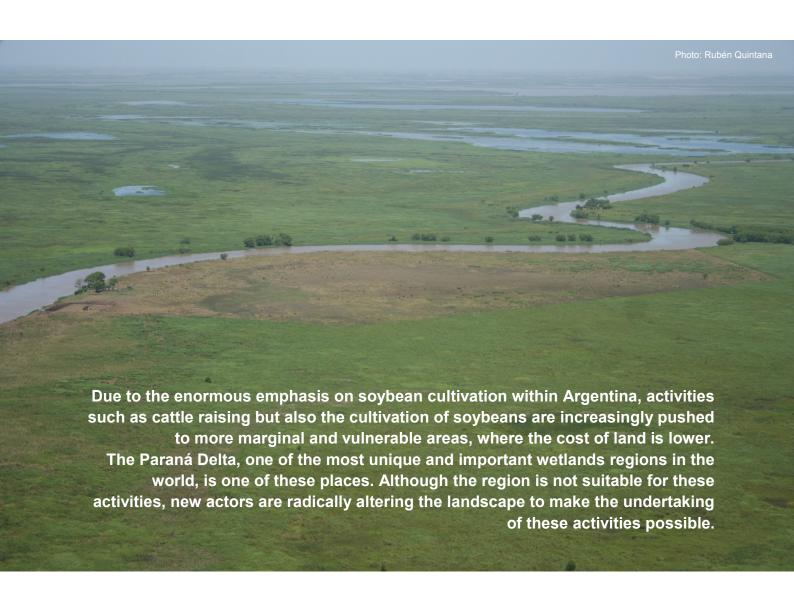


Soy entering valuable wetlands of the Paraná Delta, Argentina



Where

The Paraná Delta stretches out over the Argentinean provinces of Entre Ríos, Buenos Aires and Santa Fe. In Argentina, the area used for the cultivation of soy has increased from 12 million ha in 2002/03 to approximately 20 million ha in 2013. The result of the emphasis put on soybean cultivation in Argentina is that arable land in the traditional agricultural areas is running out and becoming very expensive. This has led to agricultural actors moving into other areas that were previously deemed unsuitable for agricultural activity. The Paraná Delta, one of the most productive and unique ecosystems on earth, is one of these areas. Although the Paraná Delta wetlands are not apt for largescale agriculture and cattle ranching, production of crops like soy, wheat and maize has increased rapidly over the last decade or so. The number of cows kept on the islands has also grown, from 160.000 in 1997 to 1.500.000 in 2007.

Moving into the Delta is an attractive option to producers, because the land is cheap in comparison to the traditional agricultural areas and the region is in the vicinity of the main centres for distribution and consumption of grain within Argentina. As the Paraná Delta provides many ecosystems services to those living in the vicinity of the area as well as those beyond, the



agricultural activity in the area could negatively affect a large number of people.

Who

There are several companies active in the Middle Delta. For example:

- Baggio, owning 48,000 hectares in Victoria;
- Deltagro SA, who have more than 80,000 hectares around the island of Lechiguanas;
- Copra SA, who own around 10,000 hectares;
- Bema Agri, a Dutch company that owns around 12,000 hectares on the island of Itapé, close to Villa Constitucíon;
- Pazzaglia Hermanos S.A. and Stonehedge S.A, belonging to the same owner. Accounts differ as to how much land the company owns exactly.

The companies that work within the area are typically the larger ones, as they have the financial resources needed to employ the costly techniques used to transform the land.

What

The agricultural move into the area has gone hand in hand with a number of illegal and/or unsustainable actions. The most important and invasive actions undertaken are those that are aimed at the alteration of the wetlands in order to make it suitable for agricultural production. Those include the construction of dikes, cutting of waterways, and the extraction of water to dry up the lands and to protect it from flooding. A research of the Argentinean office of Wetlands International signalled an increase in embanked areas in almost 32.000 ha in three years, which represents a rate of increase of around 10.000 ha. These docks and embankments have been constructed and lead to the alteration of the hydrologic regime. Even though these actions are now widespread in the Delta, they require a permit from the government. However, most companies do not request such a permit, as they are seldom punished for their actions.

Another dangerous technique used is the burning of land to clear it. The use of fire to clear land is in itself not illegal, as it is managed by law, in which is stated in what period fires can be started and that authorization has to be given by the Secretary of Environment. However, the new actors in the region have started fires that were outside of these periods and unauthorized. In 2008 these fires got out of hand, leading to 207,000 hectares of natural pasture and forest, or 11% of the total surface of the Delta, being destroyed.

Furthermore, the increased use of agrochemicals, promoted by the current industrial and large scale "soy production model", poses a threat to both the environment and the local population, as it spreads through the streams of water from which the locals drink, as well as through air. The increase in agricultural activity has also led to the introduction of foreign species.

The results of these activities include loss of vegetation; loss

of fauna; release of CO2 through

burning of the land and loss of biomass: contamination of water through keeping of cattle and use of agrochemicals; and the loss of the wetlands' capacity to tone down floods, to retain and degrade pollutants, and reserve freshwater, among other important services. All of these activities have grave impacts on the livelihoods of the local population, as they depend to a high extent on their natural environment. Traditional livelihood activities include fishing, hunting and small-scale family farming and livestock keeping. In addition to the loss of animals and vegetation this is also hampered by the closing off of land by the companies, which was previously freely accessible to all.

The Paraná Delta provides freshwater to approximately 15.000.000 people, who inhabit one of the most important urbanindustrial cords of the country. Furthermore, the local population often drinks the water from the river and stream and in certain case lacks to the instruments purify the contaminated water. With the advent of the agricultural frontier in this area. and the lack of regulations with regard to quantities of animals kept on the islands and the use of agrochemicals, Argentina could face some serious problems with its drinking water in the future. In addition, there are several reports of families having been forced to leave their land, as a company had bought it and they lacked the documents to

prove that they had inhabited the land for a long time.

