



Land transfer in the Paraná Delta, Argentina

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Thesis

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Executive summary

The most fertile soils of Argentina, the Pampa region, are increasingly dedicated to the profitable soybean production, driving up land prices and therefore causing the displacement of other less profitable production chains to marginal lands where land prices are low. That is why the agricultural frontier of the Pampa region is expanding into the Paraná Delta region, what is the research area of this study.

The aim of the research is to expand the existing knowledge about the stakeholders who have started buying land in the region, the changes that occurred on the land market and the implications of these changes for the stakeholders buying land, resulting in the following research question: *How is the expanding agricultural frontier of the Pampa region affecting the land market in the Paraná Delta and what are the consequences for the different stakeholders, especially the newcomers, on the land market?* The results of this research are based on the analysis of secondary sources and in-depth interviews with different stakeholders of the Paraná Delta, which are performed during the field research that has been conducted in the Delta from February to May 2013.

The most important result of the expanding agricultural frontier of the Pampa region is the influx of new stakeholders into the Delta region. These *newcomers* often are experienced businessmen and/or farmers, who live in the large cities surrounding the Delta and often have political relationships in the government. Their interest in the Delta stems from economical motives and they introduced up scaling into the area, to further increase the yields of their lands. They have been able to transform the Delta to their benefit, without notable interference of any of the other stakeholders of the land market of the Delta, because of their political relations and their financial resources. And not only have they transformed the land market, they also started the Pampanization process, by constructing dikes and embankments, what affects the natural environment of the Delta.

For the buyers of land this influx of *newcomers* means that the competition for land has increased, driving up land prices. Furthermore has increased governmental interference curbed their, before unlimited, possibilities on the land market. However, these limitations are negligible, because little governmental monitoring takes place. Therefore it seems that the *newcomers* who emerged into the Delta area because of the expanding agricultural frontier are the most important ones affecting the Delta and its land market and they are, as the most active land buyers on the market, minimally affected by the changes on the land market.

In order to preserve the fragile Delta region, and protect it for the current unsustainable economical exploitation, which does not respect the ecosystem nor the local population and their access to water and land, a cohesive and inclusive regulatory framework for the entire Delta region should be developed. This framework should decentralize power, regulate and closely monitor the agricultural exploitation of the lands and hereby prohibit the environmentally damaging techniques. Furthermore should a systemized land administration be realised, providing updated information and stimulating the use of the formal land market. At the same time the land tenure problems the Delta has experienced throughout its history should be addressed. Only by doing so the Delta can be exploited in a sustainable manner and the local inhabitants can be protected for the developments that currently are taking place in the Delta.

Acknowledgements

This research has provided me the opportunity to learn about performing field research in a foreign country, and thus to deal with differences in language, culture and environment. I have learned to analyse local developments in a broader perspective, and see how international trends can affect individuals, even in remote areas such as the Paraná Delta.

Foremost, I would like to thank my supervisor of Utrecht University, dr. Gery Nijenhuis, for her support and advise during the field research in Argentina and for the useful comments and engagement during the writing process back home. Furthermore I would like to thank my supervisor of FARN, Ana Di Pangraccio, for supporting this research and providing contact information of the most important NGOs active in the Delta region.

Also, I like to thank all interviewees, who have willingly shared their precious time and their knowledge during the process of interviewing. I thank my fellow researchers, Rodrigo Castro Volpe and Sophie Blok of Utrecht University for the stimulating discussions and for all the fun we have had during the trips to the research area.

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Table of contents

- Executive summary5**
- Acknowledgements7**
- List of figures 11**
- List of abbreviations..... 13**
- Introduction 15**
- Research objectives 17**
- Regional context 19**
 - Global soy industry 19**
 - Argentina..... 20**
 - The Paraná Delta region..... 21**
 - The Middle Delta region..... 22**
- Literature review 23**
 - Theories and approaches 23**
 - Political economy..... 23
 - The access framework..... 24
 - Land markets and their transfer systems 24
- Research design and methodology..... 27**
 - Research questions 27**
 - Operationalization 28**
 - Conceptual framework 28**
 - Selection of the research area 29**
 - Selection of the research population 30**
 - Data collection 30**
 - Literature research 30
 - Quantitative information..... 30
 - Qualitative information..... 30
 - Risks and limitations..... 31**
 - Political economy in the Delta region..... 31**
- Before the agricultural expansion..... 33**
 - The colonization of the islands 33**
 - The changing role of the state 36**
 - Concluding 37**
- The land market of the Delta today: the fourth phase..... 39**
 - The different stakeholders..... 39**
 - The newcomers on the land market 42**
 - Concluding 48**
- Transferring of land 49**
 - Changes on the land market..... 51**
 - Concluding 54**
- Conclusions and discussion 55**

Conclusions	55
Discussion	57
Political economy.....	57
The influence of the newcomers	57
Comparable cases	58
Limitations.....	59
Validity	59
Recommendations	59
References	61
Appendices	64
Appendix 1	65
Appendix 2	66

List of figures

Figure 1: Soybean, meal and oil exports in 2011 (source USDA, 2013b) 19

Figure 2: World soybean production 2011 (source: USDA, 2013) 20

Figure 3: The Paraná Delta region, Argentina (source: Baigún et al., 2008). 21

Figure 4: Conceptual framework of the research 28

Figure 5: Research area (source: Novillo, 2011). 29

Figure 6: Timeline displaying the first phases of colonization of the Delta. 36

Figure 7: A house on the islands of the Delta, Baradero. 40

Figure 8: Harvest of maize on the lands of Bema Agri B.V. in the Delta (source: trekkerweb.nl, 2007).
..... 44

Figure 9: Dikes constructed by Pazzaglia Brothers S.A. (source: Fundacion Proteger, 2008)..... 45

Figure 10: Stakeholders active on the current (2013) land market of the Delta..... 46

Figure 11: Stakeholder analysis 47

Figure 12: Timeline including the current and last phase of colonization..... 48

Figure 13: Newspaper advertisement in which Delta land is offered for sale (source: Paralelo 32, 2012) 49

Figure 14: Differences between the land market of the Delta before the agricultural expansion of the Pampa region and today. 53

Figure 15: Soy production in Argentina, May 2009 (source: Shurtleff & Aoyagi, 2009) 65

Figure 16: World soybean production, 2013 (source: USDA, 2013) 66

List of abbreviations

FARN	Fundación Ambiente y Recursos Naturales
GDP	Gross Domestic Product
GM	Genetically Modified
INDEC	Instituto Nacional de Estadística y Censos
PIECAS	Plan Integral Estratégico para la Conservación y Aprovechamiento Sostenible en el Delta del Paraná
SENASA	Servicio Nacional de Sanidad y Calidad Agroalimentaria
UNDP	United Nations Development Programme
USDA	United States Department of Agriculture

Introduction

A growing world population, rising incomes and changing food preferences have caused an increased demand for livestock products, while globalization reinforces trade in livestock inputs and products; estimations are that global production of meat will more than double from 229 million tonnes in 1999 to 465 million tonnes in 2050 (Steinfeld et al., 2006). With the therefore increasing global demand for animal feed, with soybeans being one of the most important components, soy production is booming (Roodhuyzen, 2011), mainly in Latin America. Argentina has become the third largest producer of genetically modified (GM) soybeans in the world, dedicating more than 50% of its agricultural lands to the production of this single crop (Goldfarb, 2012) resulting in a share of 21% (around US\$ 17 billion) of total exports (around US\$ 81 billion) coming from soybean products (FAO, 2010; World Bank, 2012). This large-scale soybean production is causing many environmental and social problems; such as pollution of water and soil, increased deforestation, loss of agro-biodiversity, health problems due to increased use of pesticides and herbicides, loss of livelihoods, increased rural conflicts, and loss of food security and sovereignty (García-López & Arizpe, 2010).

The most fertile soils of Argentina, the Pampa region, are increasingly dedicated to the profitable soybean production, driving up land prices and therefore causing the displacement of other less profitable production chains to marginal lands where land prices are low, such as beef cattle production, which traditionally was the largest economic activity in that area (Roodhuyzen, 2011). That is why at this moment the agricultural frontier of the Argentinean Pampa region is expanding to an, until recently, agriculturally unexploited area; the Paraná Delta region. This region is situated North of the cities of Buenos Aires and Rosario around the last 300 kilometres of the Lower Paraná river and comprises around 17.500 km² (Baigún et al., 2008), this is the research area of this study.

Because of this increase of agricultural activities in the Delta region, the number of cattle increased from 160.000 in 1997 to 1.500.000 in 2007 (Baigún et al., 2008) and a resurgence and expansion of the land market occurred with new actors entering the region. Local newspapers and organizations report that these recent developments have led to environmental degradation, socio-environmental conflicts and land tenure issues (Baigún et al., 2008; Roodhuyzen, 2011; Wetlands International, 2012). However, academic analysis about these developments in the Delta region is scarce. Therefore this is an explorative research, which aims to expand existing knowledge about the stakeholders who have started buying land in the region, the changes that occurred on the land market and the implications of these changes for the stakeholders buying land. Thereby the research creates an improved understanding of the problems of this region and provides information that can be used by policy makers to address the new problems in the region.

This thesis is the final result of the field research that has been conducted in the Paraná Delta region in collaboration with the host organization FARN. In this report first the research objectives are presented, formulating the academic and social relevance of the research. Where after the regional context of the Delta is explained. Then the theories and approaches related to the most important topics of this research will be presented in the theoretical framework. Followed by the research questions and methodology used during this research. Finally the results of the research will be presented, and answers on the research questions are provided in the conclusions and discussion.

Research objectives

What becomes clear from the introduction of this thesis is that in the last decade the situation in the Paraná Delta region has been changing considerably, due to the expanding agricultural frontier of the Pampa region. However, even today not sufficient information is available about what exactly is happening in this specific region, resulting in ignorance of stakeholders, a wide variety of stories in the media and a mismatch between the current developments and implemented policies.

This research aims to reduce some of these misconceptions by clarifying what changes recently have been taking place in the Paraná Delta and how these changes influence the different stakeholders, resulting in the following research question: *How is the expanding agricultural frontier of the Pampa region affecting the land market in the Paraná Delta region and what are the consequences for the different stakeholders, especially the newcomers, on the land market?* Within the research there is a focus on the developments on the land market of the Delta, and mainly on the buying side of the land market. Therefore the academic objective of this research is to expand the existing knowledge about the area, the current developments and the stakeholders that are influenced by the developments currently taking place in the Paraná Delta, due to the agricultural expansion of the Pampa region. By doing this, the research contributes to the current land grabbing debate where large-scale land acquisition for food production is an important subject.

Finally the research informs policy makers about the current status of the Delta and the socio-environmental conflicts and land tenure issues that are resulting from the developments. Subjects that are widely discussed in the present Argentinean politics and media, because of the rapid and fundamental changes that are taking place there. Policy recommendations concerning the land market of the Delta are included in the thesis to meet the societal objective of this research; to denounce the socio-environmental conflicts and land tenure issues the Delta is experiencing today and to give guidance to a policy framework that promotes social equity and a more sustainable use of the Delta.

Regional context

The Paraná Delta is a region in Argentina that is completely different from the rest of the country; regarding the natural environment, the origin of the population and even the culture. Therefore, to understand the situation of the developments in this region, the regional context of the Delta is explained in this chapter. First is elaborated on the developments in Argentina that have influenced the increased interest in the land market of the Delta. Then the Paraná Delta is described, providing a short overview of the environmental and socio-economical situation of the area. Finally the Middle Delta region, the research area, is shortly presented.

Global soy industry

The soybean is an annually grown crop, produced in temperate, subtropical and tropical regions and consisting of up to 50% protein. With a yield of up to 3.600 kilo per hectare per crop cycle, it is the vegetable protein with the highest yielding source globally. In addition, soy protein resembles animal protein much more than other vegetable proteins, making it an ideal food component for people and livestock. Therefore soy is the most important protein in animal feed (Dros, 2004), and soy oil is, with 28% in 2011, the second most consumed vegetable oil in the world (USDA, 2013a). These characteristics of the soybean have resulted in the rapidly increasing global soybean production. This increase is mainly driven by the demand for the agricultural feed industry, due to the growing meat industry, as mentioned in the introduction. Globally around 87% of total soybean production is crushed and 13% is directly processed in the food industry (Gelder & Dros, 2002).

The United States is the largest soybean producer, followed by Brazil and Argentina. Argentina is the world's largest exporter of soybean oil and soybean meal though (García-López & Arizpe, 2010; Gelder & Dros, 2002; Goldfarb, 2012), supplying about 45% of the world market (Goldfarb, 2012), as the following figure illustrates.

	Soybean exports		Soybean meal exports		Soybean oil exports	
	Thousand metric tons	%	Thousand metric tons	%	Thousand metric tons	%
World	91,592	100%	58,551	100%	9,576	100%
Argentina	9,205	10%	27,615	46,1%	4,561	47,6%
US	40,849	44,6%	8,238	14,1%	1,466	15,3%
Brazil	29,951	32,6%	13,987	23,9%	1,668	17,4%

Figure 1: Soybean, meal and oil exports in 2011 (source USDA, 2013b)

Latin America is the region that has contributed most to the increased global soybean output; in 2011-2012 52% of world soy production was produced in this region, as can be seen in appendix 2 (USDA, 2013a). In Argentina alone more than 50% of the agricultural surface is covered with soy, displacing at least 4,6 million hectares of other crops and grazing land in the last seven years (García-López & Arizpe, 2010) and is 19% of the world's soybeans produced (USDA, 2013a), as is illustrated in figure 2.

