Understanding changing land access and use by the rural poor in Senegal

Aminata Niang, Ndèye Fatou Mbenda Sarr, Ibrahima Hathie, Ndèye Coumba Diouf, Cheikh Oumar Ba, Ibrahima Ka and Marie Gagné







A study of changing land access in sub-Saharan Africa

This report is part of a wider study to improve understanding of changing land access and use in sub-Saharan Africa. The study draws on case study research and literature from Ghana, Mozambique, Senegal and Uganda. A synthesis report and briefing are also available, alongside complementary reports and briefings from each of the four countries. These are listed below with hyperlinks where available. The country reports will all be available at www.iied.org/pubs once published.

Synthesis report and briefing

Knapman, C, Silici, L, Cotula, L and Mayers, J (2017) Africa's farmland in changing hands: A review of literature and case studies from sub-Saharan Africa. *Research Report*. IIED, London. http://pubs.iied.org/17598IIED

Mayers, J, Knapman, C, Silici, L and Cotula, L (2017) Access to farmland gets quick and dirty in sub-Saharan Africa. *Briefing*. IIED, London. http://pubs.iied.org/17399IIED Also available in French and Portuguese.

Country briefings

Bugri, JT, Yeboah, E and Knapman, C (2017) Shifts in the landscape: increased pressure on rural land and livelihoods in Ghana. *Briefing*. IIED, London. http://pubs.iied.org/17355IIED

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Country reports

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Filipe, E and Norfolk, S (2017) Understanding changing land issues for the rural poor in Mozambique. *Research Report*. IIED, London. http://pubs.iied.org/17594IIED

Tumushabe, G and Tatwangire, A (2017) Understanding changing land access issues for the rural poor in Uganda. *Research Report.* IIED, London. http://pubs.iied.org/17597IIED

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Cover photo: Community members working in the fields in Niayes, Senegal.

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African Financial Community (Communauté Financière d'Afrique)

National Council for Consultation and Cooperation of Rural People (Conseil

Acronyms and abbreviations

CFA

PRA

3PRD

SAED

SCL

SOCAS

Delta)

Participatory rural appraisal

CNCR

National de Concertation et de Coopération des Ruraux) **CNRF** National Commission for Land Reform (Commission Nationale de Réforme Foncière) **CRAFS** Framework for Reflection and Action on Land Matters in Senegal (Cadre de réflexion et d'action sur le foncier au Sénégal) **CSO** Civil society organisation **DGPRF** Direction de la Gestion et de la Planification des Ressources en Eau GCO Grande Côte Operation GOANA Great Agricultural Offensive for Food and Abundance (Grande offensive pour la nourriture et l'abondance) **ICS** Chemical Industries of Senegal **IFAD** International Fund for Agricultural Development **IPAR** Initiative Prospective Agricole et Rurale LDN National Land Law (Loi sur le Domaine National) LOA Agricultural Framework Law (Loi d'Orientation Agricole) LSLA Large-scale land acquisition **MCA** Millennium Challenge Account NGO Non-governmental organisation PDIDAS Project for Inclusive and Sustainable Agribusiness in Senegal (Projet pour le développement inclusif et durable de l'agrobusiness au Sénégal) **PDMAS** Senegalese Agricultural Markets Development Project (Programme de développement des marchés agricoles du Sénégal)

6 www.iied.org

Society of Market Gardeners (Société des Cultures Légumières)

Delta Water Development Corporation (Société d'Exploitation des Terres du

Programme to Promote Rice Partnerships in the Delta

Société de Conserves Alimentaires au Sénégal

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Executive summary

Most rural households in Africa need access to land in order to earn a living and feed their families. Local changes in access to land in Senegal are strongly influenced by endogenous factors such as fragmentation due to demographic growth, and local land transactions (sales and rentals). In addition, in some areas, agribusinesses now dominate huge tracts of what used to be family farmland. The transactions that private investors use to acquire this land are rarely transparent, and often undermine local communities' collective rights to use the land in their territory. This combination of external and internal factors has led to an unprecedented increase in land transfers and acquisitions over the last decade.

This study aims to improve the understanding of changes in land access in Senegal. It does this by focusing on two areas where land is highly sought after: the delta of the River Senegal valley (herein the Delta), and the Niayes region. The Delta is known for its irrigated rice production whereas the Niayes is a zone where market garden horticulture is traditionally practiced. The Niayes also hosts a significant number of mining companies and is undergoing rapid urbanisation. The study used a qualitative approach — based on individual interviews, focus groups and a combination of other participatory methods — combined with quantitative data from a previous study of the same areas.

Key findings

Our analysis of the difficulties rural populations face in obtaining access to land — especially the most vulnerable groups — is framed by a context in which actors such as farmers, herders, mining, agribusiness and development projects need land for different purposes. Studies have shown that the amount of agricultural land in Senegal has increased slightly, while family farm holdings have diminished. This is due on the one hand to a renewed interest in agriculture in order to meet the demand for agricultural products, and on the other to the difficulties that small-scale producers face as result of land saturation and fragmentation. These problems seem to be caused by various factors, most notably demographic growth, climate change, large-scale land acquisitions, state agricultural projects, and the emergence and expansion of local land markets.

Land governance is problematic because local producers are caught between three systems: the legal system; customary norms; and actual practices on the ground. Most producers acquired the land they occupy through traditional inheritance systems that they still regard as legitimate, but they have no security of tenure because the land has not been allocated to them by the authorities and they hold no legal title to it.

Compensation for loss of land to mining and agribusiness is arbitrary and inequitable. Since the majority of rural people have customary rights to their land rather than land titles, if the state grants concessions to mining companies on land in the national domain, companies are in a position to evict original occupants. A number of processes associated with land transfers and compensation for involuntary displacement in the context of mining concessions have lacked transparency and inclusivity.

Public policies and big, donor-supported state agricultural investment projects favour large-scale operators at the expense of small producers. Rather than supporting local producers, these development programmes (such as the Senegal Agricultural Markets Development Project (PDMAS), and the Programme to Promote Rice Partnerships in the Delta (3PRD)) work in favour of new operations by wealthy entrepreneurs, which are widely regarded by local people, and especially the most vulnerable groups, as 'pro-rich' and a 'threat to family farming'. These projects perpetuate the inequitable distribution of developed land.

Producers have been left to themselves to deal with a lucrative land market (a source of conflict and unlawful monetised land practices) and poor land governance, particularly in the Niayes. Local people in both areas fear that they will become 'landless farmers' as access to land is increasingly controlled by the rich and powerful (borom doole).

The state's objectives of self-sufficiency in rice, mono-cropping and specialisation contrast sharply with those of family farmers, who tend to opt for diversification in order to increase their profitability and manage the risks they face during the hungry season.

Three groups that find it hardest to access land are:

- Rural women partly because of sociocultural factors that deny them control over land resources, but also because the land legislation that does support them is not enforced. Rural women are victims of an inequitable and highly patriarchal social structure that prevents them from accessing and controlling their means of production.
- Young men 97.5 per cent of young people in the Delta and 89.1 per cent in the Niayes have neither land nor livestock. Young men lack control over land in rural areas due to family structure and power relations within the community. Numerous studies have shown that the agricultural sector has huge potential to create productive jobs for the large number of young men in rural areas but they need the technical and financial means, training, market information and, above all, land to get into production.
- Herders are not allocated land to rear their livestock; but livestock routes shown
 on local land-use plans are blocked by works to extend access routes into northern
 Senegal. Although these plans do identify existing livestock routes and provide for
 the opening and maintenance of new ones, the fact is that they are increasingly

encroached on by agricultural activities, as local producers and councillors want to extend farming activities rather than support pastoral developments.

A number of 'anti-land grabbing' movements have sprung up across the country in recent years in response to land grabs and endogenous and external pressures on their land. Local people in Mboro and Darou Khoudoss in the Niayes are fiercely opposed to the land allocations for the Great Agricultural Offensive for Food and Abundance (GOANA) programme; and in Diogo there have been confrontations between local people and security forces during demonstrations over failures to pay compensation for loss of land. While some dismiss this as 'temporary disagreements' or caused by a few 'troublemakers', a social licence to operate is a pre-requisite for any new mining, agricultural or development project.

