatorship of Alfredo Stroessner in the 1990s. They finally accomplished acquiring rights over this area about a decade ago. The struggle for these land rights was hard and prolonged, and claimed the life of Huber Duré, the peasant leader who led the struggle for the land that now bears his name. But the settlement is located in prime agricultural soil, and for that reason it is coveted by the agribusiness barons who reign over the territory.

In the map below, the area in orange represents land devoted to large-scale crops, mainly soybeans. These crops, which are sprayed regularly with up to 10 agro-toxic compounds, surround the community. The chemical drift over the community area is likely to contaminate the water sources and crops of the community.

Some of the effects of this widespread, intense application of herbicides people living in the region



Source: Alter Vida, 2014

Soy Production and The Use of Pesticides

Soy is currently the country's main export, ranking fourth in the world after the United States, Brazil, and Argentina and sixth in terms of world production.(1) Most of the soy produced is GM and involves a seed-herbicide technology package. This means that the seed cannot be cultivated without the prescribed herbicide. About 98% of the soybeans produced in Paraguay are transgenic varieties carrying Monsanto's Round Up Ready (RR) trait.(2)

The cultivation of GM soy has entrenched the extensive, mechanized, export-oriented agricultural model in Paraguay, with minimal labor demand and high use of pesticides, and all the consequences that come with it. Paraguay currently has the highest proportion of agricultural land devoted to soybean monoculture of any country in South America. The prevalence of this production model in Paraguay leads to an annual discharge of almost 27 million liters and 2.3 million kilograms of pesticides, figures that are growing as the land sown with GM soy increases.

The table in the next page shows the quantity of agrochemicals used in the production of transgenic soybeans. The use of additional herbicides, such as Cletodim, is necessary at the moment since the use of RR alone is no longer effective due to the development of resistant weeds.

(1) Information taken from the website of Camara Paraguaya de Exportadores y Comercializadores de Cereales y Oleaginosas, www.capeco.org.py

(2) Calculated by the author of the present report through a supply survey.

Source: Lovera, Miguel. 2014. "The Environmental and Social Impacts of Unsustainable Livestock Farming and Soybean Production in Paraguay: A Case Study"



Soy field in Paraguay. Hugo Hooijer, Milieudefensie



Pesticides and GM seeds: industrial soy production facilities near Minga Pora, Paraguay. Simone Lovera, Global Forest Coalition.

community nearest to the soybean plantations. These include spontaneous abortions (or miscarriage), cancers, congenital malformations, and massive, unexplained deaths of domestic animals. One of the gravest events occurred on June 23, 2014, when two girls aged three years and six months died after unusually intense session of herbicide spraying, presumably applying Round Up or generic glyphosate. The link between the spraying and the girls' deaths was impossible to determine conclusively as the authorities were reluctant to take samples expeditiously of the soil, water supply and tissue of the victims. Instead, the medical examiner claimed that rural people are often malnourished and hence are susceptible to respiratory ailments, which could be fatal (ABC, 25/08/2014). Once, after intense pressure by the National Peasant Federation (FNC is its acronym in Spanish), the tissue samples were finally taken the Government physicians looked only for the pure substances, either Round Up or glyphosate, and not for the metabolites that may derive from the substances sprayed. As a result, no toxic agents were found anymore. As reported by Nivia (2001) and by Benachur and Seralini (2009) the compounds the government physicians needed to be looking for at that stage were AMPA (amino methyl phosphonic acid), the main product of degradation of glyphosate, and POEA (polioxietyl amina). This surfactant, (a chemical used to ensure the contact

between the plant tissues and the active ingredients of the chemical compound), used in Round Up is approximately 30 times more toxic than glyphosate (Servizi, Gordon, Martens, 1987).

Moreover, in the northern and central provinces of Argentina, where consistent follow up was given by the public and by academia to cases of intoxication related to crop spraying, the findings were all compatible with what took place in Huber Duré. Argentinean civil society organizations in the province of Santa Fe, together with researchers from the provincial university carried out an epidemiological study on homes within the soybean production area of the province. Their 2014 study concluded that there are four times more cancer cases now than there were in 1997, when GM soybeans first started to be planted in Santa Fe. Many cases of intoxication documented there match the description of the situation in Huber Duré, including the case of the two deceased girls (Verseñazi, 2014).

The FNC is committed to following up on its current struggle, which consists of claiming sufficient land area to accommodate all landless peasants, a not unreasonable demand in a country like Paraguay where most of its territory has been criminally usurped – a process that is supported spuriously by the Government, according to the peasants.