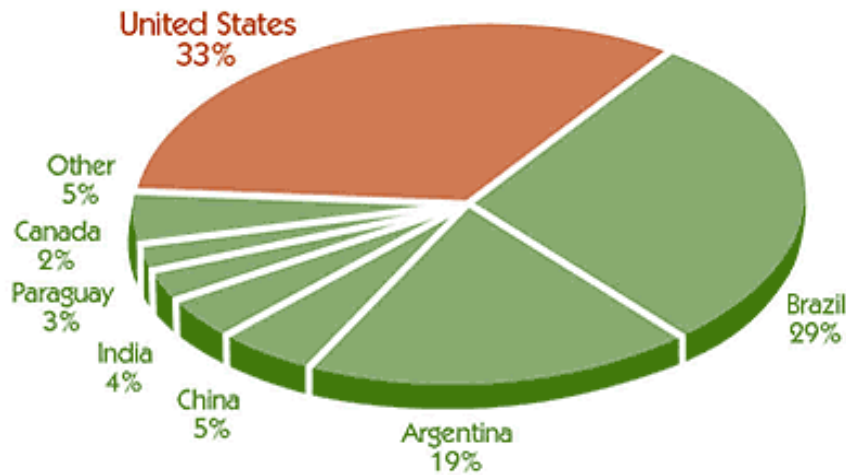


Figure 2: World soybean production 2011 (source: USDA, 2013)

The Latin American countries have focused their soybean production on exports, mainly to the European Union (45%) and China (35%). Within the European Union, the Netherlands, Spain and Germany are the most important destinations. Of total soybean production 33% is exported directly, while 62% first is crushed inside South America (Gelder & Dros, 2002).

Argentina

The soy production has become an important source of income for Argentina, a country that has experienced several severe economical crises in its history. According to the World Bank (2011) Argentina is an upper middle-income country, with a population of approximately 41 million people. It is a country with a long and turbulent history of development approaches, which range from open market policies to protectionism and again to open market policies in the 1990s, as recommended by the Washington Consensus. These liberal development policies had been carried out within the framework of the 'Convertibility Plan', a program that pegged the Argentinean Peso to the US dollar in order to eliminate the hyperinflation that was negatively affecting the economic growth of the country in these years (Volpe Martincus & Molinari, 2007). After a few successful years the Plan started showing deficiencies; exports were hurt because of the strong depreciation of the peso, the government kept running successive fiscal deficits and the major market reforms in the inflexible labour market resulted in high unemployment rates, that amounted around 20% in 2002 (Gallo, 2012). Following the financial problems, the peso was de-pegged from the US dollar again in 2001, with a quick devaluation of the currency as a result (Ledesma & Goldsmith, 2012).

Around 2003 the Argentinean government was facing many problems; unemployment and poverty rates were high, the peso was devaluated, the banking sector wasn't functioning, the society did not have any confidence in the government and politicians anymore, in short, the country was suffering from a major recession (Gallo, 2012). The only sector that still was showing potential, for more than a century, was the agricultural sector. Due to its comparative and competitive advantages the agricultural sector was able to generate an equal amount of rural exports as rural imports. Because of the devaluated peso and the global increased demand for agricultural products, due to the rise of globalization, it even became possible for the Argentinean rural exports to further expand (Gallo, 2012). This expansion of rural exports was by the Argentinean government consid-

ered as an opportunity for restoring the economic downturn the country was facing and they started implementing trade policies that maximized export tax revenues, whilst they minimized domestic inflation. This meant that export bans were imposed and prices were controlled for products that were highly utilized within the country, like beef and wheat. At the same time taxes were raised on strong export products of which only a small proportion of the production was used domestically, like soybeans and maize (Ledesma & Goldsmith, 2012).

These trade and taxing policies together with the increased global demand and prices for soybeans have resulted in Argentina becoming the third largest soybean producer in the world. Because the most fertile soils of the country, the Pampa region, are used for the production of soybeans, the less profitable production chains are pushed to marginalized soils. In the Pampa region the beef cattle rearing sector has traditionally been the largest and most important economic sector, however, because of this increase of soybean production in the region, these farmers have moved to other regions (Roodhuyzen, 2011), one of which is examined in this research; the Paraná Delta region.

The Paraná Delta region

The Paraná river ranks after the Amazon as second largest river in South America. It flows from the tropical Pantanal to temperate zones, where it converges with the Uruguay river and forms the Rio de la Plata. The Paraná Delta region comprises the last 300 km of the Lower Paraná and covers around 17.500 km² (Baigún et al., 2008; Stancich et al., 2010). It is a wetland area, by Wetland International described as a floodplain with a subtropical climate, where water and the flood pulse are the most important components of the ecosystem (Junk et al. 1989: 112). The large amount of different flora and fauna found in the Paraná Delta region results from a combination of subtropical species from the Chaco and the Paranaense Jungle which arrive through the Paraná River, and from species which come from the surrounding Pampa region (Stancich et al., 2010).

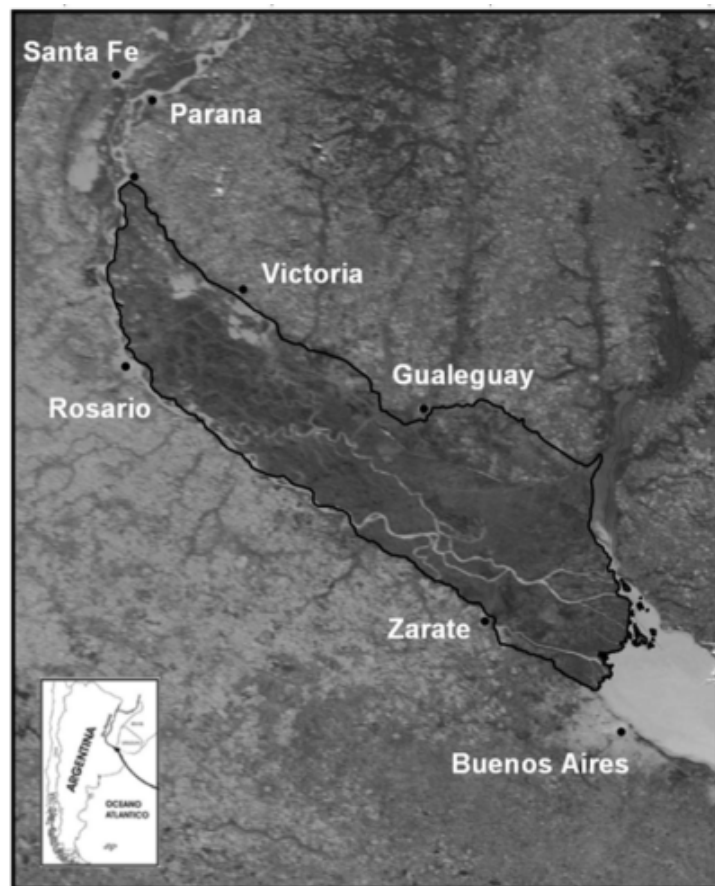


Figure 3: The Paraná Delta region, Argentina (source: Baigún et al., 2008).

Even though the Paraná Delta region has been surrounded by the Pampa region, Argentina's most developed agricultural region, and the Buenos Aires – Rosario axis, the most important urban-industrial corridor of the country, the Delta region has remained to be an economic underdeveloped region, due to the flood pulse that has made intensive and permanent agricultural activities impossible until recently (Galafassi, 2004). However, because of the expanding agricultural frontier of the

Pampa region, farmers are currently moving into new marginal areas with a low population density. The ecologically vulnerable Paraná Delta region has experienced this development first hand and has seen its cattle population grow with amply 900% between 1997 and 2007 (Baigún et al., 2008), with problems such as growing land pressure, environmental degradation and deterioration of the livelihoods of the local population as a result.

The Paraná Delta region can be divided in three areas; the Lower, Middle and Upper Delta area. Because of the location and available recourses, these areas have been exploited in different ways through the years. Especially the Lower Delta area has transformed differently, mainly because its proximity to the city of Buenos Aires (Galafassi, 2004; Baigún et al., 2008; Roodhuyzen, 2011). The economic activities that are carried out in the Lower Delta area are mainly aimed at providing for the industries and markets of Buenos Aires such as fruit production. Later the government stimulated the expansion of willow and poplar forestry plantations for the timber and paper industries of Buenos Aires. In the Middle and Upper Delta regions more traditional, subsistence economic activities were carried out compared to the Lower Delta region. These economic activities were performed by the local population living in the Delta, and include activities such as fishing, hunting, seasonal cattle rearing and forestry (Baigún et al., 2008). No recent data about the number of inhabitants is available, because the last census in the Delta has taken place in 2001. At that time 23.641 people lived on the islands of the Delta, 57% in Entre Ríos province, 1% in Santa Fé province and 42% in Buenos Aires province (Novillo, 2011a).

The Middle Delta region

This research has focused on the developments that are taking place in the Middle Delta region, due to the expanding agricultural frontier, because the entire Paraná Delta region is too large to study within three months time. There is focused on the developments that are taking place on the land market of the Delta, mainly on the buying side of the market. The Middle Delta region is located in the central part of the Paraná Delta region and lies mostly within Buenos Aires province, in the counties San Pedro and Baradero. A smaller section of the region is located in the Gualeguay Department of Entre Ríos Province. The Middle Delta region covers around 106.000 hectares and is impacted by the recently increasing beef cattle production and to a lesser extent soybean cultivation in this specific area (Roodhuyzen, 2011), resulting in increased land pressure and land prices.

Literature review

The previous chapter has provided information that gives more insights in the situation Argentina and the Paraná Delta are facing today. This chapter presents the theoretical framework that is used to guide the research and look at the current developments from different angles.

Theories and approaches

The theories that are used in the analysis of the research are the political economy approach and the access framework of Ribot and Peluso (2003). Furthermore are the concepts land markets and land transfer important for defining the subject of the research, as is illustrated in the final section of this chapter.

Political economy

Since the rise of the term 'political economy' in the eighteenth century it has had many different meanings. From the science of managing a nation's resources to the idea that ownership of means of production has influenced historical processes. Sometimes political economy was viewed as an area of study, while in other cases political economy was a methodology for the interrelation between political institutions and economic development (Weingast & Wittman, 2008). In this research political economy is seen as a synthesis of various perspectives from economics, law, and political science and explains how political institutions, the political environment, and the economic system influence each other, or as Mosco (2009) describes:

"One can think about political economy as the study of the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources."

Political economy is associated with approaches using rational-choice assumptions, what comprises the idea that all human action is fundamentally 'rational' and that people calculate the costs and benefits of any action before deciding what to do (Scott, 2000). Other important topics of political economy include the analysis of public policy issues, such as economic regulation, market protection, monopoly and institutional corruption (Weingast & Wittman, 2008).

When looking at rural land markets it becomes clear that those land markets often exist of more than one property rights regime. Large-scale, private agricultural companies, which are owned by powerful landowners, coexist with subsistence peasants who cultivate small plots of land and possess limited property rights. This difference in power and land tenure status still exists despite the overall consensus that well-specified and secure property rights of land stimulate the economic outcomes of the land. According to Fergusson (2013) this situation is intentional caused by the large-landowners and can be explained from a political economy perspective; because of this large power difference, the large-landowners have easy access to cheap labour. Therefore the large-landowners have little interest in promoting strong rural institutions and a well-functioning land tenure system (Fergusson, 2013).

The political economy approach provides this research with a comprehensive vision on the developments that are taking place on the land market of the Delta. The developments need to be studied on a micro, meso and macro level and in a multidisciplinary manner. The approach illustrates how political institutions, the political environment and economic development influence each other

and thus all are important for this research. The political economy approach is used as a leading perspective in the analysis of the data.

The access framework

When analysing property, access is an important concept, indicating that benefits can be derived from property. Ribot and Peluso (2003) expanded the notion of access and focus their access framework on the 'ability' of access rather than the 'right' of access as in the classical definition of property. By making a distinction between the ability and the right of access, they indicate that rights *prescribe* a situation, while ability *describes* a situation (Ribot & Peluso, 2003). Thus possessing a plot of land does not necessarily imply having access to it and benefiting from it.

Legal institutions are only one of the mechanisms that grant access to a certain property. These institutions are part of the 'rights-based access', the access to property that is sanctioned by law, custom or convention, which in addition involves illegal access mechanisms. The 'structural and relational access mechanisms' emerge from the political-economic and cultural context of the subject of access and involve technology, capital, markets, labour, knowledge, authority, identities and social relations (Ribot & Peluso, 2003)

In their definition, Ribot and Peluso emphasize on how power relationships can constrain or enable people to benefit from their property, thus to have access to their property. Peluso and Lund (2011) add the importance of land control to the land access debate. They explain that land can be controlled by enclosure, territorialisation, legalization processes, as well as by force and violence or even by the threat of them. Land control always has been an important subject in the land debate and today new forms of land control are occurring, reviving the land control debate; land grabbing, new crops with new labour processes and objectives, new actors and new legal and practical instruments (Peluso & Lund, 2011).