Innovative and effective ways of dealing with local land saturation have been found by other communities in the Delta. A highly organised village group in Thilène realised that water management is a key factor in boosting agricultural production, and used their own money to install a system to irrigate the village diéri¹ with water from one of the tributaries of the Walo. This judicious change in the use of land previously reserved for rain-fed crops has enabled men, women and young people to grow agricultural produce throughout the year, and is the kind of good practice that should be replicated in order to reduce pressure on land in areas where soils are leached and fields have shrunk due to land fragmentation.

Recommendations

All the stakeholders affected by land issues agree on the need to find sustainable solutions that will help small producers and vulnerable groups. In order to contribute to this process, our key recommendations for decision makers and future researchers are:

- Future research must build on this effort to explore drivers of change in particular agro-ecological contexts and implications for the most vulnerable groups. Following from this, laws should be rethought into framework laws that can take account of the different agro-ecological qualities of different parts of the country.
- In-depth analysis is needed of the roles and responsibilities of elected officials, other land governance actors and the General Directorate of Taxes and Land Matters in land transactions and other aspects of land governance.
- More action in needed by all relevant stakeholders to ensure that private investors, particularly in the mining sector, comply with the law; this includes compliance with Environmental Impact Assessment requirements, to ensure local land rights are protected, including reserves for future generations.

1 Poor quality sandy areas traditionally used by herders in the rainy season.

- More attention needs to be paid to the threat to the environmental equilibrium of the Niayes (particularly the green belt of casuarina trees) posed by mining operations and urbanisation.
- Greater emphasis should be placed on initiatives that promote and support family farming.
- Initiatives that promote private sector access and partnerships need to emphasise inclusive and responsible business practices.
- A land reform agenda must carefully and sensitively consider the interests and priorities of different groups, focusing on the protection of and opportunities for the most vulnerable. These could include considering limitations to foreign land leases or promoting traditional land management practices.

l Introduction

Most rural households in Africa are dependent upon access to land to earn a living and feed their families. Governments and development agencies that are seeking to reduce rural poverty need to understand how access to land is changing, and how land access and use is affected by factors such as demographic growth, socioeconomic change, high food prices, the market, and demand for biofuels and minerals. Although a good deal of research has been done on land issues in sub-Saharan Africa, an understanding of the multiple processes that affect access to land is still limited.

As competition for good quality land intensifies, customary systems also seem to be changing, with landholdings becoming more concentrated and social differentiation more marked in rural areas (Amanor, 1999; Peters, 2004; 2009; Woodhouse, 2012; Cotula, 2012).

In Senegal, a number of factors have intensified pressure on land and restricted vulnerable households' access to land resources since the 2000s. These include a renewed interest among local and international agribusiness investors in acquiring farmland, including for biofuel production, the increase in mining activities, demographic growth, urbanisation and soil degradation. The changes in land access vary from one agro-ecological region to another, depending on socioeconomic structures, levels of land reserves, and local development interventions.

While public attention has largely focused on 'land grabbing' by foreign investors keen to exploit favourable public policies and land governance arrangements, including the promotion of public-private partnerships, local changes in access to land are also strongly influenced by endogenous factors, such as fragmentation due to demographic growth, and a growing land market.

However, large tracts of what used to be family farmland are now occupied by agribusiness ventures. Nearly 30 per cent of the available arable land in Senegal has

been affected by large-scale land acquisitions (LSLAs) intended for agriculture, industrial development, mining and urban expansion (Faye *et al.*, 2011). Remarkably little has been written about this phenomenon despite its scale and impact on local people's access to and use of land. Yet the ability of poor Senegalese households to access land is being reduced by competing land uses, with consequences that vary for different social groups. Agribusiness developments on vast tracts of land in the River Senegal delta are hampering extensive livestock rearing activities in the area, and there is a risk that the spread of mining activities in the Niayes area will limit local producers' ability to retain their lands.

Aggregated data from a study examining changes in land use show that the overall amount of agricultural land across the country increased slightly from 17 to 21 per cent between 1965 and 2000 (Tappan *et al.*, 2004). In the River Senegal valley, local people have progressively cut back the dense acacia forest that used to cover the Walo plain to make way for subsistence farming and irrigated crops. In the Niayes region, the cultivation of sandy areas that were traditionally used for pasture (*diéri*) increased from 7 per cent in 1968 to 14 per cent in 2000. There has also been a reduction in the density and diversity of forest cover, although dunal movements seem to have been stabilised (Tappan *et al.*, 2004). These data suggest that although the level of land occupancy is relatively high, the main issue with land in Senegal is not the availability of agricultural land per se, but which actors have access to land and who is able to use it in a context of radically changing land uses and practices.²

This research is part of a wider study to improve understanding of the changes in land access and use by rural populations in sub-Saharan Africa. Its overall aims were:

- To enable technical and financial partners, decision makers, and key actors in rural development agencies and producer organisations to understand the dynamics of change in access to land; changing pressures on land; changes in mechanisms for accessing land; trends in land fragmentation and concentration; and implications of these changes for land use.
- To explore what these dynamics mean in relation to changing rural livelihoods, food security, poverty, the formation of social classes, and poor rural people's access to agricultural land. Inform International Fund for Agricultural Development (IFAD) country programmes and projects, and for national governments, development agencies and rural producer organisations.

² Arable land covers 3.8 million of the 19.6 million hectares (196,722km²) of land in Senegal, or 19 per cent of the national territory. "On average, around 2.5 million hectares of land is cultivated each year (65 per cent of arable land), of which 98 per cent is rain-fed, and the remaining 2 per cent irrigated. The highest cultivation rates are found in the peanut basin (81 per cent) and the Niayes (65 per cent), compared with 40 per cent in the Casamance and eastern Senegal" (Badiane, 1999, cited in DAPS, 2009: 8).

UNDERSTANDING CHANGING LAND ACCESS AND USE BY THE RURAL POOR IN SENEGAL

This research report discusses and analyses the findings from Senegal. In order to understand these issues in depth, two areas where land is highly sought after were selected by the research team as case study sites: the Niayes region and the delta of the River Senegal valley (the Delta).

This report is divided into seven chapters. Following this introduction, the second chapter presents the methodology; the third discusses the dynamics of change in land access and use in Senegal; the fourth the drivers of change in land access and use in the Niayes and the Delta; the fifth the impacts of these changes on livestock rearing; and the sixth the mobilisation of civil society in attempts to secure land tenure. The final chapter presents the main conclusions and recommendations.

2 Methodology

This study used a qualitative approach in order to better understand all the social, economic, historical and environmental dynamics at play, and explore the perceptions of those affected by land issues in Senegal. To get a more holistic picture of the situation, the qualitative data were combined with quantitative data from a previous study of the same areas — IPAR's report on youth employment and migration in West Africa (Hathie *et al.*, 2015) — which surveyed 1,500 sample households and used questionnaires to interview 500 rural migrants. The quantitative data taken from this study relates to the means of access to land, types of land use, yields and family farm sizes.

The literature review considered all the available academic documents and research reports produced by civil society actors in the period under investigation (2004-2014). There are very few articles examining changes in access to land in the two study sites, or their effects on the make-up of social classes in rural areas. It was therefore decided to include several older documents in order to capture the relevant data.

In addition to the literature review, preparations for the study included an exploratory mission in the study areas to the villages of Ndéllé, Boundoum, Thilène, and Ndiagambal in the Delta, and the villages of Sao Mékhé, Diamballo, Darou Fall, Darou Ndoye and Fass Boye in the central Niayes region.

2.1 Selected study zones

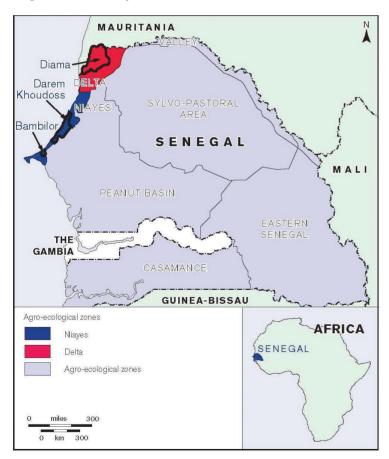
The Delta and the Niayes were selected as our study zones. The two zones are contrasting in relation to demographics, levels of urbanisation, type of production, types of land tenure and dynamism of the land market, and they reflect two contrasting realities:

1) in the Delta the large number of agribusiness projects has been a major factor in changing poor rural people's access to land; 2) the main activity in the Niayes is market gardening, but this is changing as a result of various sub-surface activities prompted

by the recent discovery of minerals, and increasing peri-urbanisation due to the area's proximity to Dakar and Thiès.