The FNC is also committed to carrying on the necessary research to “nail down the culprits” of the unusual morbidities they are experiencing. So they are discussing with civil society organizations and

academics, both nationally and internationally, how to continue their investigations; the main obstacle, though, is funding.

Disaggregated Data on the Use of Pesticides in Cultivation of Roundup Ready (RR) Soy in Paraguay During 2013

Technical Name	Type	Toxicological Class	Liter/ha	Kg/ha	Total in Liters Applied on 3,157,600 ha	Total in Kg Applied on 3,157,600 ha
Glyphosate	Herbicide	Class IV Green Label	2		6,315,200	
Cypermethrin	Insecticide	Class III Blue Label	0.75		2,368,200	
Acephate	Insecticide	Class II Yellow Label	0.75	0.4	2,368,200	1,263,040
Endosulphan	Insecticide	Class Ib Red Label	1.2		3,789,120	
Tebuconazole	Fungicide	Class IV Green Label	0.5	0.33	1,578,800	1,042,008
Carbendazin	Fungicide	Class IV Green Label	0.4		1,263,040	
Cletodim	Herbicide	Class III Blue Label	0.4		1,263,040	
Paraquat	Herbicide	Class Ib Red Label	2.5		7,894,000	

Source: AlterVida/CEIDRA, 2013

This chart was initially put together by AlterVida in 2012 and updated by CEIDRA in 2013. AlterVida is a nongovernmental organization based in Asunción and CEIDRA is The Center for Studies and Research on Rural Law and Agrarian Reform of the Catholic University of Asuncion.

Part 2

The overlooked impacts of meat and dairy production

Not Only Cattle

Community representatives from Capiatá provided testimony at the seminar of another, often overlooked aspect of meat production in Paraguay: the contamination caused of public resources by slaughterhouses and processing plants. La Blanca S.A. is a company dedicated to the production of poultry and eggs. The commercial name under which their chicken is sold is "Pechugón", which in Spanish means busty or large-breasted, like its chickens are bred to be. La Blanca S.A. has been present in the Paraguayan market for the last 45 years. It owns the entire production chain, from the incubation of baby chicks through to slaughter, and they are gatherers of grains (corn and soybeans among others), and producers of feed for all domesticated animals, including cattle. The company also produces milk, yoghurt, cheese and other derivatives alongside its extensive chicken production for domestic consumption, as well as for export.

At the time the company started, Capiatá was a secluded town on the outskirts of Asuncion with lots of wooded acres that was crossed by international route No. 2. Today, it is one of the most populated cities in the country with almost 250.000 inhabitants and this population is steadily rising. The families that live in the vicinity of the Pechugón poultry breeding farm and the slaughterhouse that exist today must withstand constant odors, invasion of flies and contamination of soil and water. According to them, the company's record with respect to its social responsibility towards the community is poor.

The problems neighbors of the facilities report having to deal with every day are:

- Water and air pollution in the three neighborhoods adjoining Pechugón's slaughterhouse, where the daily output is approximately 40,000 chickens (see map below);
- Various health problems, especially allergic skin reactions, hypertension, diarrhea, and vomiting;
- Chemicals being released without regard for standard safety procedures, and the wind blowing them into peoples' houses, leading to constant itching and persistent skin irritation (rashes);
- A lack of response to complaints made by neighbors' organizations by the company (a



Dining with flies: A daily reality for the community living in the vicinity of the Pechugón poultry facility. Photo provided by the community.



Polluted water from chicken slaughterhouse and shopping centre, Capiatá, Paraguay. Photo by Ronnie Hall, Critical Information Collective.

company staff member reportedly told one of the complaining neighbors to move), the local government and the Secretariat for the Environment (SEAM in Spanish);

The community lacks the means to complete the lab tests needed to confirm the relationship between the numerous health effects they suffer and the waste produced and chemicals used by Pechugon. Public agencies are not willing to investigate the true cause of these health problems. At the same time, the neighboring communities also report cutbacks in public health care, particularly cuts to personnel and supplies for the local health post.

The community's goals are:

- To produce research studies to assess the levels of pollution to which the local population is exposed and to campaign for a transfer of the slaughterhouse to a rural area so they can live in a healthier environment; and
- To campaign for the respect of international and national treaties and laws that require the company to produce in an environmentally-friendly way.

Conclusions

Like many other Latin American countries, Paraguay has become a territory reserved to produce raw materials for export. After decades of high production of cotton as an export commodity, in which peasant labor played a key role growing and harvesting the crop, overseas demand changed, as if on a whim, to other commodity crops that could be sown and harvested without peasants, but not without their land. Due to this reality, peasants' land increasingly is being grabbed in Paraguay by local elites and foreign occupiers. In alliance with transnational corporations, they are now producing and exporting these new "raw materials" in high demand globally, namely, soybeans for livestock feed and beef.