The concepts of access and land control provide a useful perspective on the diversity of possible mechanisms by which people may benefit or suffer from growing land pressure. Therefore the access framework fits well within the political economy approach that is used for the analysis.

Land markets and their transfer systems

Land markets are markets where the rights of land are exchanged. They have a vital role in the economic development process, because land is one of the best collateral assets available, providing the owners with a certain amount of financial security; in rural environments land is not only the main means for generating a livelihood, but also to accumulate wealth and transfer this between generations. The allocation of land rights therefore influences the household's ability to produce for their livelihood and generate marketable surplus, their social and economic status, their willingness to make investments, and often also their ability to access financial markets (Deininger & Feder, 2001).

Land markets are complicated to research, because land rights are only visible when they are documented, what often is not the case as Zoomers (2003) experienced during the research in Santa Cruz, Bolivia. In this research there was a notable difference between the formal and informal land market. The formal, visible, land market was researched through newspaper advertisements and appeared to be small. The informal, invisible, land market on the other hand was more dynamic, with farmers actively buying and selling land without official registration. The informal land market of Santa Cruz is a part of the livelihood of people. The possibilities of buying and selling land are one

of their ways of adapting to changes and crisis or to diversify their income (Zoomers, 2003). From a case study in Nicaragua it becomes clear that mostly the poor population is lacking official land title documents and is therefore obliged of operating in the informal land markets (Deininger, Zegarra, & Lavadenz, 2003).

Land transfer is the process in which the ownership of a certain plot of land is transferred from one person to another. This transfer can be done through i.a. buying, renting or leasing. When this process is carried out in a formal manner, then the documents which state who is the owner of a certain plot of land are the only tangible evidence that someone owns the land. However, when there is no land registration, if people do not have land titles land or if land is transferred illegally, then these documents which state who owns the land often do not exist and therefore there is no tangible evidence of who is the owner of a certain plot of land, what makes the transfer process invisible (Zoomers, 2003).

These case studies have provided the research with a framework of what land markets and transfer systems are and how these can be studied. Furthermore have they showed the difficulty of studying these subjects and what problems could be encountered during the research.

Research design and methodology

Previous chapters provided the background information necessary to formulate research questions and to design a suitable methodology to find the answers on these questions, which are presented in this chapter. First the research questions are described, followed by the operationalization of the questions. Then the selection of the research area and population are discussed and the used methods and techniques for collecting data, with their risks and limitations are presented. Finally the leading theory of this research, political economy, is shortly presented within the context of the Paraná Delta.

Research questions

The main research question that is addressed in this research is:

How is the expanding agricultural frontier of the Pampa region affecting the land market in the Paraná Delta region and what are the consequences for the different stakeholders, especially the *new-comers*, on the land market?

The following sub questions are formulated to help find an answer on the above stated main research question:

1. What were the characteristics of the main stakeholders and the land transfer mechanisms in the Paraná Delta region before the agricultural frontier started expanding into the area?
 - a) What were the characteristics of the main stakeholders who were buying land in the Delta?
 - b) What were their sources of income?
 - c) Why did they decide to go the Delta area?
 - d) How did these stakeholders behave?
 - e) What were the main patterns of purchasing land?
 - f) What factors were determining the land transfer dynamics?
 - g) What were the results of the land transfer process?
2. What are the characteristics of the main stakeholders who currently are buying land in the Delta?
 - a) Where do the stakeholders come from?
 - b) What are their sources of income?
 - c) Why did they decide to go the Delta area?
 - d) How do these stakeholders obtain land?
 - e) How do they use the lands they obtained?
3. Which factors explain the current land transfer dynamics?
 - a) What are the main patterns of purchasing land?
 - b) What factors are determining the land transfer dynamics?
 - c) What are the results of the land transfer process?
 - d) What differences in the land transfer process have taken place since the expansion of the agricultural frontier?

Operationalization

To be able to answer the research questions, several elements are included in the research. The first research question focuses on the characteristics of the former stakeholders and land market of the Delta. The studied characteristics of the former stakeholders comprise their nationality, place of origin, their main sources of income and their business management. The studied elements of the former land market include inhabitation of the area, the land tenure situation of the inhabitants and companies, the demand for land in the Delta, legislation concerning land and the political interference on the land market.

The second research question studies the current stakeholders of the land market and analyses the same characteristics of the stakeholders as mentioned at the first research question. Additionally the motivation of the stakeholders to enter the land market of the Delta is studied. In this research question there is a focus on the newcomers on the land market of the Delta.

Within the third research question the current land transfer process is studied. Again the same elements concerning the land market, as mentioned at the first research question, are studied. Furthermore are the factors that influence the functioning of the land transfer process researched; the current patterns of buying and selling, the distribution of land and the factors that influence the land market.

Conceptual framework

The abovementioned elements of the research have resulted in the following conceptual framework:

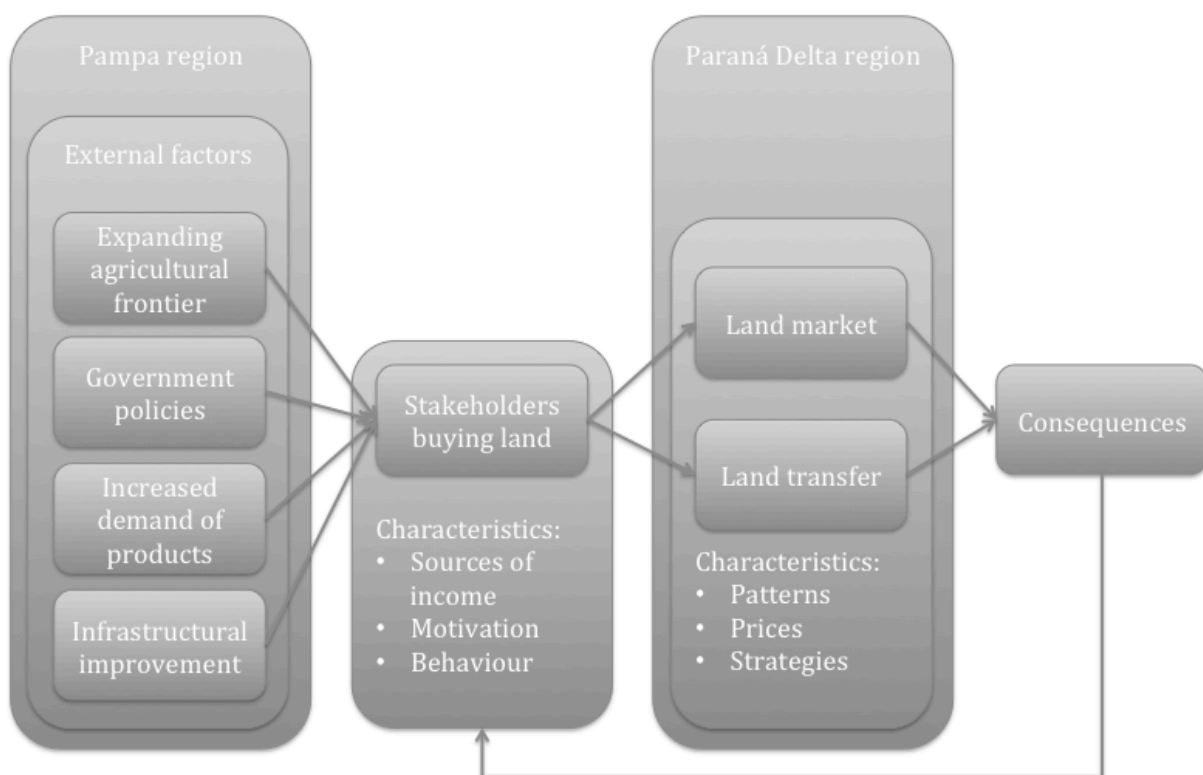


Figure 4: Conceptual framework of the research

Selection of the research area

The Paraná Delta region comprises the area between Buenos Aires and Rosario, what covers around 17.500 km² (Baigún et al., 2008) and stretches over three provinces, i.e. Entre Ríos Province, Buenos Aires Province and Santa Fé Province (Blanco and Méndez, 2010 in Roodhuyzen, 2011). Because this area is too large to cover completely in a research that has to be conducted in 3,5 months, the field research focuses on the counties of San Pedro with 106 km² inside the Delta and around 59.000 inhabitants and Baradero with 341 km² inside the Delta and around 33.000 inhabitants (Novillo, 2011a). Both counties are situated in the Middle Delta region, which covers around 106.000 hectares and is transforming due to the recently expanding beef cattle rearing and to a lesser extent soybean cultivation in this specific area (Roodhuyzen, 2011)¹.



Figure 5: Research area (source: Novillo, 2011).

¹ Interview with employees of local NGOs, San Pedro, 11-03-'13, Villa Constitución, 12-03-'13 and Paraná, 13-03-'13.

Selection of the research population

The aim of the research is to increase existing knowledge about the stakeholders who have started buying land in the region, the changes that occurred on the land market and the implications of these changes for the stakeholders buying land. From this can be derived that the stakeholders who have started buying land in the Delta region are the research population. These stakeholders mainly consist of beef cattle farmers, who in many cases combine this economic activity with other agricultural activities, such as soybean and maize cultivation (Roodhuyzen, 2011)².

Data collection

To be able to answer the research questions, different data collection methods were used, which will be explained below.

Literature research

Before conducting research in the Middle Delta area, literature has been studied to learn about the research area and the developments that are taking place. Mostly academic articles are used to gain more knowledge about the processes of land transfer, land markets and for getting more general knowledge about the social, physical and historical background of the region. In addition, information from local media reports and governmental reports and working papers are used, which provided more insights in the current developments and conflicts that are occurring in the Delta region.

Quantitative information

For this research most information has been gained from qualitative secondary sources, however, quantitative information proved to be a good addition. Data on for instance the number of inhabitants, farmers, cattle and economics have been important to make a complete analysis of the developments that are taking place in the Delta area. This data has been collected through secondary sources, such as INDEC (Instituto Nacional de Estadísticas y Censos), but when using the information of such institutes it is taken into account that many of these institutions became influenced by the government; the government decided to replace all INDEC's professional and independent staff with people from the government. This staff started to manipulate the inflation index and tried to palliate the consequences of the economic crisis that started in 2001, what makes the statistical information untrustworthy since around 2006 (Gallo, 2012).

Qualitative information

To get more specific information, the developments in the research area and the consequences for the various stakeholders, semi-structured interviews have been conducted.

Fifteen interviews have been performed with local organizations that are active in the Middle Delta region. These organizations include governmental institutions, NGOs, employees of the local school and real estate agencies. These interviews with non-residential actors that are active in the research area provided besides more general information about the area and the recent developments that are taking place, more insights in their opinion and perception concerning these developments and the different involved actors.

² Interview with an employee of a NGO in Paraná

During the field research, not only information was obtained from interviews, but also observations were an important additional source of information. The observations of for instance the presence of cattle, soy or other plantations, harbours, houses of the local population and dikes and embankments made it possible to get a better understanding of the living conditions inside the Delta and the magnitude of the developments that are taking place.

Risks and limitations

A limiting factor in this research is that little information about the area is available. Because travelling within the region can only be done by private transport, by boat, only few researchers have been able to get in direct contact with the local inhabitants of the area. Moreover, is little statistical information about the area available, because the islands of the Delta are part of the municipalities surrounding the borders of the area. This means that the Delta is not a statistical unit and therefore information is not specified for the islands of the Delta area only, what has complicated the analysis of the developments in the Delta.

During the research it also became evident that it was very difficult to get in contact with the research population to interview them, probably because of the political sensitivity of the research subject. Therefore during the field research only two actors that fit the research population could be contacted and only one of them was willing to cooperate in an interview.

Furthermore has the short time span in which the research had to be conducted, 3 months from February until May, been a limiting factor. Especially because the subject of the research proved to be a politically sensitive subject, what means that people are cautious in what they say. Additionally the *islanders* are a closed and reserved community, meaning that more time is needed to gain trust from these local inhabitants and the *newcomers* on the land market, before they will be willing to cooperate to the research.

Political economy in the Delta region

The traditional economic activity of the Pampa region was large-scale beef cattle rearing. However, due to changes in the global market for soybeans and the therefore increasing prices have resulted in a shift in these traditional economic activities. An increasing number of farms started producing soybeans, with a decreasing number of beef cattle farms. Up to the point that the cattle farmers have started to look for other, marginalized areas to continue the cattle farming. The production method of the Pampa region had shifted, from large-scale cattle farms to large-scale soybean farms. Power relations have changed, due to global economic interests. These concepts of technology, capital, markets, labour, knowledge, authority, identities and social relations are important within the political economy perspective and comprise the idea that political institutions, the political environment and economic development influence each other (Ribot and Peluso, 2003).

These changing power relations due to economic developments have not only taken place in the Pampa region, but are currently also taking place in the Paraná Delta region, where the local population by tradition mainly performed self subsistent economic activities such as fishing, hunting, seasonal cattle rearing and forestry (Baigún et al., 2008). However, due to the explosive rise of the number of cattle farmers in the region, these economic activities, the land use and therefore the power relations within the region are shifting. Where the local population did not have any competition before, because the area was seen as 'unproductive waste land' (Roodhuyzen, 2011), they now have to deal with many stakeholders who are interested in the lands of the Delta.

The political economy approach has helped to see the changes that have been and still are taking place in a larger perspective; local developments are taking place because of national and even international influences. The economic developments in the Delta are not an isolated fact, but are a result of a combination of several factors.