The Delta is located in the western part of the River Senegal valley, where there has been substantial public investment in water management and irrigation schemes. This study covers the commune of Diama, which is the largest commune in the department of Dagana. It was selected as a study site because it straddles the Walo plain and *diéri*, and allowed us to look at issues such as land saturation, fragmentation and concentration. Various resource persons helped us with the initial selection of the study villages in order to capture the similarities and differences in the pressures and their implications for different land users. To enable us to study the issue of LSLAs in greater depth, the first three target villages of Boundoum, Thilène and Ndiagambal were supplemented with Diama, Démézile, El Ngourane I, and El Ngourane II (see Map 1).

Map 1. The case study areas



Source: Authors.

The Niayes is a band of land that runs north along the coast from Dakar to the southern end of the River Senegal delta. Covering some 2,759 square kilometres, it is punctuated with interdunal depressions where the water table rises to the surface. In administrative terms, the Niayes includes the western parts of the regions of Saint-Louis, Louga, Thiès and Dakar. It can be divided into three sub-zones: northern Niayes, which runs from the south of the region of Saint-Louis to the region of Louga; central Niayes, which covers almost all of an area in the region of Thiès known as Diender (from the district of Niakhène to that of Keur Moussa); and finally southern Niayes, which runs from the district of Sangalkam to the suburbs of Dakar.

The survey started in central Niayes, in Mboro and the villages of Diogo and Sao Mékhé II in the commune of Darou Khoudoss, and then moved into the commune of Bambilor in southern Niayes. Sites were chosen to facilitate in-depth assessments of specific pressures such as energy and mining operations, urbanisation, and other planned infrastructure.

2.2 Data collection and tools

Key informant interviews (KIIs) and focus group discussions (FGDs) were undertaken by the research team in the Niayes in December 2014 and in the Delta in January 2015. These focused on understanding the changes observed in recent years, the drivers of change associated with access to land and changes in land use, and their impacts on productive resources. Another mission was conducted in Bambilor in southern Niayes to study peri-urbanisation and its consequences for agricultural land and productive activities. The village chief provided the entry point in each locality and key informants were identified during the exploratory missions. A mixture of targeted and randomly chosen respondents ensured that all the different population groups affected by the study issues were properly represented. In total 56 people (45 men and 11 women) in the Niayes and 60 people (45 men and 15 women) in the Delta were interviewed or participated in FGDs.

KIIs were conducted with the village chiefs, in order to establish the historical profile of the village and changes in access to and use of natural resources. Other KIIs included senior members of the decentralised technical services, particularly agents from the public local development support centres, agricultural and rural councils, sub-prefects, agents from the forestry services, senior staff from private companies and presidents of producers' organisations.³

FGDs were conducted with groups selected according to their age, gender and occupation and with mixed groups according to their occupation (farmers, herders, agropastoralists) and land status (landholders/landless). Group interviews were

3 CSO representatives were interviewed at the national level.

conducted with women who work in different sectors such as agriculture, livestock rearing and petty commerce, and young men (who are usually farmers but who also work in other sectors). Questions for these groups focused on productive activities, changes in access to and use of land, and their perception of the impacts of these changes and their future prospects.

Some participatory data collection methods were used in conjunction with KIIs and FGDs including resource maps and historical profiles.⁴ The team also used systematic direct observation of study issues, such as land fragmentation and the physical impacts of mines on neighbouring fields, which provided an opportunity for fruitful discussions and mutual learning between the researchers and target populations.

The KIIs and FGDs were transcribed as they took place and later coded by key themes. The analysis of the data was iterative, feeding back analysis into the field investigations so that the research questions could be continually refined and key issues arising explored in more depth.

2.3 Constraints and limitations of the study

The research team encountered various problems gathering data in the field. First, there was a feeling of research fatigue in the research sites limiting the participation of some who felt 'over-surveyed'. Second, some days scheduled for conducting surveys coincided with weekly markets, making it difficult to bring people together for interview. However, by adopting an iterative process we were able to discuss the research questions with representatives from each group in the community. Third, the team faced significant challenges organising meetings with some of the decentralised administrative authorities.

The first limitation of the research relates to timescales. Research into the impacts of LSLAs could only assess how land access and modes of production are changing for local people. Not enough time has passed to fully assess the secondary implications of land loss on future food security. Follow-up studies should be planned to monitor this over the coming few years. Second, it was difficult to assess recent changes in the amount of cultivated land as there is very little data on this in Senegal, either aggregated or at the village level. Third, field research took place in the Delta and the Niayes regions, so the findings on types of land use and certain drivers of change in access to land (urbanisation, mining activities) are specific to the study areas and cannot be generalised at the national level. However, the findings relating to land governance, the implications of lack of (or limited) access to land for local livelihoods, securing land for small-scale producers, and other issues can be extrapolated to other parts of Senegal.

⁴ Resource maps are a tool that allows the population to represent their land on the soil or on paper and to locate the availability of natural resources and related activities. Historical profiles are a participatory tool that identifies all the important historical events of a community.

3

Changes in land access and use

3.1 Land management practices and access to land in Senegal: between customary rights and the law

3.1.1 From 'cutting rights' to deliberative rights

Whilst customary resource tenure systems have been superseded by written statutory law, on the ground customary practices are going strong despite the law, albeit adapting to contemporary contexts. The rules governing land access and occupancy are determined by the way that each society regards the land and natural resources on which its activities depend. The rights acquired by the first person to clear a piece of virgin land and make it viable for production are commonly known as cutting rights. Holders of cutting rights have certain privileges, including the authority to act as 'master' of the cleared land so that it can be incorporated into the family or lineage group landholdings. The community founded by the first occupant benefits from this space in a strong triangular relationship between the land, the first person to clear it, and their descendants. This relationship makes the first occupant "the founding father of a lineage group whose descendants have imprescriptible and inalienable rights to this land as an asset that belongs to their lineage group" (Verdier and Rochegude, 1995:10). The space occupied by this lineage group is defined as "a piece of shared land and resources appropriated by members of a single lineage group. The land and shared resources are generally overseen by an elder who represents the interests of all the descendants of this single ancestor" (GRAF,

2008). The oldest member of the family is responsible for managing the productive use of the family landholding, and ensuring that this is done in a sustainable manner so that it can serve the present and future interests of the family (Olawale, 1961). As the processes of territorialisation and settlement unfold, this holding usually evolves into a village occupied by the descendants of the family lineage group and outsiders to whom they have offered hospitality and gradually incorporated into the group. These incomers may be transient seasonal labourers or people who married into the lineage group and settled in the village.

The initial effort invested in securing primary occupancy rights to this land has to be maintained by subsequent heads of the lineage group in order to retain the hard-won asset and defend their ancestral hold over the land. This legitimises their interventions to manage the land and distribute parcels between direct and indirect members of the lineage group.

Customary rights are therefore based on a land management system that distinguishes between the primary rights acquired through cutting rights, and numerous secondary rights that mainly relate to all the different kinds of transactions associated with land resources — except for sales, since land is sacred and should not be monetised.

Land held by the community was traditionally managed by 'land masters' (*lamanes*),⁵ who allocated parcels to members of the community so that they would be used in an equitable manner. This customary system was fundamentally challenged by the colonial authorities. After independence, the difficulty of establishing reliable proof of rights held under the (oral) customary system, and the perceived shortcomings of local conflict prevention and management systems, led to the formulation of the National Land Law (LDN). Voted in on 17 June 1964 under Law No. 64-46, the LDN provided the legal and institutional frame of reference for land governance in Senegal.

When the National Land Law was passed, all unregistered land became national property (95 per cent of land in 2012). Drawing on colonial land policies, the colonial powers and later on the post-independence regime suppressed customary land rights. But despite colonial authorities' use of coercion, and the introduction of the Torrens system, longstanding customary rights systems not only persisted but even gained some recognition from 1955 onwards. Although the LDN abrogated traditional modes of land tenure, Article 15 states that "anyone occupying and making personal use of land that is part of the national domain when this present law comes into force may

⁵ The Sérère word for land masters.