Since the root cause of this state of affairs lies outside of Paraguay, solutions should also come, at least in part, from those countries where the commodities are in demand. The main binding factor between Paraguayan organizations struggling for their economic, environmental, cultural and human rights and foreign ones should be solidarity, understood as a value that is mutually beneficial and not a charitable opportunity.

Many of the representatives of Paraguayan organizations who made presentations at the November 2014 seminar agreed that an international campaign against unsustainable livestock and feed production is needed in order to strengthen their position in the face of the powerful local oligarchy that controls politics and the economy of Paraguay. Such a campaign could help cool the impetus for the expansion of agribusiness in Paraguay, which is taking over more and more of the soil that has been occupied for centuries by peasants and Indigenous communities.



Yes to our food sovereignty: Ñamoseke Monsanto (Get rid of Monsanto) is a national campaign of social movements, peasants, Indigenous Peoples and activists to get Monsanto out of Paraguay. Photo by Ronnie Hall, Critical Information Collective.

Recommendations

The seminar also produced some key recommendations that can help counteract the negative impacts of unsustainable livestock and feedstock production in Paraguay and other countries around the world. These are to:

- Establish an international alliance of organizations campaigning against unsustainable livestock production, building on existing international networks, federations and coalitions that have North-South linkages and constituencies. The alliance should provide support to creative national campaigns of indigenous and peasant organizations to denounce dirty production (like Ñamoseke Monsanto Paraguay/ Let's get rid of Monsanto in Paraguay), including through organizing field visits and testimonies. The alliance will promote recognition of the rights and role of pastoralists and other sustainable livestock producers, and women.
- Produce concrete information and stories, including an accurate documentation of facts, problems and data of the impacts of livestock and feedstock production.
- Gather more information and analysis on the corporate architecture of agribusiness and the impacts of free trade agreements.
- Expose and denounce actions of agribusiness and government agencies promoting industrial livestock/feed, and the global corporate architecture supporting unsustainable livestock production in general. It should also produce specific letters of protest from NGOs in consumer countries like Russia against, for example, the pollution caused by La Blanca S.A. in Capiatá.
- Support campaigns to reduce meat/dairy consumption and promote good/sustainable farming/production and food sovereignty (i.e. community farming) in consumer countries. These campaigns could focus on two key aspects:
 - the GMO-health angle, in light of the increasing concern about GMOs and their impact on health amongst especially EU, Chinese and Russian consumers. The alliance should encourage consumers to reject meat/dairy that is produced with GM feedstock, highlighting the pesticides used in GM production.
 - the climate change impact of meat/dairy production, highlighting that meat and dairy consumption is one of the biggest individual sources of GHG emissions, as well as being a globally significant source of GHGs
- Demonstrate the relationship between the fact that Paraguay has the world's highest level of deforestation and its unsustainable livestock production model and use that information in global campaigns.
- Use the impact of unsustainable livestock production on the future world food situation as a policy angle in the Sustainable Development Goals negotiations and the FAO Committee on Food Security.
- Support new educational approaches focusing on agroecology, like the IALA Guarani University, and facilitate the exchange of experiences with agroecology universities and schools.

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This Report is written as a contribution to the current and growing national struggles and international campaigns against unsustainable livestock production. It is jointly published by Global Forest Coalition and Brighter Green.



The Global Forest Coalition (GFC) is an international coalition of 67 NGOs and Indigenous Peoples' Organizations from 47 countries defending social justice and the rights of forest peoples in forest policies. GFC participates in international forest policy meetings and organizes joint advocacy campaigns on issues like the need to respect Indigenous Peoples' rights, women's rights and needs and community conservation, the need for socially-just forest policy and the need to address the underlying causes of forest loss. It's staff and collaborators work from, amongst others, Paraguay, the Netherlands, Colombia, Thailand and the UK.

www.globalforestcoalition.org



Brighter Green is a public policy action tank that works to raise awareness of and encourage policy action on issues that span the environment, animals, and sustainability. Based in New York, Brighter Green works in the U.S. and internationally with a focus on the countries of the global South and a strong commitment to ensuring and expanding equity and rights.

On its own and in partnership with other organizations and individuals, Brighter Green generates and incubates research and project initiatives that are both visionary and practical. It produces publications, websites, documentary films, and programs to illuminate public debate among policy-makers, activists, communities, influential leaders, and the media, with the goal of social transformation at local and international levels.

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