Before the agricultural expansion

The Paraná Delta has a long and diverse history of occupation and colonization, which can be divided in four stages. The first three stages of colonization and the stakeholders involved are explained in this chapter, and summarized in Figure 6, these stages took place before the soy production in the Pampa region caused the agricultural frontier to expand to the Delta. The fourth and last stage in the occupation process takes place at this moment and will be examined in the next chapter.

The colonization of the islands

The Paraná Delta has never been an economically developed area, especially compared with the adjacent Pampa region. The area has been populated since the sixteenth century, when it housed an indigenous population, which used the islands of the Delta for small-scale cultivation of crops and raising cattle and poultry for domestic consumption. Furthermore they relied on what the natural environment of the Delta had to offer; fishing, hunting and forestry were important additional activities the *islanders* performed to meet their livelihoods (Bonomo, Aceituno, Politis, & Pochettino, 2011).

From the first phase of European colonization in Argentina, from the eighteenth century until around 1850, this situation started to change and marks the start of the process that resulted in the current regional shape of the Delta. The city of Buenos Aires started to urbanize, therefore the Paraná Delta was further utilized to produce primary products to meet the needs of this growing city and later for meeting the needs of the urbanizing southern axis between the cities of Buenos Aires en Rosario. The migrants settling on the lands of the Delta in this period, were mostly still local inhabitants, living in the urban zones surrounding the Delta (Galafassi, 2004). The lands of the Delta were fiscal lands and therefore seen as public land, the difference between fiscal and private lands are explained in box 1, and mainly used for the production of wood and fruits. At this point in time still without any governmental regulation or interference. The area was only sparsely populated, still mostly in temporary settlements, and no land tenure regime was in place yet (Roodhuyzen, 2011).

Box 1: Fiscal and private lands

The Paraná Delta region exists of different types of land; private and fiscal lands. Private lands are plots of land that are privately owned; in this case the owner possesses the legal land titles of the land. These owners can be companies, but also *islanders*. The remaining lands of the Delta are fiscal lands. These are rural public lands that are situated outside the urban zones of the municipalities and are property of the provinces. The provinces control these lands and can decide if they keep them open and accessible for everyone or if they sell or lease these lands to private owners. In the Delta all three options are implemented.

The second phase of colonization took place between the second half of the nineteenth and the early twentieth century. It was the start of the large transformation of the natural environment, because of the permanent settlements and intensive fruit cultivation by smallholder farmers. These smallholder farms formed a mode of production that did not fit the traditional Argentinean agricultural production model, which is the *hacienda* system where *latifundios*, large estates, are the dominant actors on the market (Kay, 1998). However, in the Paraná Delta this different mode of production did emerge, because of several reasons. The need for European immigrants to obtain

land to work, which the governments had promised in the Pampa region but could not provide, the existence of cheap land in the Delta and the existence of the urban market of Buenos Aires, which consumed agricultural products of the islands (Galafassi, 2004). The Paraná Delta suddenly became a commercially interesting area and the national government started stimulating agriculture and colonization in order to economically develop the region. These developments mostly had an impact on the region closest to the city of Buenos Aires, the Lower Delta (Roodhuyzen, 2011).

Modernistic development ideas entered the Argentinean political field in this second phase of colonization; economic growth, by means of opening up of the market, became an important goal in the transformation process the country was implementing. The new conditions of the world economy, which became structured on the basis of comparative economic advantages, assumed an international division of labour in which European countries passed through a strong process of industrialization that opened their food markets for agricultural producers overseas. This new economic system was reinforced by the considerable influx of foreign capital from the industrializing countries, with Great Britain as the biggest supplier of capital for Argentina. Significant population movements also accompanied the flow of investments from old-world *core* to *periphery* nations. The Argentinean government was happy to receive these migrants from 'civilized nations', in the hope that they would reinforce the transformation process Argentina was going through (Galafassi, 2004).

Due to the encouraging policies the state enacted to enhance this migration process, especially the European immigration to the area increased (Donadille, Postma, Prol, Stancich, & Vizia, 2010), with a population peak of 40.000 inhabitants for the whole Delta area, a little more than two persons per km², in the 1930s as a result. The origin of immigrants of the Delta was more diverse than the rest of the country; Ukrainians, Hungarians, Poles, Italians, Spanish, French, Russians, and other nationalities settled in the Delta. The new government policies had led to a flourishing fruit industry; in 1942 a total of 18.200 hectares of the Delta (20,5 %) were planted with fruit trees (Galafassi, 2004). However, in the late 1940s the growth of the population and fruit industry stagnated, because the small-scale producers were competed out by large-scale producers elsewhere in the country, resulting in a halving of hectares planted with fruit trees within ten years (Galafassi, 2004; Roodhuyzen, 2011).

The third phase of colonization began mid twentieth century and was the period when the nature of agricultural production within the Delta started changing fundamentally. From diversified agricultural production performed by small-scale migrant farmers, it transformed in a monoculture of forestry plants, mostly willows and poplars, managed by family production units (Galafassi, 2004). This transformation was stimulated by the provincial governments (Baigún et al., 2008), in the hope of making the area economically attractive again after the downfall of the fruit industry. This forestry industry thrived until the early 80s, when the extreme floods of 1982-1983, price fluctuations and increased transportation costs caused the abandonment of many of the plantations (Blanco & Méndez, 2010; Galafassi, 2004).

Most of the lands that became privately owned in the research area, the Middle Delta, are still owned by the forestry corporations that were established mostly in the 1970s. These corporations are continental actors, a concept typical for the Delta region and explained in box 2, who only had their companies on the islands of the Delta and did not inhabit the Delta region. In some cases these companies do not exist any longer. These continental actors did buy land for their businesses in the area, because of the aforementioned encouraging national and provincial policies. Around 1979 the-

se policies had resulted in more than 110.000 hectares of willow and poplar plantations, only in the Middle Delta area (Blanco & Méndez, 2010). However, most plantations were abandoned within a few years or moved out of the research area after the large floods in 1982 and 1983 (Baigún et al., 2008), as in the rest of the Delta. But the plots of land remained the private ownership of the continental actors (Roodhuyzen, 2011). Furthermore besides selling land to private owners, the government allocated land to people who had been working for the authorities, as an alternative payment method (Roodhuyzen, 2011).

For the people who had been living in the Delta area, buying plots of land often was not possible, because of lack of financial resources. However, Argentinean state law also recognizes occupants as right holders. This means that if these *islanders* have occupied a plot of land for more than twenty years, and comply with certain conditions, they can apply for landownership. In the case of San Pedro and Baradero there are only few *islanders* who appropriated land this way and therefore most *islanders* are still occupants, living on fiscal lands or the lands of other private owners. The difference between islanders and continental actors is explained in box 2.

Box 2: Local islanders and continental actors

There are different actors present and active on the land market of the Delta. The local population classifies these actors in two different groups; *islanders* and continental actors. The *islanders* are the local inhabitants of the islands. These people often have lived on the islands of the Delta for generations and they use the islands to provide for their livelihoods. The continental actors are the actors who are active on the land market or already own land inside the Delta, but who do not live on the islands of the Delta. These actors live in the cities directly surrounding the Delta; this can be small towns such as Baradero and San Pedro or the metropolitan cities such as Buenos Aires and Rosario.

Because of the shortfall of governmental control, the Delta area has been described as 'the Wild West', an area where the right of the strongest rules and having land is a matter of taking it. As until recently few actors were interested in the lands of the Delta, few conflicts occurred and these conflicts were usually dealt with without any legal intervention (Roodhuyzen, 2011). However, due to the expanding agricultural frontier this situation started changing.

It becomes clear that over the years the interest in the Delta area has been very diverse what also applies for the stakeholders of the land market; from an indigenous population living from the natural resources of the Delta, to European immigrants exploiting the lands of the Delta for fruit and forestry production. The first decades of colonization of the Delta, the Argentinean government was completely absent in the process. However, with the increase of interest in the lands of the Delta, also the political interference rose; several policies were implemented to regulate the developments that were taking place on the land market.

The changing role of the state

The first colonists settled on the empty fiscal lands since the eighteenth century and with the increased demand for lands in the Delta, the competition for land grew. Therefore the interest of the colonists to regularise their tenure position arose. In order to maintain the colonization process of the Delta, the Argentinean government felt the need to allocate land to private owners. Therefore laws were implemented that regulated landownership and made the allocation of lands to private owners possible (Galafassi, 2004; Roodhuyzen, 2011). The first decree concerning the allocation of land was implemented in 1856 and stated that the ownership of lands was granted to the possessors of that time, so landownership became based on its occupation and use. In 1888 the province of Buenos Aires implemented the fist law, law 2027, which allowed for the sale of the already occupied lands. As a result, approximately 55% of the Lower Delta became privately owned in 45 years of operation of this law (Blanco & Méndez, 2010; Galafassi, 2004). This privatization of the lands of the Delta has continued ever since, with 80% of the Delta comprising of private lands today³.

	Demographics	Agricultural production	Role of the state
1500-1700	Inhabitation of the islands by an indigenous population living in temporary settlements.	Small scale agricultural production for domestic consumption.	No interference of the state yet.
1700-1850 First phase	Immigration of mostly local inhabitants in temporary settlements.	Agricultural production to meet the needs of the growing cities at the border of the Delta, mostly wood and fruits.	Growing awareness of the potential of the Delta, however, no interference of the state yet.
1850-1950 Second phase	Considerable immigration of European colonist in more permanent settlements.	Smallholder farms, mostly producing fruits.	First encouraging policies of Argentinean government to colonize the Delta region.
1950-1990 Third phase	Decline of population growth.	From agricultural diversity to a monoculture of forestry plants.	Policies stimulating the entry of forestry plants after the downfall of the fruit industry.

Figure 6: Timeline displaying the first phases of colonization of the Delta.

³ Interview with an employee of a local NGO in Paraná on 13-03-'13.

Concluding

From an indigenous population to European immigrants, in the different phases of colonization, the Paraná Delta has experienced a diverse group of stakeholders interested in its lands. In the sixteenth century, the beginning of colonization, the exploitation of the natural resources was minimal, they were only used for domestic consumption. In the second and third phase of colonization however, a considerable increase of exploitation of the natural resources for the agricultural production can be observed. The Argentinean government, who wanted to economically develop the area, stimulated this development by privatizing many of the fiscal lands the colonists had occupied for years, resulting in more than half of the Delta pertaining to the province of Buenos Aires already being privatized in the 1930s. The years following, this trend continued, mostly in the Lower Delta and to a lesser extent in the Middle and Upper Delta. With a flourishing fruit industry at the end of the 1930s and a prosperous forestry industry in the 1970s, both ended quite abruptly because of several causes, as a result. After the decline of these industries, for a few decades, it was quiet on the land market of the Delta. Until another industry emerged, in a new form for the Delta area: large-scale livestock production.

The land market of the Delta today: the fourth phase

After the decline of the forestry industry in the 1980s, as mentioned in the previous chapter, it became quiet on the land market of the Delta for a few years. The region was still sparsely populated and because of the flood pulses that characterize the Delta and had caused the failure of many companies in the past, no new industries were initiated in the area for a while. Meanwhile the soy production in the Pampa region had been increasing since the 70s, because of the high yields on soy production. Then the introduction of genetically modified soy in the 90s resulted in a soy production boom (Tomei & Upham, 2011). The increased change of land use of the fertile soils of the Pampa region from livestock- to soybean production expelled beef cattle production from traditionally mainland areas to marginal ones.

Several regional developments induced that this was the period when the Delta became a place of high interest again and caused the start of the fourth and last colonization phase of the Delta: the increased demand for products produced in the area, the construction of infrastructure that made the Delta more accessible, such as the road between Buenos Aires and Rosario that was finished in 2002 and new land transfer and -use policies, which reduced the costs for land transfer and made the construction of dikes and embankments in the area possible (Donadille et al., 2010). The lands of the Delta were mostly used for livestock production and to a lesser extent for agricultural use, such as the production of soy, maize and wheat. This increased commercial use of the Paraná Delta region can among other things be seen on the substantial increase of the number of cattle within the region; from 160.000 animals in 1997 up to 1.500.000 animals in 2007 (Baigún et al., 2008).

This chapter examines the stakeholders of the land market of the Delta, and specifically the new stakeholders who recently have entered the land market of the Delta. The most important *newcomers* in the research area are studied in more detail. Furthermore is analysed how these *newcomers* on the land market have influenced the land transfer process in the Delta and how this affects the different stakeholders in the area.

The different stakeholders

With the increased attractiveness of the lands of the Delta, due to the regional developments mentioned above, a change of the stakeholders active on the land market occurred as well. Not only local inhabitants living inside the Delta or in the cities directly surrounding the area, who always actively have used the lands of the Delta, are operating on the land market. Also a whole new group of interested parties announced itself; by the *islanders* referred to as 'businessmen'⁴. The current stakeholders of the land market of the Delta can be divided in four separate groups, namely the *islanders*, the medium landowners, the state and the *newcomers* on the land market, these 'businessmen'.

⁴ Interview with an employee of a local NGO, in San Pedro, 11-03-'13, interview with an employee of a local NGO, in Villa Constitución, 12-03-'13, interview with an employee of a local NGO, in Paraná, 13-03-'13 and an interview with 2 teachers and 12 students of a local school inside the Delta, in Baradero, 11-04-'13.