⁶ Named after its inventor Sir Robert Richard Torrens, a colonel in the British army during the conquest of Australia. Under the Torrens Act, which was adopted on 2 July 1858, indigenous territories occupied by the colonised peoples of Australia were declared *res nullius* ('nobody's property'). The colonial authorities regarded the conquered territories as land free of rights. The principle of public land ownership arising from the application of this system from 1900 onwards in French West Africa resulted in a purge of customary rights and the colonial authorities' claim that "all land was vacant and ownerless."

continue to occupy and use this land" (Law No. 64-46 of 17 June 1964). This law was passed following a six-month transition period when customary rights holders had the opportunity to stake an official claim to their holdings and obtain full title deeds to this land. Unfortunately, very little land was registered during this period (which was extended once) due to the short timeframe, lack of information and local people's misgivings about the process, which is why most lands are part of the 'national domain'.

Land in the 'national domain' belongs to the nation rather than to the state or to individuals. The state provides the institutional framework for the nation and holds, but does not own, land in the national domain.⁷ Article 3 of the LDN states that the only way land can be taken out of the national domain is to register it in the name of the state, and that this can only be done if it is to be used for operations that are in the public interest.

The law also changed rules around succession. In the past, land was considered part of the family heritage and could be passed down from one generation to the next; but this changed as the LDN ushered in a modern land allocation system, where land allocations were 'deliberated'. In theory, land was no longer automatically transferred when the first 'owner' died. The heirs could ask to be allocated the land within three months of the holder's death, and had priority rights over other applicants with an interest in the vacant land. However, this provision has rarely if ever been put into practice: land is still regarded as an integral element of the family heritage, and is passed down through the family like any other asset.

Under the current legal and institutional regime, land can only be accessed by applying to the municipal council, which discusses applications from individuals that have the capacity to use the land productively (on their own or with the help of their family) and allocates land accordingly.⁸ Again, this procedure is not widely followed in rural areas as most people still follow customary land practices.

This context is summarised by Dr Ba, executive director of IPAR and a member of the technical committee for the National Land Reform Commission: "Most land in Senegal is part of the national domain. It does not belong to the people who work on it because the law of 1964 suppressed customary rights. In practical terms, those who cultivate land on a regular basis regard this land as theirs because it was held by their forebears. But in legal terms, it does not belong to them, and their tenure is relatively insecure as the state could reclaim this land at any time for use in the public interest — as could local governments. This creates problems with security of tenure."

⁷ Article 2. The state holds land in the national domain in order to ensure that it is used responsibly and in accordance with development plans and programmes.

⁸ Land allocations can only be withdrawn if the land has been abandoned, insufficiently used or not used productively, or if the state requires it for public interest purposes.

Although the state transferred the power to manage local land to local councils as part of the decentralisation process, it still controls land management (transactions, registration) as all land-related decisions need prior approval by a state representative.⁹

Before the recent rush for land by investors, land transactions remained largely informal. These informal transactions are now validated and legalised *a posteriori* (after the transaction has already taken place) by town councils. These elected bodies were not really functional in the past, but recent interest in land endows them with further influence in land management issues. This new leverage is however constrained by the central government, which intervenes in local governance affairs when town councils act in a way deemed inappropriate.

Nowadays, a number of local authorities, such as village chiefs or rural councillors, become intermediaries or land speculators, as real estate brokers need an entry point in the community. This is especially noticeable in the Niayes region. In addition, the government tends to allocate land that belongs to the state domain to outside interests to the detriment of local dwellers.

Producers are currently caught between three systems: the statutory legal system, customary norms, and actual practices on the ground (increasingly influenced by dynamic land markets). The statutory legal framework for land tenure contains many ambiguities that make it hard to enforce land law in Senegal. Key concepts, such as productive land use, are ill-defined, land governance tools are lacking, and there are insufficient human, material and financial resources to enforce them in the face of resistance from customary elites. Most producers acquire the land they occupy through traditional inheritance systems that they still regard as legitimate, but they have no security of tenure. Over 65 per cent of the land used in the Delta is untitled, 10 while some producers in the Niayes have insecure tenure because their market gardens lie in protected areas. This lack of legal tenure leaves small producers in a very vulnerable position.

3.2 Current trends in access to land

3.2.1 Widespread land saturation due to constant land fragmentation

The historical profiles of the villages covered by the study show that natural resources (water, land, vegetation and wildlife) have declined over time. The chief of one village

⁹ The communes that were created as part of the new decentralisation policy (in 2013) are expected to administer land in conjunction with the administrative services, under the supervision of a representative of the state.

¹⁰ According to maps produced by the Rural Community Support Programme in the River Senegal valley in 2010 (French Development Agency).

recounted how "there used to be plenty of land, enough for the head of the household plus several hectares to share between family members." Things are very different today: the vast expanses of green grasslands suitable for pastoral and agricultural activities no longer exist, and the last ten years have seen land saturation increase across the country.

Several factors have contributed to land saturation and the depletion of land resources in the two study areas: land fragmentation due to internal anthropogenic factors such as demographic growth; more intensive production systems in both areas; urbanisation in the Niayes; and the lack of irrigation infrastructure in the Delta. In addition to this LSLAs, for the purposes of large-scale crop production or mineral extraction producing for international markets, have led to the restructuring and concentration of traditional lands in the hands of fewer wealthy private investors. In a context of social change, demographic growth and the resulting mass demand for agricultural produce, land fragmentation is accelerated by several factors. Respondents in both the Niayes and the Delta identified the following:

1) Lack of rich or useful land (known in Wolof as *deck*, *xur* or *tákk* soils). The Niayes is a particularly rich agro-ecological zone ideal for year-round market gardening due to its location on the Grande Côte.¹¹ Unfortunately for local producers, the area is largely made up of national land and classified forests,¹² leaving little land in reserve for local people and even less for incomers (see Section 3.2.2). This has led to land fragmentation that has been accelerated by an increase in household sizes, especially on family farms. The lack of cultivable land has negatively affected productivity in the Niayes and is threatening local producers' primary means of subsistence.

In the Delta, the increasing shortage of developed land for rice production has led to a widespread local perception that "the Walo is finished" (*Waalo jeexna*).¹³ The pioneer zones where the first developments took place in the 1970s and 1980s have been divided between subsequent generations — leaving each household in the village of Boundoum with just 1.5 hectares of land for rice production, and young farmers with a mere 0.4 hectares apiece.

2) Inheritance: according to customary practice, land is transferred to the landholder's descendants when s/he dies. These holdings (toolu baay)¹⁴ become more and more fragmented as the number of family members increases with each generation, leaving the youngest men and women of the family (who only receive two-thirds of the assets) with very little. Average family farm sizes in Senegal fell from 1.07 hectares in 1960 to 0.57 hectares in 1998 (IPAR, 2012: 6).

¹¹ Local producers refer to it as Xéwël, or God's gift.

¹² Although these protected areas are not supposed to be cultivated, the state tolerates their temporary use for productive purposes (see Section 3.2.2).

¹³ Wolof term for the Delta, or land near the river.

¹⁴ The descendants' fields.

- **3)** Land sales are becoming increasingly widespread in both study zones (see Section 3.2.3). An official from the farm organisation *Union des groupements de producteurs des Niayes* in Darou Khoudoss noted that sales in his area are being boosted by urbanisation.
- 4) Land rentals: it is common practice in both study zones for producers from other regions to rent fields. There are two forms of land rental. The first is a sharecropping arrangement known as bay seddo or rem peccen, which is fairly widespread in the Niayes. The landholder rents part of their plot, making land and inputs available to a seasonal producer (sourga) who cultivates the land. Both parties then share the harvest after the costs of production have been deducted (seed, fertiliser, pesticides, and so on). In the second arrangement, landholders rent out their fields because they need the money to get through the next agricultural season or because they lack the labour to work on the land themselves.
- **5)** Using land parcels as collateral (*tayle suuf*): landholders use their parcels as collateral in order to obtain credit from a financial institution, or as part of an informal arrangement to raise urgently needed cash.
- 6) Urbanisation: the spread of urban housing developments from central and southern Niayes down to the outskirts of Dakar is causing unparalleled fragmentation and saturation of arable land across the Niayes. Local people feel that urban housing is taking precedence over production (dekk taax mën tool) as the urban front eats away more of their market gardens. This new dynamic calls for more detailed analysis of the relationship between urban and rural areas, and the real impact of urbanisation on agriculture and other land uses. On 16 July 2014, the council of ministers registered the threat this poses to the future of Senegalese horticulture, the 'nation's lung', and the risks of uncontrolled and galloping urbanisation. The head of state even ordered a detailed land audit on the management of the areas concerned although no concrete action had been taken on this exercise when this report was written.