Civil Society Actions

There are a number of NGOs active in the region, performing research and drawing up reports to persuade the government into taking action. Organizations frequently cooperate with each other to increase the impact of their actions. There is also a large number of local organizations that raises attention to the topic. Together they discuss the need for norms to come into place and the development of certain institutions that can improve conservation. Through their discussions they come up with political and jurisdictional necessities and present these ideas to the governmental bodies.

In addition to this project the NGOs are working hard to drawing attention to the illegal activities that are taking place, by presenting petitions asking the local government to intervene in illegal activities that are occurring in the wetlands, such as the construction of dikes and use of heavy machinery on the islands. The NGOs have also addressed the deficiency of government actions regarding this illegal activities, and that those in charge have so far not managed to put a stop to these infringements of the law. The pressure of the organizations has been one of the factors leading to the adoption of PIECAS (see below).

Governmental Actions - legislation and policies

A number of factors on the side of the government contribute to negative developments in the Paraná Delta. First of all, as a result of the federal organization of the state within Argentina, there is a multiplicity of governing organs that are responsible for the Delta region: on the national level, different provincial levels, and the municipal level. This dispersion of power has led to a division of responsibility, making it easier to point the finger to someone else when problems arise. Furthermore, legislations are often conflicting in their content, with some things being legal in one province but illegal in the other. In many cases land owned by companies spreads out over multiple municipalities, departments or even provinces, making the legal context blurred and creating a situation where it is simple to break the rules.

In addition, there is a diverse level of knowledge and appreciation of the ecosystem services among the authorities, which remarks the need of a coordinated work and dissemination of information. Since then, a number of important studies that do show this connection have been brought to their attention, and the PIECAS plan incorporates this knowledge and acknowledges the relation between the state of the wetlands and the provision of goods and services. The polit-

ical decisions necessary to properly implement the existing legislation is not sufficient in the context of the impacts and developments mentioned before.

It has been mentioned that inspections that government officials should undertake to check if the agricultural companies do not break any laws, for example by constructing illegal embankments, have not been executed up to par. Many of those working for the different governing bodies still hold on to the vision that a territory is only productive if large-scale agriculture and livestock keeping is performed and do not see the importance of the ecosystem services that the Delta offers in its uncultivated form. As such, they favour the interests of the agricultural actors over those of the environment and the local inhabitants.

In September of 2008, the Plan Integral Estratégico para la Conservación y el aprovechamiento Sostentible del Delta del Paraná (PIECAS) was launched. This is an environmental legislation tool for the Delta region. It was also designed to follow the international covenants of which Argentina is a part, especially the Convention on Biological Diversity and the Ramsar Convention. The central objectives of PIECAS are to (1) to protect, conserve and make the most of the components of the biological diversity and the natural resources in the area, in a sustainable way; (2) to maintain and

restore the structure and ecological functions of the strategic ecosystem of the Paraná Delta; (3) to promote sustainable development; and (4) to ensure the participation of all the actors involved.

The plan was seen as a scenario that could resolve the interiurisdictional conflicts that existed and prohibited proper conservation in the Delta. Unfortunately, the reality does not live up to these promising plans so far. Various environmental organizations have stated that despite the fact that the development of policies to conserve the Delta is one of the main objectives of PIECAS, so far little has happened in the fulfilment of these goals. The provincial secretaries of environment do keep track on the embankments, have developed documents that take up recommendations and proposals of both academics and NGOs, and try to keep the issue on the agenda of their offices. Unfortunately, they do not enjoy the same power as the Ministry of Production and the executive power.

Some municipal subdivisions of the Ministry of Agriculture, Livestock and Fishing have undertaken actions aimed at protecting the rights and traditional livelihoods of the islanders. On the islands belonging to the municipalities of Baradero and San Pedro projects are in by place that provide small subsidies for islanders in order for them to be

able to slowly capitalise, by buying tools or some pigs or bees, for their small-scale productions.

The idea that by providing a little bit of capital, the islanders could decrease their dependency on ecosystem services, could be questioned though. Although the islanders would manage to acquire a small capital through such schemes, they will continue to depend on the natural resources of the delta, as they hunt, fish, keep small herds of livestock and practice beekeeping. As such, the availability of land, water, vegetation, the fauna and fish within the delta is of great importance for the sustenance of local livelihoods.

For more information

FARN | www.farn.org.ar

Wetlands International LAC / Fundación Humedales www.lac.wetlands.org

M'Bigua | www.mbigua.org.ar/index.php?page=red-delta

Taller Ecologista | www.tallerecologista.org.ar/

PIECAS | www.ambiente.gov.ar/ archivos/web/AmDELTA/File/ PIECAS_Delta_2008%281% 29.pdf

Recommendations

- Implementation of international covenants, such as the Ramsar Convention;
- Integrative vision of different jurisdictional elements, as is envisioned in PIECAS;
- · Effective implementation and monitoring of PIECAS;
- Provide support to the development of income generating activities that the local population can carry out on the islands and that can be commercialized and sold for a fair price;
- Grant the islander subsidies to make the purchase of renewable energy equipment possible, as it is very expensive to obtain energy on the islands;
- Secure the islanders' access to lands, especially for those who
 do not have a land title (the majority of the local population) to
 protect them from land grabs;
- Stop large-scale cultivation within the wetlands of the Paraná Delta:
- Promote the implementation of the environmental legislation that is in place;
- Declare the Parana Delta as a "no-go" area for soybean cultivation within the Roundtable of Responsible Soy (RTRS).