Figure 7: A house on the islands of the Delta, Baradero.

The *islanders* are the inhabitants of the Delta, often living on the islands for several generations. When traveling through the Delta it became visible that they live very dispersed, on small plots of land, around 15 hectares (Roodhuyzen, 2011), and in very basic houses, build from wood and corrugated iron. There is no electricity or telephone network inside the Delta, making them dependent on generators, a luxury that not all families can afford. Inside the Delta there aren't any roads, therefore most *islanders* own a boat, canoes and sometimes motorboats, for travelling around⁵. Most *islanders* are poorly educated and have a low income, which they generate by activities traditional for the region; hunting, fishing, beekeeping and cattle rearing, in many cases the cattle of others (Roodhuyzen, 2011). Many *islanders* own a few animals, such as dogs, chickens and sometimes cows and pigs. The *islanders* are a group of stakeholders that have a high interest in the lands of the Delta, because the land is their home, their source of food and their source of income. However, only few *islanders* have been able to legalize their land tenure status, meaning that today they have little power and a weak bargaining position when new actors want to buy the land they are living on, resulting in many conflicts⁶ as an employee of the agricultural secretariat in Baradero explains:

*"The life of many of the islanders is influenced by the developments in the Delta, mainly by the new companies in the area. The infrastructures of these companies [the dikes and embankments] cause that the islanders have less access to the lands and thus to the resources of the Delta."*⁷

The *medium landowners* are also local inhabitants, but unlike the *islanders* they live in the small cities directly surrounding the Delta region, such as San Pedro, Baradero and Villa Constitución. These landowners often possess small to medium sized plots of land, from around 150 to 500 hectares, and

⁵ Interview with an employee of a local NGO, in San Pedro, 11-03-'13, , interview with an employee of a local NGO, in Villa Constitución, 12-03-'13.

⁶ Interview with a teacher of a local island school.

⁷ Interview with an employee of the agricultural secretariat in Baradero.

use the land for producing soy, maize and wheat and for cattle rearing. In some cases these *medium landowners* employ *islanders* to do the work on their lands. These landowners have more financial resources than the *islanders*, but not enough resources to do large land modification, such as dikes and embankments, to protect their land for the seasonal floods of the Delta. Therefore these landowners are highly dependent on the natural environment and are well aware how to exploit the lands of the Delta without unbalancing the natural cycles of the area. Often these landowners have the possession rights or legal land titles for their plots of land and therefore have more power and a stronger bargaining position than the *islanders*. The *medium landowners* are moderately active on the land market, often informally buying and selling land to their direct neighbours in the Delta⁸. The differences between possession and ownership rights are explained in box 3

Box 3: Landownership rights and possession rights

The concepts of landownership rights and possession rights indicate a different tenure status. When someone owns the legal land titles of a plot of land, this means that this person is the owner of the land and therefore has the right to use the land the way they want within the regulations of the law. Possession rights are less straightforward and strong than ownership rights. Occupants of land, referred to as possessors, are recognized as right holders by the Argentinean law though. These rights can be compared to squatter's rights and are called possession rights. When a possessor resides a plot of land for more than twenty years, and can comply with certain conditions, then they can strengthen their tenure status by applying for legal land titles by means of adverse possession. This means that the possessor needs to have proof that he continuously resided a plot of land for more than twenty years, no one else with stronger possession rights should claim the land and the occupant has to proof he has acted as a good owner of the land (Roodhuyzen, 2011).

The third stakeholder mentioned before is the state, however, the state is represented through different governmental levels that do not pursue the same development agenda. Within the Delta there are three different governmental levels, which all have their influence and authority within the Delta. The first level is the national government that formulates general laws all inhabitants of Argentina have to comply with, such as how possession rights can be obtained. The second state level is the provincial level. Every provincial government has the obligation to protect their natural resources and all do this as they wish. Regarding the fact that the Delta region is spread over three different provinces, Buenos Aires, Entre Ríos and Santa Fé, means that the natural resources are protected in three different ways, with inconsistent nature protection decrees as a result. Furthermore are the fiscal lands property of the province. Each province can decide how much and under which conditions they want to lease or sell the lands they own, also inducing inconsistent land allocation systems. Finally there is the third state level, the municipal level. The municipalities have the right to develop the lands of the Delta the way they want, within the set national and provincial framework. This means that one municipality chooses to develop the islands industrially, by building a new harbour, while an other municipality chooses to create a nature reserve, to attract tourists to their municipality⁹. This creates conflicting agendas concerning the protection of the flora, fauna and local inhabitants of the Delta.

⁸ Interview with a medium landowner, Baradero, 17-04-'13 and an interview with an employee of the cadastre, Baradero, 18-04-'13.

⁹ Interview with an employee of a NGO in Paraná and an interview with an employee of the interview with an employee of the agricultural secretariat in Baradero, 8-05-'13.

Recently the problem of the governmental overlap has been acknowledged and therefore a new plan is established, Plan Integral Estratégico para la Conservación y Aprovechamiento Sostenible en el Delta del Paraná (PIECAS), in collaboration with organisations such as the UNDP and the Global Environmental Facility, to establish a province-transcending environmental management, to harmonise the various legal frameworks and protect the natural environment of the Delta¹⁰. However, according to several interviewees the goals of this plan are not met, because of lack of governmental monitoring¹¹.

The newcomers on the land market

The most important group of stakeholders for this research is the fourth group, the *newcomers* on the land market, actors that have been most active in buying land inside the Delta recently. While doing this, these *newcomers* are transforming the land market. During the research it became clear that all stakeholders of the Delta were aware of the presence of these new actors; nearly all interviewees talked about these 'businessmen'. These interviewees state that the *newcomers* on the land market are wealthy continental actors, Argentinean and international, with professions such as doctors, bankers and lawyers, with strong political relations.

*"The new actors of the Delta are advocates, people from the government or other people who possess a lot of financial resources. In many cases they do not even have any knowledge of farming."*¹²

*"Today many people start commercial processes in the Delta, mostly cattle farms. In many cases these companies are owned by people from the continent, who do not inhabit the Delta area."*¹³

These actors are not living on the islands of the Delta, but are living in the major cities surrounding the Delta area, such as Buenos Aires and Rosario, and often do not have an agricultural background¹⁴. They have obtained land inside the Delta in two different ways; most of them own the land titles or they lease the fiscal or private lands (Donadille et al., 2010).

An employee of an agricultural federation confirms the statements of other interviewees with more detailed information that demonstrates the political influence of these actors: in the 1990s Victorio Gualtieri, acquaintance of, then vice-president, Duhalde, obtained 5.000 hectares of land from an afforestation company and later was able to obtain, through informal mechanisms, 45.000 hectares more on the Lechiguana Islands, which are used for the production of soy. Pedro Pou, the ex-president of the Buenos Aires Province Bank, owns around 50.000 hectares of the islands of the Gualeguy municipality. Eduardo Escasany, president of the Galicia Bank, and Carlos Fernández, former Minister of Economy of Argentina, both own 30.000 hectares in the Delta region¹⁵. These actors are some of the most influential actors in the entire Delta area, owning the largest plots of

¹⁰ Interview with an employee of the environmental secretariat of Entre Rios Province, Paraná, 14-03-'13.

¹¹ Interview with employees of local NGOs, San Pedro, 11-03-'13, Villa Constitución, 12-03-'13 and Paraná, 13-03-'13.

¹² Interview with employees of local NGOs, Villa Constitución.

¹³ Interview with an employee of a local NGO, Paraná.

¹⁴ Interview with employees of a local NGO, Villa Constitución, 12-03-'13, interview with 2 teachers and 12 students of a local school inside the Delta, in Baradero, 11-04-'13.

¹⁵ Interview with an employee of a national agricultural federation, Villa Paranacito, 01-06-'13.

land¹⁶. In the research area the most influent actors do not have the same power in national politics, nor do they own such large plots of land.

During the interviews with local NGOs only few names of companies who recently have been buying land in the research area were mentioned, with Bema Agri B.V. and Pazzaglia Brothers S.A. as the companies most referred to. These companies are well known in the area and very visible in local and even national media, as is illustrated in box 4.

Box 4: Bema Agri B.V. and Pazzaglia Brothers S.A. in the media

The reason that the companies Bema Agri B.V. and Pazzaglia Brothers S.A. are so visible in the media, is because they perform illegal activities in the Delta area; they build infrastructures to control the water flows of the Delta, a process that has been called the Pampanization of the Delta¹⁷, what is illustrated with the following quotes:

"An entrepreneur [Pazzaglia Brothers S.A.] acquired land on the islands of Baradero, today around 12.000 hectares. With major investments they are building dikes, canals, placing gates and pumps to dry a vast area of wetlands and build a large agricultural company." (Baradero Te Informa, 2008)

"Antonio Jose "Bachi" Pazzaglia is a large employer in the area with strong political ties. [...] During the fires that caused injuries and deaths in 2008, he was a fugitive from justice, therefore an arrest warrant on his name was published." (Semanao La Opinion, 2013)

"Bema Agri B.V. acquired just over 8.000 hectares in March 2008 and has constructed embankments to protect their crops. The private enterprise required an investment of about US\$ 3,5 million, and was constructed without the permission of the municipality, despite the existence of two rules prohibiting agricultural activity in the area." (Diario Victoria, 2009)

"Two environmental protection reports were presented to the judicial powers against Bema Agri B.V., a Dutch firm, to cease the construction of embankments, planting and spraying of some 10.000 hectares of islands located in the suburbs of the city [Villa Constitución]." (La Capital, 2009)

To learn more about these *newcomers* in the research area we tried to get in direct contact with them, however, this turned out to be more difficult than expected, as is illustrated by this reaction of one of the *newcomers* in the research area: *"Considering the situation in Argentina, we can not contribute to this research."*¹⁸ Where it remains unclear what they exactly mean by this "situation in Argentina", however the negative attitude of most NGOs, *islanders* and media towards these *newcomers* on the market, suggests the precarious situation these *newcomers* are facing.

To illustrate the presence of the *newcomers* on the land market, the two companies mentioned above, Bema Agri B.V. and Pazzaglia Brothers S.A., are described in more detail in boxes 5 and 6.

¹⁶ Interview with employees of local NGOs, San Pedro, 11-03-'13, Villa Constitución and Paraná, 13-03-'13.

¹⁷ Interview with an employee in Paraná.

¹⁸ Conversation with owner of Bema Agri B.V., Villa Constitución, 11-04-'13.

Box 5: Bema Agri B.V.



Figure 8: Harvest of maize on the lands of Bema Agri B.V. in the Delta (source: trekkerweb.nl, 2007).

Bema Agri B.V. is a company owned by two Dutch brothers. In the Netherlands these brothers owned a dairy farm, however, the high production costs made them decide to start another company abroad, ending up in Argentina because of the favourable production perspectives, mainly those of soybean production. After having gained working experience as employees in the soybean sector, to which they were not familiar yet, the brothers started their own business in 2007 on the cheap, but very fertile lands of the Delta. They were able to buy around 10.000 hectares of land in the Delta in the county of Victoria (2,5% of the islands of Victoria) (Novillo, 2011a) in Entre Ríos Province, north of the research area. The brothers use the lands mainly for cattle rearing and soybean, wheat and sorghum production. To be able to cultivate these crops, the company has been constructing an infrastructure of channels, water pumps, embankments and a dike of five metres high and a length of around 30 kilometres to protect their lands for the cyclical floods of the region, even though this is prohibited according to the provincial laws. However, because of lack of governmental control, according to most interviewees, as a result of corruption, this enhancing of the infrastructure is not stopped (Roodhuyzen, 2011)¹⁹.

The Bema Agri B.V. case shows how high land prices, land scarcity and production costs elsewhere not only drive Argentinean farmers to look for agricultural lands in marginal areas, but also provoke foreign producers to look across the borders of their country to find more profitable regions for agricultural production.

The following case of Pazzaglia Brothers S.A. is specific for the municipality of Baradero and demonstrates that the *newcomers* on the land market are able to obtain very large plots of lands by using different approaches of demonstrating their power.

¹⁹ Interview with local NGO, Villa Constitución.

Box 6: Pazzaglia Brothers S.A.

Pazzaglia Brothers S.A., also operating under the name of Stonehedge S.A., is the most important newcomer in the research area, who entered the Delta region around 2006. The owner of the company is an agricultural producer from the Pampa region. Even though it is unclear how much land the company exactly owns, as the mentioned number of hectares range between 12.000 and 30.000 (35%-88% of the islands of Baradero) (Novillo, 2011a), the owner of the company is called the “owner of the islands”, because of his influential position in the Delta of Baradero. The land is used for cattle rearing and soy, wheat and maize production. This company too has illegally built dikes, embankments, canals and pumps²⁰ with large-scale investments to make their land suitable for agriculture²¹. This new build infrastructure, together with the company’s approaches for buying land is what this company is well known for within the municipality of Baradero. Several interviewees state that because of the owners business relationship with the mayor of Baradero, that he is not prosecuted for the illegal infrastructure he is building, nor for the obscure ways in which he obtains the lands²².