3.2.2 Populations caught between state and classified lands

The general rules for land tenure set out in the National Land Law were revisited in Law No. 2013-10 of 28 December 2013 on the General Local Government Code. The land system in Senegal divides the national territory into three domains – national lands, state lands, and land belonging to individuals; while the National Land Law provides for four types of zone – urban areas, 'home' territories, pioneer zones and classified (protected) areas (see Box 1).

Box 1. Different categories of national land identified in Law No. 64-46 of 17 June 1964

Article 5. Urban areas are made up of national lands within the territorial boundaries of communes and urban clusters envisaged by the relevant legislation. The administration of agricultural land within urban areas will be determined by decree.

Article 6. Classified areas consist of woodlands or protected areas that have been classified according to the provisions of the relevant legislation, and which are administered in accordance with its regulations.

Article 7. Land outside urban areas and classified areas will be divided into home territories and pioneer zones through decrees issued on the advice of regional development committees.

In principle, home territories include land that is regularly used for rural housing, growing crops and rearing livestock, while other areas are classified as pioneer zones. Local governments have the authority to manage home territories, while classified areas are managed by the forestry services.

Local people in the Niayes are frustrated by the overlaps and inconsistencies between these different land regimes, particularly by the fact that the richest land in the 'Niayes belt', 15 where all local agricultural activities take place, is in a protected area. This area was classified in 1957 and then incorporated into the national domain just ahead of the land reform of 1964. The colonial authorities wanted to safeguard local timber resources and biodiversity by creating a restoration area in the Niayes belt. This land is currently managed by the forestry services, although the forestry service in Mboro says that the exact boundaries of the classified area, which covers around 47,000 hectares, are unclear. At the moment, "all the land to the west of the Niayes road up to the edge of the maritime zone is part of this classified area, including the band of casuarina [trees] that stabilise the dunes on the Grande Côte." 16

Local people have the right to use classified land for purely agricultural or pastoral purposes, and to erect temporary facilities on it. Although the law says that they should obtain occupancy permits from the forestry service in order to access this land, it is still managed according to customary practices and passed down from generation to generation – effectively leaving producers in the Niayes vulnerable to eviction at any time by the central authorities. The local authorities that are supposed to defend local people's interests have not had any power over this classified area since the law was adopted.

¹⁵ A rich interdunal depression between the maritime area and home territories.

¹⁶ Individual interview with Youssoupha Traoré, an agent in the Mboro forestry services.

Frustration over this insecurity has escalated since the early 2000s, especially in the last ten years, as the pressure on cultivable land has intensified due to the growing rural population and increasing urbanisation in the commune of Mboro and urban centres such as Thiès, Tivaouane and Mékhé.

In another major development in 2009, land that is still classified as protected was allocated as a site for a zircon mining project in Diogo (discussed below) and a coal-fired power station in Sao Mékhé II (still at project stage). Local people have been fiercely criticial of this apparent disregard for the law, accusing the central government and decentralised local authorities of wanting to allocate large tracts of land to private foreign companies at the expense of increasingly insecure family farms.

3.2.3 'Unlawful' but virtually institutionalised land transactions in the Niayes

Law No. 64-46 rendered 95 per cent of the land in Senegal imprescriptible and inalienable, and prevented individual citizens from holding ownership rights to this land. According to both customary rights and the LDN, individuals only have the right to use land, not to own it. In reality however, the law on national lands is constantly violated and customary practices seem to be accommodating new, often monetised, forms of land allocations and acquisitions. Land in the national domain is subject to numerous transactions, especially in central and southern Niayes, where urban housing developments are spreading and the mining sector is flourishing.

Land sales

Law No. 64-46 assigned the administration of land in the 'home territories' (a category of land in the national domain generally for land used for rural dwellings and crop cultivation) to rural councils, which then became municipal councils following Decentralisation Act III (the new land reform of 2013). These municipal councils have the power to allocate or withdraw land use rights from residents in their commune.

Despite the fact that land sales and loans are illegal, they have intensified in recent years, even in classified areas. It seems that land allocations by the municipal council in the Niayes effectively amount to official recognition of land sales. Applicants have to present the 'deed of assignment' for the parcel (generally known as the 'deed of sale') duly signed by its 'owner', the village chief and other witnesses needed for a land allocation. This is not a free service, as anyone wanting to obtain access to land first has to pay to have its boundaries marked out, at a cost that varies according to the number of hectares involved and the local government concerned. Each local government sets its own rates for this service, which provides the main source of income for the commune. Land transactions are sometimes retrospectively formalised by the municipal council, and the procedure is

concluded by registering the land in name of the new 'owner' and removing that of the previous one. However, it is difficult to determine the exact progress of land allocations and withdrawals as most communes do not keep land registers.

These land sales have practical implications for the livelihoods of rural vendors. Many land sales are due to the family concerned being unable to manage their farm or face the competition created by new agricultural enterprises (Touré and Seck, 2005: 48). In the Niayes, "the rise of this type of parallel land management and distribution has contributed to the further marginalisation of women" because they earn less than men (Enda Pronat, 2011: 47).

Land sales are a final one-off transaction, generating a single payment that vendors need to invest in another productive activity in order to avoid the impoverishment that afflicts many former smallholders in the Niayes. Renting land provides a seasonal income that may increase over time, but it also carries a certain risk because the National Land Law regards the person who works the land as its owner. During the work to develop rice basins in the Delta several years ago, the Delta Water Development Corporation (SAED) only compensated the people who used these parcels, regardless of whether they owned or rented them, and many landholders ended up losing parcels that they had rented out, without receiving any compensation for them.

These transactions are a manifestation of poor governance by central and local governments. Turning a blind eye in order to maximise profits for the national treasury and municipal council coffers appears to have been institutionalised. The ultimate beneficiaries are private property developers (individuals or companies), while rural people (especially women and young men) who need land but lack the resources to obtain it are becoming less and less resilient to economic shocks and unemployment.

Land speculation and poor governance of transactions

The land transactions discussed in the previous section are evidence of a dynamic land market that is opening the way for two types of land speculation in southern Niayes. The first, more common, practice is to buy land cheaply and wait until it can be sold at a higher price; while in the second type of speculation, brokers inflate the real asking price so that the land transaction will generate more money. Although brokerage is a highly developed practice, little is known about how many people are involved in this type of speculation. There is no particular logic to these transactions, which are usually voluntary agreements between the vendor, their intermediary, and the buyer, with land prices varying from one area to the next depending on its proximity to urban centres and road networks, or its location within home territories. Figure 1 shows that land in the Kounoune area costs

over 15,000 CFA francs¹⁷ per square metre (about US\$26 at the time of publishing), compared with 10,000 CFA francs (US\$17) in the Ndiakhirat-Niaga area, and little more than 5,000 CFA francs (US\$8.7) in Bambilor-Gorom. The most expensive area in the Niayes is Lac-Rose, where land sells for over 35,000 CFA francs (US\$60.7) per square metre due to its tourist potential.

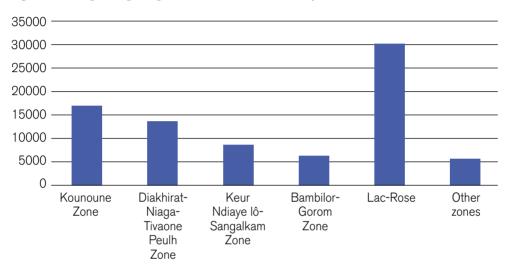


Figure 1. Land prices per square metre in southern Niayes

Source: Sarr, 2011.