Figure 9: Dikes constructed by Pazzaglia Brothers S.A. (source: Fundación Proteger, 2008)

In order to obtain the lands, the owner of the company offers the *islanders* three deals, which will be explained in more detail in the next chapter; money, a job on their company as cattleman and/or they offer the *islanders* that the company buys and therefore becomes the owners of the land, but that the *islanders* and their cattle can continue to live on and use the land they have lived on for years²³. However, according to several interviews with local NGOs and the teachers of the local island school, *islanders* have not always been cooperative or willing to sell their land. In these cases threats and bribes have been conducted by the company to make sure that the owner of the company got what he wanted. One of the teachers of the local island school illustrated this by stating that the huge fires of 2008, that afflicted the majority of the Delta area, around 200.000 hectares (Fundación Proteger, 2012), were not only fires to fertilize the land that had gotten out of hand, but that these fires were a threat of the large companies, such as Pazzaglia, towards the *islanders* and smaller companies, to show them their power.

²⁰ Interview with local NGO, Villa Constitución.

²¹ Interviews with teachers of the local island school and personal observations.

²² Interviews with local NGOs in Baradero and San Pedro and interviews with teachers of the local island school.

²³ Interview with an employee of the Agricultural secretariat in Baradero.

Pazzaglia is known as an intimidating actor, who predominantly makes use of informal mechanisms to obtain their lands: *"Pazzaglia bribes the islanders, they have to work for the company, otherwise they will be forced from their lands"*²⁴. Furthermore it seems that also in this case political relationships are important to make this possible:

In short we can say that all four groups of stakeholders have a very distinct set of characteristics, that the reasons for interest in the lands of the Delta are very diverse and that the power differences between the stakeholder groups are substantial. To get a better overview of the four stakeholder groups, they are summarized in Figure 10.

Stakeholder group	Characteristics
Islanders	<ul style="list-style-type: none"> • Often no legal land tenure. • Poorly educated and low income. • Not active on the land market of the Delta, because of lack of financial resources. • Live very dispersed on small plots of land inside the Delta in self-made houses. • Transportation via the water using motorized boats and canoes. • A traditional livelihood, using the Deltas resources, such as fishing, hunting and water from the river. • Often own a few animals of livestock, such as cows, pigs and chickens.
Medium landowners	<ul style="list-style-type: none"> • Own small to medium sized plots of land. • Often have possession rights or land titles for their plot of land. • Moderately active on the land market, often negotiate with direct neighbours for buying/selling plots of land. • Do not have the financial resources to protect their lands for the floods of the Delta by building dikes and embankments. • Mostly use the land of the Delta for cattle, soy, maize and wheat production. • Live in small cities nearby their plots of land, such as Baradero, San Pedro and Villa Constitución.
State	<ul style="list-style-type: none"> • Three levels of authority influencing the developments of the Delta, resulting in deficiencies in the policies. • Owns the fiscal lands of the Delta, when leased or sold these lands provide an income for the provinces. • The PIECAS plan is formulated, to minimize the governmental overlap between the different authorities and to protect the natural environment of the Delta.
Newcomers	<ul style="list-style-type: none"> • Businessmen, often already active in the corporate world and/or large-scale farming. • Recently have been very active on the land market of the Delta. • Often are able to obtain legal land titles in a relatively short time span. • Often build new infrastructures to protect their land for the floods of the Delta, making their investments in land worthwhile. • Appropriate large plots of lands for their businesses, mostly cattle, soy, maize and wheat production. • Live on the mainland, in cities such as Buenos Aires and Rosario.

Figure 10: Stakeholders active on the current (2013) land market of the Delta

²⁴ Interviews with teachers of the local island school.

The stakeholders are brought together in a stakeholder analysis whereby the influence or power and the interest in the lands of the Delta are compared with each other. Figure 11 shows this comparison.

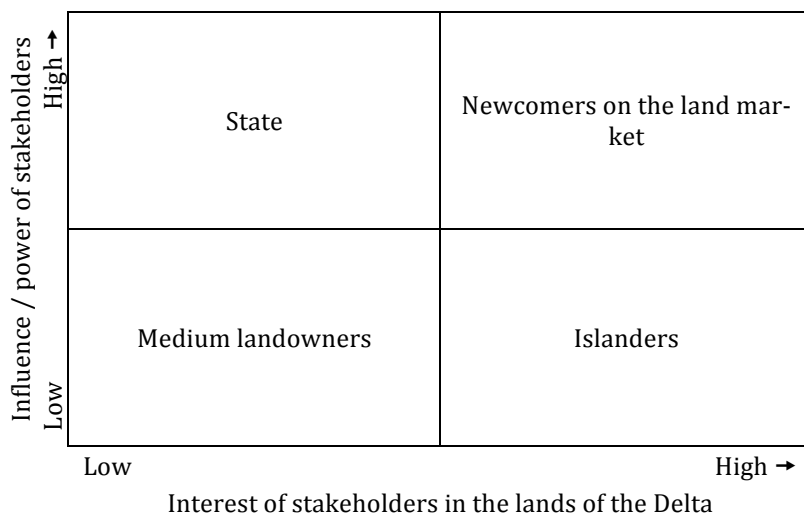


Figure 11: Stakeholder analysis

The *islanders* are the stakeholders who have high interest in the lands of the Delta, because they use all natural resources available in the Delta to provide in their livelihoods, as they mostly live from hunting, fishing, beekeeping and small scale cattle rearing. The lands of the Delta are their home and therefore very important to them. Their influence and power level, however, is very low. Many *islanders* do not have legal land titles, nor the political contacts that some of the other stakeholders do have, making them a vulnerable group.

The *medium landowners* have, similar to the *islanders*, little power and influence on the current developments that are taking place on the land market of the Delta, because they neither have the right political relationships, money nor in many cases legal land titles. Their interest in the lands of the Delta is lower than that of the *islanders*, because most medium owners use the lands of the Delta to diversify their livelihoods and therefore are not solely dependant on the lands for their livelihood such as the *islanders*.

The third stakeholder, the state, is a stakeholder with more influence than the two mentioned before. Of course the state has the ability to implement laws to regulate the land use of the Delta. However, until today the Delta has not been an area of high interest for the Argentinean government, mainly because it has proven to be very hard to economically exploit the area. A situation that seems to be changing, due to new infrastructural technologies, which make management of the cyclical floods of the Delta possible.

Finally there are the *newcomers* on the land market. This group has most interest, power and influence of all stakeholders. The *newcomers* are interested in the lands of the Delta, because they enable them to economically exploit the lands; the prices of land are low, yields high and cheap labour is available. Their power and influence is also high, especially compared to the other stakeholders, because these *newcomers* often are experienced businessmen and/or farmers and have relationships in local and sometimes even national politics. Therefore the *newcomers* are the most notable stakeholders on the land market of the Delta today.

Combining all this information, we can expand the timeline as presented in the previous chapter with the current last phase of colonization:

	Demographics	Agricultural production	Role of the state
1500-1700	Inhabitation of the islands by an indigenous population living in temporary settlements.	Small scale agricultural production for domestic consumption.	No interference of the state yet.
1700-1850 First phase	Immigration of mostly local inhabitants in temporary settlements.	Agricultural production to meet the needs of the growing cities at the border of the Delta, mostly wood and fruits.	Growing awareness of the potential of the Delta, however, no interference of the state yet.
1850-1950 Second phase	Considerable immigration of European colonist in more permanent settlements.	Smallholder farms, mostly producing fruits.	First encouraging policies of Argentinean government to colonize the Delta region.
1950-1990 Third phase	Decline of population growth.	From agricultural diversity to a monoculture of forestry plants.	Policies stimulating the entry of forestry plants after the downfall of the fruit industry.
Fourth phase	Entry of new stakeholders in the Delta, starting their businesses there, but living in the cities around the Delta.	Large-scale cattle production, and to a lesser extent soy, maize and wheat production.	Highest state interference in the history of the Delta, stimulating the economic exploitation of the area.

Figure 12: Timeline including the current and last phase of colonization

Concluding

Four different stakeholder groups are observed on the land market of the Delta today, all with different interests in the lands. The *newcomers* are the strongest and most influential group buying lands in the Delta. This group mostly exists of people who have experience in the corporate world and/or large-scale farming and are able to obtain large plots of land for their businesses. The less powerful stakeholders, the *islanders* and the *medium landowners*, are the disadvantaged groups; they are not able to fight for their rights against such great opponents and therefore often have to pay the highest price; getting displaced from their lands.

Transferring of land



Figure 13: Newspaper advertisement in which Delta land is offered for sale (source: Paralelo 32, 2012)

The aforementioned stakeholders have different possibilities of obtaining land in the Delta. First there is the formal land market, where land can be bought and sold or leased. The formal land market is open, visible and thus accessible to anyone, sales often go through intermediary parties such as real estate agencies and newspapers, by means of advertisements. On the land market both forms of tenure status are sold; possession rights and ownership rights, the difference between these two is explained in box 3 on page 31, with the ownership rights being the most valuable. When selling

land through the formal land market, the procedures of transfer of ownership are comparatively clear and transparent.

The leasing of land, where the user of land pays the owner for using the land, occurs at two different levels; leasing of land by private landowners, often for several years, to farmers who use the lands for cattle rearing or crop cultivation, and the leasing of fiscal lands by the provincial governments²⁵. The provincial government of Entre Ríos, for instance, sanctioned law number 9.603 in 2004 (Taller Ecologista & Fundación M'Biguá, 2009), which allows the lease of fiscal lands in the islands of Entre Ríos. After passing this law the provincial government leased around 128.350 hectares of fiscal lands (around 9% of the total surface of the province inside the Delta) between 2006 and 2007 to about 109 tenants, mostly to livestock producers and investors. From these 109 tenants 48% occupies 80% of the leased lands (89.325 hectares). Almost all of the leased area in Entre Ríos province is used for livestock, as was stipulated by law (Donadille et al., 2010).

However, currently the formal land market of the Delta is not dynamic anymore²⁶, and most land transfers take place via the informal land market, where buying and selling of land is arranged privately, directly from buyer to seller. And thus the transfer of land does not take place through the usual channels. What is illustrated by the number of advertisements for land found during the research period; only three newspaper advertisements have been encountered in three different weekly local newspapers in the past five years²⁷. Sales through real estate agencies only take place sporadically; during the research only few official advertisements of real estate agencies of plots of land inside the Delta have been found, most in Entre Ríos province. An owner of a real estate agency explained that they used to sell many plots of land inside the Delta area until around 5 years ago, they were a large intermediary in the Delta's land market. However, they have stopped doing business in the Delta, because they encountered too many problems concerning legal issues, such as the absence of official ownership papers.

²⁵ Interview with an employee of a NGO, Paraná.

²⁶ Interview with an employee of a local NGO, Paraná, interview with an employee of a local NGO, San Pedro, 11-03-'13, owner of a real estate agency, San Pedro, 16-04-'13 and an employee of a real estate agency, Baradero, 17-04-'13 and own observations.

²⁷ Semanario La Opinión in San Pedro, Semanario La Opinión in Baradero and Diario Paralelo in Victoria.

"No we do not do any business in the islands of the Delta anymore. To many times we encountered legal problems, because many people do not possess the legal ownership papers of the lands they live on. How can we then sell those lands?"²⁸

Next to this real estate agency many other interviewees explain that still much is unclear and even unknown about what is happening on the informal land market of the Delta today²⁹. Even illegal land use activities take place, as the following statement illustrates:

"The black market is far more dynamic than the legal market. In some cases the cattle farmers even put their cows on land that not even is theirs."³⁰

During the field research we experienced this first hand. As an outsider of the land market, it is very hard to get information from the actors directly involved on the land market. *Islanders* live very dispersed and remote, they are very close-tongued and distrustful towards non-*islanders*. Getting information from them is very difficult. *Medium landowners* live in the cities surrounding the Delta and are therefore more accessible than the *islanders*. However, during a conversation with one of these *medium landowners*, it became clear that this too is a closed community and that these landowners are not willing to provide detailed information about colleague landowners. What already became clear in the previous chapter is that the *newcomers* on the land market also were not willing to collaborate in the research. Finally there are the governmental institutions involved in the land market of the Delta, only few of these institutions indicated that they were able to cooperate to the research. The informal land market is a closed process, where outsiders are kept away from. Therefore only limited information has been obtained about this process, mostly about the case in Baradero; Pazzaglia Brothers S.A.

Pazzaglia Brothers S.A. is one of the actors using the informal market for expanding their lands. This company has used the formal market and legal ways for buying the land titles of their first plot of land. However, for expanding their lands the company makes use of the informal land market and has formulated an alternative strategy to obtain lands from *islanders* and *medium landowners*. That strategy exists of three options, which in many cases are used simultaneously to convince the sellers;

1. Pazzaglia Brothers S.A. offers to buy the possession rights for a price that is below the market price of the lands, but that still is a relatively large amount of money for the *islanders* and *medium landowners*.
2. They offer the *islanders* a job on their company, mostly as cattlemen and keepers of the land.
3. And/or they offer the *islanders* that they and their cattle can continue to live on and use the lands that Pazzaglia Brothers S.A. has bought³¹.

The *islanders* and *medium landowners* often perceive this as a good deal, as they are offered money, a job and can continue to live on the lands they have lived on for generations. This way Pazzaglia Brothers S.A. has been able to obtain the possession rights of many of the *islanders* and *medium*

²⁸ Interview with an employee of a real estate agency, Baradero.

²⁹ Interview with an employee of a local NGO, Paraná, interviews with teachers of the local island school, interviews with local NGOs in Baradero and San Pedro.

³⁰ Interview with an employee of a local NGO, Paraná.

³¹ Interview with an employee of the Agricultural secretariat in Baradero.

landowners. Later in the process the company is able to convert these possession rights into formal land titles, making them the official owners of the land, what enables them to use the lands the way they want, what often means that the *islanders* and *medium landowners* are displaced from the lands (Roodhuyzen, 2011; Semanario La Opinion, 2013)³².

*"The owner of Pazzaglia is able to obtain the property rights of the lands, because he has a powerful contact in the provincial government of Buenos Aires. The islanders do not have such contacts and therefore are not able to obtain property rights this easy, for them it is a very expensive and time-consuming process."*³³

This example of Pazzaglia Brothers S.A. demonstrates how *newcomers* on the market, with great knowledge of the Argentinean legal system are able to obtain land titles through the legal loopholes, a strategy that was also used by Victorio Gualtieri on the Lechiguana Islands³⁴, in disadvantage of the weakest groups, the *islanders* and the *medium landowners*, who in often loose access to land (Roodhuyzen, 2011). Therefore it seems that the description of the Delta as 'the Wild West' still applies, as owning land still seems to be a matter of taking it.

Changes on the land market

Recently the Paraná Delta has experienced many developments that have changed the situation in the Delta completely. Not only have tangible changes taken place, such as the changed use of land, the enormous increase of cattle and the construction of dikes and embankments, but also less tangible changes have taken place. With the most important one being the increased interest in the lands of the Delta, resulting in a land pressure the region has never experienced before, what has affected several aspects of the land market. In less than 10 years the land prices per hectare increased around 2000% from US\$ 50 to US\$ 1.000 (Roodhuyzen, 2011), a complete new group of stakeholders entered the land market and state interest and interference in the area has never been as high as today³⁵. These changes on the land market will be explained in more detail in the following paragraphs.

The *newcomers* in the Delta have caused complete different dynamics on the land market and in the Delta as a whole. These *newcomers* are stakeholders who only recently became interested in the lands of the Delta, because of the financial benefits and commercial exploitation possibilities that arose when soy production in the Pampa region forced farmers to look for other exploitable areas. They have completely different working methods with regard to obtaining and exploiting the lands than the other stakeholders, who have been working and living in the region for decades, what resulted in these changes on the land market. Their financial capabilities and their political contacts have resulted in that they relatively easy have been able to obtain official land titles for their lands, a privilege that almost no other actors in the area, especially the *islanders*, have ever had.

Therefore the *newcomers* have created a power status that is exceptional to the history of the Delta and the land tenure situation of the other stakeholders has weakened more than ever. This powerful position is based on their financial and political means to obtain huge plots of land, such as the 12.000 to 30.000 hectares Pazzaglia Brothers S.A. owns. The size of these plots is not in line with the

³² Interview with an employee of the Agricultural secretariat in Baradero.

³³ Interview with an employee of the Agricultural secretariat in Baradero

³⁴ Interview with an employee of an agricultural federation.

³⁵ Interview with an employee of a local NGO, Paraná.

average plots of land the *islanders* and *medium landowners* usually own or have owned, respectively around 15 and 150-500 hectares. This tremendous up scaling is not common in the history of the area and therefore a notable alteration on the land market of the Delta. This up scaling is a trend that is observed in the entire country; the number of smallest producers (under 500 hectares) has decreased, while the number *medium landowners* (500 to 5.000 hectares) has increased, because *newcomers* have emerged on the land market and acquired land from the smallest producers (Marcelo & Soumoulou, 2011). Moreover have these *newcomers* transformed the land market of the Delta from a relatively open and clear process, where people haggled with each other very directly, into an invisible and closed market, even for the *islanders* and *medium landowners*, where deals are unclear and often only in the advantage of the *newcomers* (Roodhuyzen, 2011)³⁶.

The increased interference of the state has been taking place at the different governmental levels mentioned in the previous chapter. First at national level new policies are developed to create province- and municipal-transcending developmental plans that stimulate the sustainable use of the Delta, such as the PIECAS framework. With this plan the Argentinean government, together with and under pressure of international organizations such as the UNDP, intends to create an integral environmental protection program for the Delta region to promote the sustainable use of the Delta. It is the first tangible effort in sustaining the ecosystem services of the Delta that the national government makes. However, some interviewees claim that because of the corruption of the government, governmental supervision is lacking and therefore the goals of this framework are, until today, not met (Novillo, 2011b)³⁷.

On provincial level the increased state interference is observed in the new laws that are implemented that intent to control the informal land market. For instance after the implementation of law number 9.603, which allowed the lease of fiscal lands in the islands of Entre Ríos, several irregularities occurred; such as irregularities related to individual interests of obtaining ownership rights, conflicts caused by indiscriminate fires, non-payment of the prescribed leasing fee, illegal occupation of fiscal lands and leases awarded to persons not resident in the province (Donadille et al., 2010; Roodhuyzen, 2011). Therefore in May 2010 provincial decree number 1.186 was sanctioned, by which leasing law number 9.603 was revised in the islands area. With this revision the province tries to protect the public lands of the Delta to prevent the misuse by individuals. Even though this decree tends to address the irregularities mentioned before, it nevertheless leaves open the possibility to continue the leasing system and does not specify what the modalities are (Donadille et al., 2010). Resulting in a continuation of a system that does not sufficiently protect for the misuse of the fiscal lands inside the Delta area.

Also at municipal level the interest and interference on the land market of the Delta rose notably compared with the land market of the Delta around two decades ago, when it was not that dynamic yet. The municipalities implement their own development plans for the Delta, within the framework created by the national and provincial governments, inducing widely differing strategies for development. The mayor of Baradero, for instance, prioritizes economic exploitation of the lands of the Delta belonging to his municipality and has not included any nature protection plans into his development framework for the Delta (Baradero Te Informa, 2012). In order to stimulate this economic exploitation, he and the municipal authorities have developed a plan to expand the current small

³⁶ Interview with an employee of a local NGO, Baradero.

³⁷ Interviews with employees of a local NGOs in Paraná, Baradero, San Pedro and Villa Constitution.

harbour of the city to an international harbour that can bring many economical benefits to the city (Municipalidad de Baradero, 2010)³⁸. The municipality of San Pedro however, has developed a completely different plan for developing their lands of the Delta. Here the protection of the fragile environment of the Delta is more important, therefore a plan for creating a small nature reserve with camping possibilities is developed, which should attract eco-tourists and thus also bring economical benefits, but in a more sustainable manner than in Baradero³⁹. These examples show that even the municipal governments have started to directly interfere in the development of the Delta, a governmental level that has never been notably interested in the lands of the Delta and therefore never interfered this much in the land market.

In short many changes have taken place on the land market of the Delta since the expansion of the agricultural expansion from the Pampa region, affecting all stakeholders in one way or another and creating a whole new dynamic. To provide a better overview of the changes explained above, they are summarized in Figure 14.

	Land market before	Land market today
Land prices	Low land prices (US\$ 50 per hectare)	High land prices (US\$ 1000 per hectare)
Interest in lands	Few stakeholders interested in the lands	Many stakeholders interested in the lands and more diversified groups of stakeholders
Land tenure	Mostly land was occupied, not many stakeholders with legal land titles	Most powerful stakeholders are able to obtain legal land titles relatively easy
Bargaining	Bargaining was relatively straightforward and results were clear for those involved	Bargaining and deals became more difficult and unclear, mostly disadvantaging the less powerful stakeholders
Size of plots of land	Only small plots of land were occupied, ranging from 15-500 hectares	Newcomers on the land market obtain large plots of land, from around 10.000 hectares and more
State interference	Little governmental interest and interference in the Delta, mostly at provincial level	More governmental interest in the Delta, on all levels; national, provincial and municipal level

Figure 14: Differences between the land market of the Delta before the agricultural expansion of the Pampa region and today.

³⁸ Interview with an employee of the Agricultural secretariat in Baradero.

³⁹ Interview with an employee of a local NGO in San Pedro.

Concluding

The stakeholders of the land market of the Delta can use different tactics for obtaining land in the Delta. In the past the formal land market of the Delta was dynamic, real estate agencies offered many plots of land and *newcomers* were able to obtain their first plots of land through the usual channels. However, after acquiring this first plot of land, they often use the informal market to expand their lands. This is where their knowledge of the Argentinean legal system and their influential and powerful background comes at hand, as is showed by the case of Pazzaglia Brother S.A. Besides reinforcing the informal market and creating more obscurity, the *newcomers* have also initiated the up-scaling process in the Delta. Alongside the influence of the *newcomers* has also governmental interference in the area increased enormously, since the popularity of the area grew. Before mostly provincial governments tried to develop the area, today the government on all three levels is involved and interested to participate in the development of the Delta, resulting in many different contradictory policies and frameworks that give direction to the development of the land market of the Paraná Delta and thereby of the Delta as a whole.

Conclusions and discussion

All previous chapters provided information that has led to answers on the questions formulated before the start of the research. In this final chapter these findings are presented in the final conclusions, which give an answer on the main research question. Then the results are discussed and compared with the literature presented in the second chapter of this thesis. Furthermore are recommendations done, which can help policy makers and future researchers interested in the region.

Conclusions

This research has been conducted in the Paraná Delta, with the aim to expand the existing knowledge about the stakeholders who have started buying land in the region, the changes that occurred on the land market and the implications of these changes for the stakeholders buying land. The results of this research are based on the analysis of secondary sources and in-depth interviews with different stakeholders of the Delta, which are performed during the field research that has been conducted in the Delta from February to May.

The Delta has experienced several phases of colonization, starting around the sixteenth century, when an indigenous population occupied the islands and only used the area for domestic consumption. Thereafter the cities surrounding the borders of the Delta started urbanizing, stimulating agricultural production for these cities and therefore immigration into the Delta area. From around the second half of the nineteenth century the first policies that allocated land to private owners were implemented to stimulate the colonization of the Delta. Many European colonists were offered land inside the Delta and smallholder, mostly, fruit production flourished in these years. Also the first permanent settlements arose, mostly in the Lower Delta. From the second half of the twentieth century the population growth declined dramatically and a monoculture of forestry plants emerged, because large-scale fruit producers elsewhere in the country competed the fruit industry out.

The Delta has seen many different stakeholders come and go since the sixteenth century, often influenced by the ecological environment and governmental land allocation policies. In general these were agricultural producers, from the indigenous population producing for domestic consumption to fruit and forestry plants producing for the surrounding cities of the Delta. The motivation of these stakeholders to go to the Delta area mostly was economically based, so when unexpected problems occurred that threatened the yields of their businesses, such as the large floods in 1982-83, these agricultural producers did not see many obstacles to leave the area, to look for other less impeding areas to start their businesses. Land allocation only took place when the government started allocating fiscal lands to private owners in 1856. From then on occupiers became the formal owners of the land and a land market arose. However, this land market was not dynamic at all, as besides the people who got allocated to land from the government, few people were interested in the lands of the Delta.

After the agricultural frontier of the Pampa region started expanding into the Delta area, more stakeholders became interested in the lands of the Delta and thus the land market became more dynamic. The stakeholders of the land market are the *islanders*, the *medium landowners*, the state and the *newcomers*. The *newcomers* are most active on the land market and have most interest, power and influence of all stakeholders. They are referred to as 'businessmen', because many of them are experienced businessmen and/or farmers, who live in the large cities surrounding the Delta

and often have political relationships in the government. Their interest in the Delta stems from economical motives and they introduced up scaling into the area, to further increase the yields of their lands.

The *newcomers* in the Delta also caused a change in land use in the Delta. After the floods of 1982-83 not much economic developments have taken place in the Delta, until these *newcomers* started buying land in the Delta in the 1990s. They started using the land for large-scale permanent livestock production and to a lesser extent for the production of soy, maize and wheat. To be able to do so, these stakeholders have built large infrastructures, such as dikes and embankments, to protect their animals and crops for the seasonal floods of the Delta area. These changes of land use have affected the natural environment of the Delta, such as loss of biodiversity and pollution of soils and water, and also affected the other land users of the Delta. Mainly the *islanders* are affected, as they experience a loss of their livelihoods, because the lands they used for hunting, fishing, beekeeping and cattle rearing are now property of the *newcomers* and enclosed, with these dikes and embankments, for public use.

Furthermore has the land transfer mechanism changed, because of the increased interest in the lands of the Delta and the arrival of the new stakeholders. Besides increased land pressure, which resulted in a rise of land prices, the process of buying and selling of land has changed. The governmental interest in the Delta increased and laws have been implemented to regulate the increased amount of land transfers and to stimulate the economical exploitation of the Delta. Therefore the *newcomers* have been able to obtain their first large plots of land and land titles through the formal land market. However, for expanding their lands they often make use of the informal market. They formulate deals that at first sight are a good opportunity for the *islanders* and other smaller landowners, but which at a later stage do not benefit the vendors of land, but only themselves. Thus the land transfer process has become more obscure, mainly benefitting the *newcomers*.

These developments could take place unabatedly, because the Argentinean government did not formulate a sufficient cohesive and inclusive regulatory framework for land. As there is no overarching, national-level legal framework that is consistent with provincial legal frameworks and that regulates land use. Furthermore there is a lack of systematized information on land on provincial and even local level, as no updated and reliable cadastre was encountered in the research area, what incites the formation of an informal market for land. And finally, the state maintains an obscure role in the land market of the Delta; some land transfers have been performed under doubtful legal administrative circumstances and some provinces, mainly Entre Ríos province, have developed rural development policies, which actively promoted large-scale cattle farming, by selling big parcels of fiscal lands to large companies and by not interfering and thus allowing large companies to occupy land, to the disadvantage of the *islanders* and *medium landowners* who often do not possess legal land titles.