In exploring motivations for land sales, a village chief in the Fulani area of Sao Mékhé II reported that people "prefer to sell because they don't have land titles and they know that the state can withdraw the land at any time and reallocate it to a company. They say "bala may ñakk, ma jaay ko" (or literally: "I'll sell before losing"). Large private investors are given land titles that secure their concessions, while most small producers have great difficulty in securing their land.

Analysis of the behaviour of local people who sell their land shows that they have various strategies for anticipating or sidestepping the law. The sale of land is supposed to meet certain legal standards, but in reality the rules are dictated by both land users and land management actors, and to which the producers who sell their land are just as much party as the purchasers. Lack of law enforcement continues due to vendors' ignorance of the law, the lure of the city dwellers' 'pots of money' and the complicity of the local authorities.

Exclusive forms of land management, poor internal management and corruption are endemic in local government. A number of local authorities (sub-prefects, village chiefs,

¹⁷ Senegal uses the West African CFA franc, one of two African currencies guaranteed by the French treasury (the other is the Central African CFA franc). CFA stands for *Communauté financière d'Afrique* (African Financial Community).

mayors, presidents of land commissions) have been accused of ruining local people's lives (*ndey bu niu nanpal posson*) by colluding with certain private national and foreign entities and granting land concessions in return for favours (money, fuel for their vehicles, jobs for their children). The former president of the commune of Darou Khoudoss told us that "the old rural communities¹⁸ made lots of land management mistakes; their practices weren't rigorous or transparent. The presidents of the rural communities just rubber-stamped decisions that had already been made." In other words, these elected officials formalised irregular land practices by 'withdrawing and reallocating' land in order to provide the purchaser with an official document.

The decentralised state services that are responsible for raising local people's awareness and informing them about bad land practices seem to be powerless, saying that they don't have the resources they need to do their work properly. In the meantime, private foreign investors exploit the shortcomings of the legal system, poor law enforcement, bad governance (corruption, nepotism and political patronage), and the vulnerability of local people in order to acquire the best land.

Modes of land acquisition

Land acquisitions in the Niayes vary considerably between central Niayes, where market gardening is the main economic activity, and southern Niayes, where rapid urbanisation is under way.

A study conducted by IPAR, published in 2015 on youth employment and migration in West Africa (Hathie *et al.*, 2015) shows that 78 per cent of all land acquisitions in the Niayes do not comply with the regulations (see Figure 2). The qualitative surveys for this study show that land occupancy is based on inherited customary rights passed down through the generations from the first occupant's 'cutting rights' and land allocations.

Only one per cent of the households surveyed in the Niayes obtained their land through legal land allocations (compared with 59 per cent in the Delta). This can be explained by the fact that most agricultural land in central Niayes lies within classified areas, and is therefore not managed by the municipal council. Land purchases and loans respectively account for 8 per cent and 7 per cent of land transactions in the Niayes, compared with 4 per cent and 2 per cent in the Delta. Only 2 per cent of land in the Niayes is rented.

18 Now 'communes'.

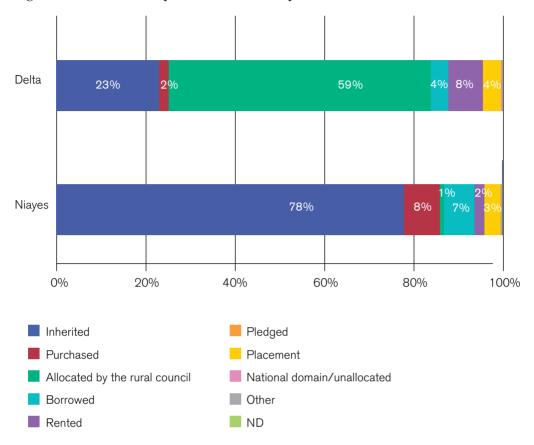


Figure 2. Modes of land acquisition in central Niayes

Source: Hathie et al., 2015.

Purchases are the most common means of land access in southern Niayes, with 36 per cent of households gaining access to land in this way. Some 33 per cent of households have no title deeds to the land they occupy as it was obtained through customary channels. IPAR's youth employment and migration study for West Africa (Hathie *et al.*, 2015) shows that southern Niayes has a higher rate of land allocations (13 per cent) than central Niayes, and that 12 per cent of all transactions in the Niayes involve some form of land title (rental agreements, final land titles and occupancy permits), showing that some people in peri-urban areas do follow legal procedures for acquiring land.

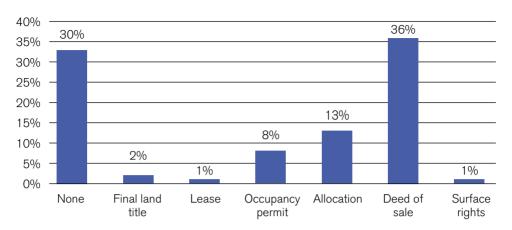


Figure 3. Status of land occupancy in southern Niayes

Source: Sarr, 2011.

3.2.4 Young people: victims of power struggles

Agriculture is the main employer of young people in Senegal and the primary source of income for rural households. Most of the workforce on family farms consists of young people, ¹⁹ yet it is very difficult for young adults to access productive resources (Hathie *et al.*, 2015). The 2015 IPAR study shows that 97.5 per cent of young people in the Delta and 89.1 per cent in the Niayes have neither land nor livestock (ibid). The main constraint to young adults in the Delta is access to land. Irrigated land that was developed in the 1960s and redistributed after SAED redeveloped various basins in the 1990s²⁰ and 2008 was allocated to heads of household, in 2- to 5-hectare plots to be divided between family members. The logic of distribution was based on the family structure, in which the head of the family controls all the lineage group's assets. According to this logic, land is a common good that belongs to all members of the household but is managed and redistributed by their guardian, the head of the household. The village chief in Thilène reported that, "the developed plots were distributed between the different families. Everything was in the hands of the head of the family. After the Thilène basin was developed in 1980 no-one under the age of 55 received any land."

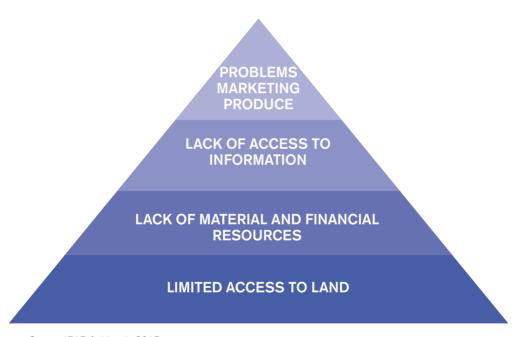
Young men and women suffer from this inequitable distribution of land resources, which flows from a gerontocratic and patriarchal social structure where the elders hold sway and young women have little, if any, power. Young men are still highly dependent on the heads of agricultural production units, and usually gain access to productive resources through inheritance or rental agreements. This limits their production capacity and their

¹⁹ In this report, the term 'young people' refers to those between the ages of 15 and 35 in line with the definition of youth and young people in the African Union's Youth Charter (Africa Union Commission, 2006). 20 1,372 hectares of the Boundoum basin were redeveloped in 1994.

ability to operate autonomously. The young are the largest demographic group in rural areas, but they usually have little social or political power because land and the means of production are controlled by older people (usually men). Many of the young people we spoke to in the Delta complained about their lack of representation in producers' unions, which means that little account is taken of their needs when decisions are made about allocating developed plots or providing access to credit and information.

The pyramid of constraints developed with young people from the village of Boundoum (see Figure 4) shows that their main problem is access to land, which is a key factor in production and a pre-requisite for becoming a producer.

Figure 4. Pyramid of constraints faced by young people in Boundoum



Source: IPAR fieldwork, 2015.

In a context of social change, traditional standards are no longer universally recognised. Young people in rural areas say that they want greater autonomy from the head of household, and would like more money to meet their own needs and lay the foundations for their own family unit within or outside the setting in which they were raised. They see the world differently from their elders, have different patterns of consumption and are more entrepreneurial than their elders. Many have successful production strategies that usually involve renting cultivable land where they can develop their own plans. Those without the means to rent tend to work at the other end of the agricultural value chain, mainly processing irrigated rice (in the Delta), transporting agricultural produce to large markets across the country (the Niayes), or selling produce.

In the final analysis, the data collected in the Delta show that young men want to get into agriculture. They see it as an important segment of the rural labour market that can provide them with a consistent income, but all those consulted said that they need developed land and longer-term, low-interest finance. Young men in villages where rice is produced are increasingly aware that this crop could give them what they want, but that they currently seek work elsewhere. Projects such as the Accelerated Agricultural Programme for Senegal (*Programme d'accélération de la cadence de l'agriculture sénégalaise* – PRACAS) should prioritise young people, who are a great asset for these agricultural areas.

3.2.5 Women's access to land: a sociocultural and functional problem

Women in Senegal face discriminatory access to resources due to a combination of sociological factors and legislation that has long been weighted in favour of men. Women constitute a highly resourceful economic force that contributes to family incomes and the growth of the community in many ways. They still provide most of the unpaid labour on family farms, in addition to being entrepreneurs, farm workers, manual labourers, supporting family businesses, being self-employed, or working for other people. A good deal of effort has been invested in supporting women in Senegal, yet they had to wait until 2001 to see equal access to land and property rights for men and women enshrined in the Constitution (Article 15), and are still waiting for concrete legislation to bring this law into force.

The National Land Law makes no distinction between men and women in terms of access to and control over land. Provided they meet the conditions set out in the texts (are resident community members and have the capacity to put the land to productive use), women can acquire land in the national domain (individually or in groups). They also have the right to inherit land, and to manage their inheritance if they are married.

However, there are many gaps in this law, which is why is it being revised. But the main obstacle to women's access to and (especially) control over land is the pre-eminence of customary land tenure regimes. Under customary systems the content and scope of women's land rights depend on their dual social identity as daughters and sisters in their family of origin, and as wives in their family by marriage.

Customary law limits women's capacity to access land, since land that is transferred through inheritance is "regarded as a common good that belongs to all family members and is overseen by a member of the lineage group (usually the oldest male) who acts as the land chief. In addition to this, women inherit half as much land as men under Islamic inheritance laws" (Enda Pronat, 2011: 37). Many producer organisations argue that society's reluctance to grant women more rights is based on a desire to safeguard the

family farm land unit, and numerous studies have shown that women's lack of access to land is linked with the expectation that most of them will marry, usually outside the family group, and the desire to avoid family landholdings being gradually eaten away by another family or even another village. All girls are expected to marry and join another family at some point in their lives, and they cannot take their land with them — legally or physically. From the family-in-law's point of view, the new bride is an outsider who could return to her original family if there is a problem with her husband or in-laws. A mother living in the village of Ndiagambal in the Delta told us that most land parcels in the Walo are held by men. She explained "land belongs to men, not to the women from this village, and certainly not to female incomers. Even when land is passed down through the family, it is shared out between the men."

This social view of women as less than 'full' members of any family unit means that women traditionally tend to only have use rights, even if they are allowed to inherit land. In addition to working on the family farm, which is managed by the head of household, women traditionally work on a small piece of land behind the home known as the toolu ker.21 However, this does not give them much financial autonomy. A woman whose husband is absent can only cultivate this land with his agreement or that of the family; and if she is widowed the family council will decide whether she can keep the land or has to leave it. Women have no control over these decisions, which depend upon their status in the family, whether they have children (especially sons), are remarried to another family member, the availability of land, and so on. A widow in the village of Ndiagambal in the Delta told us, "Women work just as hard as men, but we don't have access to land. If you see a woman's name in the union it's because a man is using it to get more land. And even if women are allocated a piece of land, they don't have any rights to it. When your husband dies your sons will inherit his land, you won't have any rights to it." Rural women are victims of an inequitable and highly patriarchal social structure that prevents them from accessing and controlling their means of production, and of customary land allocations that tend to perpetuate social inequalities, because the descendants of former landowners still control most of the land.

In the Delta, women and young people are under-represented in producers' unions. Most producer organisations have very few individual female members as women generally join as part of a group. They find it very hard to get appointed to responsible positions. They are also side-lined at the village level because women's groups are outnumbered by family units where men have more say.

This is not to say that all women are in the same economic position. Some do manage to acquire land, and some become major producers. Nor is it true that Senegalese women are always marginalised in land management; a number of more egalitarian societies, such as the Diola in southern Senegal, recognise land rights that pass from mother to

21 Wolof term for home fields close to dwellings in rural areas.

daughter, especially for rice fields (Faye, 2003). Some women who have access to land resources through heritage do sell land to invest in other activities, such as trade. This is particularly true of Fulani women in central Niayes, who prefer to sell cow's milk because it generates a decent income and is something that they feel more comfortable doing, as a skill they traditionally learn as girls. This tends to strengthen a general perception by men that women cannot put land to productive use, despite the fact that women produce a significant proportion of the food in sub-Saharan Africa.

Economic changes are creating new obstacles to women's access to land. Land has become an economic asset with an increasingly high market value due to the pressure on land and high demand for scarce productive land. Those with the most precarious land access are worst affected by this commodification of land resources. Some women in the Niayes complain that male relatives are selling off family holdings.

Land saturation also increases women's dependence on the head of the household (in her original or marital family) and reduces their opportunities to undertake independent income-generating activities. This problem is particularly acute in the highly fragmented market gardens of the Niayes and older developed areas of the Delta, especially in Diagambal, where women's land tenure is extremely precarious and no women have access to developed land. The men we spoke to about this said that it is a "functional problem", and that women's lack of access to land in certain areas is simply due to land saturation. One (male) member of the Diagambal producer's union told us that, "Even the heads of household find it hard to produce enough to meet their household's needs, which are constantly increasing". Women's civil society organisations (CSOs) and international non-governmental organisations have been lobbying hard to improve the situation and address this persistent problem of unequal access to land.

Current state projects such as the Programme to Promote Rice Partnerships in the Delta (3PRD) and the Senegal Agricultural Markets Development Project (PDMAS) aim to allocate more than 10 per cent of newly developed parcels in the Delta to women. But it is increasingly difficult for women to make much money from them as these parcels have shrunk to accommodate the growing number of producers. An official from a women's group in the village of Boundoum told us, "We only have a few sacks to share between ourselves after the seasonal loans have been repaid. That's just enough to get through the hungry season or deal with a pressing financial obligation."

3.3 Changes in land use

3.3.1 Productive use of the diéri and a return to rain-fed crops

People in rural areas are constantly devising new strategies to respond to cyclical and structural crises and the ongoing challenges presented by variable rainfall, increasing food needs, rising living costs and demographic pressure on resources. Repeated cycles of drought in past decades and accelerated climate change over the last ten years have led producers in both the Delta and the Niayes to progressively abandon their rainfed crops. Successive droughts and the high risk of losing their financial, material and human investments made reliance on rain-fed crops too uncertain, and intensive irrigated agriculture in wetland areas a much more promising prospect. Now producers in both areas (see Maps 2 and 3) face a number of problems associated with water management and land saturation, which is a particularly pressing problem as land parcels for rice growing and market gardening become increasingly cramped. This situation has prompted producers from both the Delta and the Niayes to return to former rainy-season plots in the *diéri* and on 'Dior' soils,²² although the key triggers for this shift vary according to the area concerned.

The Delta

The Walo is known as a good rice-growing area due to its fertile soils and the availability of water throughout the year. Almost all of it has been developed since SAED started the first works in Boundoum in 1966 and allocated each family a 0.6 hectare plot of developed land. Local farmers say that the whole of the Walo is now under productive use (*tak gui diexna*). Some villages have started cultivating land in the *diéri* in order to meet their urgent need for land (especially for women and young men), and to diversify agricultural production to meet their own domestic needs and those of other consumers.

In 2001, the producers' union in the village of Thilène completed an ambitious project to install a 4.5 kilometre channel to take water from the river in Gorom Lampsar to the *diéri*. This project enabled them to develop 300 hectares of land in the *diéri*, thanks to their organisational skills, a bank loan, money from members of the group, and various water management techniques. The village chief in Thilène recalled how "we set up economic interest groups and asked the rural community for land in the *diéri*. Under Decision No. 7, a good part of the village lands in the *diéri* were given to the Thilène village section, and each member was allocated 0.2 hectares after the irrigation canal was installed."

The president of the Thilène Producers' Union claims that this local initiative inspired the Project for Inclusive and Sustainable Agribusiness in Senegal (PDIDAS), which was launched in 2014. PDIDAS is funded by the World Bank through a loan agreement for US\$80 million and a US\$6 million grant agreement.