Concluding that the most important result of the expanding agricultural frontier of the Pampa region, the influx of new stakeholders into the Delta region is. These stakeholders who buy the lands possess financial resources and political power and influence that are unparalleled in the history of the Delta. Because of this, these stakeholders have been able to transform the Delta to their benefit, without notable interference of any of the other stakeholders of the land market of the Delta. And not only have they transformed the land market, they also started the Pampanization process, what affects the natural environment of the Delta.

For the buyers of land this influx of *newcomers* means that the competition for land has increased, driving up land prices. Furthermore has increased governmental interference, through regulations, brought some limits to their possibilities. However, as many of the interviewees explain, these limitations are negligible, because little monitoring takes place. Therefore it seems that the *newcomers* who emerged into the Delta area because of the expanding agricultural frontier are the most important ones affecting the Delta and its land market and are they, as the most active land buyers on the market, minimally affected by the changes on the land market.

Discussion

Political economy

Political economy approaches explain how political institutions, the political environment and economic processes influence each other. During the decades of exploitation in the Delta the mutual influence as described in the political economy is felt. During the first phase of colonization, the eighteenth century, the cities on the borders of the Delta started urbanizing, due to international migration, with an increased number of inhabitants and thus increased needs for food, water and other products as a result. Therefore the Delta was increasingly used for the production of mostly wood and fruits for these cities. Then around the second half of the nineteenth century, the second phase of colonization, the Argentinean government acknowledged the growing economical importance of the area by implementing laws that stimulated the colonization process. Because of these policies the Delta area could further economically develop. When this economic situation of economic growth and agricultural expansion deteriorated, because of competing production methods elsewhere in the country, the Argentinean government again tried to revive the economic activities in the area, as modernistic development ideas that ruled the development debate at that time saw economic growth as the path to modernism, a goal the Argentinean government tried to achieve. These stimulating policies resulted in a flourishing forestry industry until the floods of 1982-83 what resulted in a decline of this industry.

The recent developments that are taking place, the expansion of the agricultural frontier of the Pampa region in the Paraná Delta, are a result of global economic developments in combination with national policies stimulating the soy production in Argentina. Furthermore provincial governments have used land allocation policies to stimulate agricultural expansion in the Delta area. This has resulted in the traditional Argentinean *hacienda* system in the Delta, where the large landowners have most power and resources to exploit the lands of the Delta the way they want. What becomes clear is that in the history of the Delta the waves of economical development and political interference are alternating and affecting each other. It emphasizes the value of the political economy approach, which states that economic and political developments are intertwined and influence each other.

The influence of the newcomers

Besides the external forces of influence, as mentioned in the previous section, single actors, mostly the *newcomers*, are also important contributors to the changes that are taking place in the Delta. Where the external forces of the global soy industry and the favourable conditions of the Delta have been the initial conditions that caused the expansion of the agricultural frontier of the Pampa region into the Delta, the actors are the ones that have shaped the changes. The *newcomers* are the most important actors, because they have influenced the developments in the Delta most.

Most *newcomers* have bought land and started agricultural businesses in the area, because they noted the economic benefits of the area, which were created because of the external factors mentioned above. Because of the lack of sufficient land acquisition laws the *newcomers* have been able to enter the land market of the Delta relatively easy and become the possessors of large plots of lands. Furthermore do many of the *newcomers* have political relationships, which have made it possible for them to obtain the legal land titles of their plots of land, a privilege that none of the other stakeholders in the Delta possess. Hereafter have these *newcomers* used the informal market to obtain more lands. The interviewees explain that again the political relationships of the *newcomers*, their power and their wealth have been helpful in these processes and thus the *newcomers* seem to have been able to bend the institutional rules to their advantage. However, not only have the *newcomers* influenced the legal structures, they have also been able to influence the natural environment of the Delta, allowing them to permanently exploit the flood-prone area of the Delta. The tools they have used are the kilometre long dikes and embankments that protect their lands for the seasonal floods.

These examples illustrate how the *newcomers* in the Delta are active agents who at least interact with and in some cases even influence the external factors of the Delta. The other stakeholders in the area however, are to a much greater extent surrendered to the external factors influencing the development of the Delta. They do not have convenient political relationships, large amount of money or in another way a lot of power that they can use to secure their domain within the Delta, like the *newcomers*. For them, the *newcomers* even seem to be an external force, which they cannot stop or even influence.

Comparable cases

What becomes clear through this thesis is that the land market of the Delta has experienced many changes and developments in the last two decades, due to several developments on regional, national and even international level. The land market of the Delta shows many similarities with those studied in Nicaragua and Santa Cruz, Bolivia. First similar problems of researching a land market occurred. During the research in Santa Cruz, it became clear that a land market is difficult to research, because the selling of land is actually the selling of land rights what, when not documented, is an invisible process (Zoomers, 2003). This has proven to be a mayor obstacle in being able to research the land market of the Delta. In the Delta relatively few people possess legal land titles, just like in the case of Nicaragua especially few of the poor population, the *islanders*, own legal land titles (Deininger et al., 2003), of the plots of land they live and/or work on. What means that many of the transactions take place without proper documentation, making it an invisible process, where only the stakeholders involved in the transaction exactly know what transfer agreements are made.

A land market exists of buying, renting and leasing of land, two of these forms are observed in the Delta; buying and leasing. The land market of Santa Cruz showed most dynamics on the informal land market (Zoomers, 2003). In the Delta most transfers take place on the buying and leasing markets and also the informal market is more dynamic than the formal land market. However, during the field research in Santa Cruz several advertisements for land were encountered in local newspapers and at local real estate agencies, making it possible to get in contact with the people selling land (Zoomers, 2003). In the Delta such dynamics were not encountered on the formal visible land market, making it impossible to use the same research method, calling the advertisers by phone to get in direct contact with them, for getting more insights in the formal land market.

Finally similarities in the importance of the land for the livelihoods of the users are observed with the case of the land market of Santa Cruz. In that research however, land was mostly used as an economic asset that was marketed when economic circumstances demanded this (Zoomers, 2003). In the Paraná Delta the land is not solely seen as an economic asset, for the *islanders* their land provides in all aspects of their livelihoods; it is their access to water, food, work and shelter. Without their lands they are not able to stay self-sufficient and lose their livelihood completely.

Limitations

The main limiting factor in this research was the relatively inaccessibility of the service-poor and flood-prone area of the Delta. Given financial limitations, it was very hard to travel inside the Delta to get to the *islanders* and farms, as private transport is needed to reach them. Therefore not many interviews could be conducted with the local island population nor could many island farms be visited. This has resulted in that most of the information in this research comes from secondary sources, such as local NGOs, real estate agencies and governmental institutions, what means that this information is somewhat biased. In order to overcome this limitation as much as possible, the information from these interviews is complemented with literature research, qualitative data and personal observations.

Validity

As mentioned before, during the field research it was impossible to get in contact with the research population, the stakeholders buying land in the Delta. Therefore information is gathered from secondary sources, mainly organizations actively working inside the Delta region who are knowledgeable about the developments in the Delta and what the implications are for the different stakeholders. However, this means that the results of this research present to a lesser extent the views of the *newcomers* on the current developments of the land market. Furthermore has the field research mainly focused on Baradero and San Pedro, only two small municipalities, situated on the border of the Middle Delta area. The developments that are taking place on the land market of the Delta are steered by national, provincial and even regional political decisions and relationships and are very dependent on the regional context; even the Lower Delta area has developed completely different than the rest of the Delta, due to its proximity to the city of Buenos Aires. This means that the results of this research are very case specific and therefore cannot be generalised to the Delta as a whole nor to other Delta regions with similar characteristics in the world. Nevertheless did the research methods used in this study fit best to learn about the land market in the Delta and answer the research questions.

Recommendations

This research sheds light on the land market of the Delta, however, more research is necessary to get a grasp on how the different actors have influenced the developments, how political relationships play a role in the developments inside the Delta and what exactly takes place on the informal land market. Preferably the researchers should be familiar with the culture, political relationships and local figureheads inside the Delta, because these are very specific and determinative for the developments taking place in the area. Furthermore more resources and time are necessary to travel inside the Delta region, because only this way it becomes possible to build a trustful relationship with the people living and working inside the Delta, what is crucial for being able to collect data.

This additional research is necessary for being able to formulate policies that help preserve the fragile Delta region, as the economical exploitation of today is not sustainable and does not respect the ecosystem nor the local population and their access to water and land. What will result in the loss of biodiversity and the livelihoods of the *islanders*. Therefore it is necessary that a cohesive and inclusive regulatory framework for the entire Delta region is developed. This framework should decentralize power, regulate and closely monitor the agricultural exploitation of the lands and hereby prohibit the environmentally damaging techniques, such as the construction of dikes and embankments and the use of chemicals and fertilizers that pollute the soils and water of the Delta. Furthermore should a systemized land administration be realised, providing updated information and stimulating the use of the formal land market. At the same time the land tenure problems the Delta has experienced throughout its history should be addressed. Only by doing so the Delta can be exploited in a sustainable manner.

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Appendices

Appendix 1

ARGENTINA

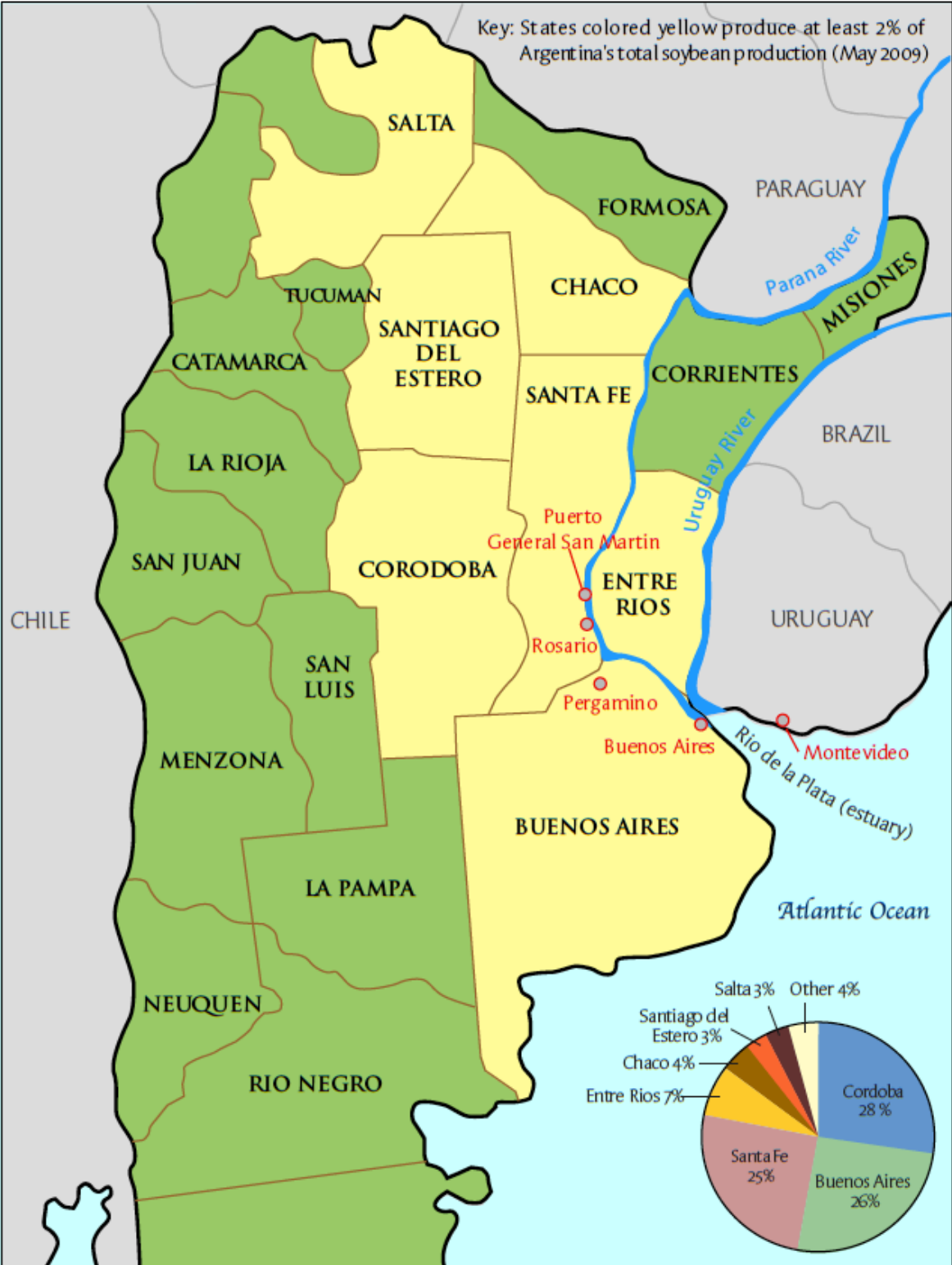


Figure 15: Soy production in Argentina, May 2009 (source: Shurtleff & Aoyagi, 2009)