22 Light soils, mainly composed of sand (around 92 per cent) and iron oxide.

Thilène village irrigation channel to the diéri in the Delta

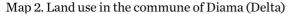


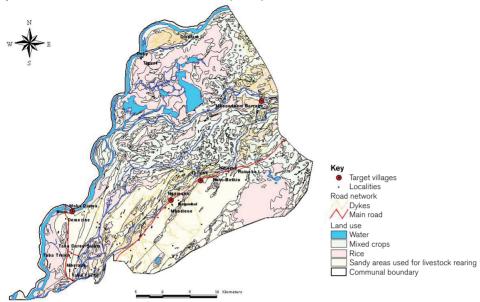
Photo by IPAR, 2015

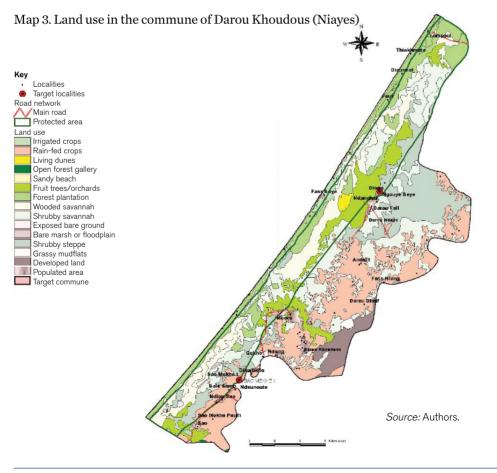
In the Niayes

Local producers in the Niayes are having to change the way they use their land because year-round intensive market gardening in fertile pockets of the dune slacks has led to over-exploitation of their cramped fields, and is also expensive.

The return to rain-fed crops on Dior soils coincided with good rains in 2005 and 2007, and the launch of the Great Agricultural Offensive for Food and Abundance (GOANA) by the former president of Senegal. In 2009, the president of the rural council of Darou Khoudoss assigned 1,000 hectares of land on Dior soils to non-residents as part of this programme, and according to our fieldwork interviews argued that, "they had the money to put this huge tract of unexploited land to productive use." Local people saw this as the start of land grabbing in the locality and felt that they were being dispossessed of their land in favour of wealthy city dwellers and religious dignitaries (borrom dolé). One producer from Diogo told us that even though farmers regard Dior soils as less valuable than land in the basin (which is used for market gardening), it is all useful because "farmers are as attached to the land as crazy people are to their rags" (doff du doyal Saggar, Baykat du doyal suuf). Producers in Darou Khoudoss also realised that once the land on Dior soils fell into the hands of these 'new farmers', it could be used for building projects or financial transactions that would be detrimental to local people's interests. In response, they mobilised collectively to defend their rights to these lands.







3.3.2 Introduction of new production techniques and crops

Producers in the Niayes have used water management systems to grow crops for several decades now. Rain-fed agriculture was the main source of local incomes and well-being for a long time, but agricultural activities changed during the droughts of the 1970s and horticulture (market gardens and tree crops) became the main mode of land use in the area. This shift was accompanied by changes in production techniques, especially in the use of water. Small, medium, and large market gardens use different systems, which fall into the three main categories described below.

Shallow hand-dug wells or sumps. In some parts of the Niayes the water table is shallow enough to be accessed directly without special equipment (it rarely exceeds three metres). Crops are irrigated manually with watering cans or buckets, which is very labour intensive, so this system is usually used on very small plots. Some producers have improved the system by using low- or medium-flow motor pumps and hoses to feed the storage basins, and a number of farmers in the Mboro area have invested in wider and deeper hand-dug wells (*céanes*) and pumps with high flow rates that allow them to use irrigation guns. This is the most common type of irrigation in the area. Some nine out of ten producers use watering cans or irrigation guns, which are much less labour intensive but waste a lot of water (Cissé *et al.*, 2001).

These technological developments were prompted by the increasing difficulty of accessing water, as the water table is gradually sinking and demand for water is rising. Producers received support from development projects such as the *Projet de promotion des petites et moyennes entreprises horticoles*, which promotes small and medium-sized horticultural enterprises, and the *Projet d'appui à l'entreprenariat paysan*, which supports rural entrepreneurs.

Traditional wells. In areas where the water table is deeper, usually on Dior soils, small producers use a bucket and rope to draw water from wells sunk 9 to 20 metres into the ground. The water is stored in basins and applied with watering cans. Like the *céane* system, traditional wells require little equipment but are often used on small plots, as storage and watering are time-consuming.

Modern production systems. These use boreholes and modern drip-fed or spray irrigation systems. These expensive systems are usually found on large holdings, and are sometimes connected to mains water supplied by the national water company, Senegalese Water. They are fairly rare in the Niayes, where most producers have small or medium-sized operations.

Recent developments. The appearance of mini-boreholes marks a new stage in producers' efforts to cope with the constantly sinking water table and the need for more cultivable land. A recent study showed that one in five farms has at least one mini-borehole, and that they are particularly concentrated in Thiès, where they cost around

400,000 CFA francs to install (DGPRE, 2012). In northern Niayes (the region of Louga and Saint-Louis), there are many modern wells, some of which were partly funded by the European Development Fund.

These changes in local irrigation systems have been accompanied by changes in production systems and increasingly specialised production according to soil types and growing techniques. Producers around Mbour in the Niayes, where there are many *céanes*, tend to concentrate on carrots, turnips and cabbage; while those on Dior soils, where wells are more common, tend to focus on onions and potatoes.

There is a close correlation between the type of irrigation system and the size of the production unit. Holdings of up to 0.5 hectares usually use shallow, hand-dug *céanes*, traditional wells and watering cans to irrigate their crops. Medium-sized farms of up to ten hectares usually have improved wells with motor pumps or mini-boreholes, and often use irrigation guns; while large operations with at least 20 to 30 hectares of land use boreholes and drip-fed or spray irrigation systems (Touré and Seck, 2005; Sakho, 2013 (unpublished)).

Setting aside the legal and customary rules that regulate access to land, it is clear that land access and use is highly dependent on the producer's ability to mobilise enough money to acquire an effective irrigation system. It is very hard to put the land to productive use without one. External labour (agricultural labourers) is easily available and sharecropping common, so the key issue for many producers is access to short- and medium-term credit.²³ The current shortcomings in the finance system are exacerbating the increasing differentiation between producers (to the detriment of small producers), and contributing to the concentration of land in the hands of economic actors who are able to mobilise enough money to use the land productively.

²³ Seasonal loans (short-term) and equipment loans (medium-term).

4

Drivers of change in land access and use

4.1 Large-scale land acquisitions

The growth of large agricultural and mining enterprises is reducing the amount of land available for family farming in the Niayes and the River Senegal delta. The phenomenon of large-scale land acquisitions has intensified over the last decade. Those acquiring land are rarely farmers, but actors who regard agriculture as a profitable sector for investment. A 2016 Land Matrix Senegal Country Profile reports a total of 270,908 ha as coming under contract to foreign investors for agriculture and forestry concessions, since 2000 (Land Matrix, 2016). This has been driven by international food, energy and financial crises, and by public policies promoting private sector investment in farmland.

State programmes such as the Return to Agriculture Plan of 2006 and the GOANA of 2008 encouraged private investors to apply for land for industrial agriculture or biofuel production projects. The state also introduced an investment code that offers investors numerous fiscal and customs advantages, enables them to benefit from the status of 'free export company', exonerates them from certain taxes, and allows them to export up to 80 per cent of their output. A number of other instruments, policies and programmes with similar incentives have been introduced by the government of Senegal to encourage wealthy investors to put their money into Senegalese agriculture. An inventory drawn up by IPAR in 2011 shows that national operators have been granted 249,353 hectares of land, and foreigners a total of 160,010 hectares for agriculture energy and tourism (Faye *et al.*, 2011). This renewed interest in agriculture has led to fierce competition over access to and control over land and resources.

Similarly, in the mining sector, the government formulated legislation to simplify the administrative procedures and secure mining investments in 2003, with tax and customs incentives for investors and provisions that were supposed to improve state and local government finances. This mining code succeeded in terms of attracting foreign investment, but with the result that benefits generally accrue to multinationals at the expense of local or national interests. The mining code was later revised by the government in response to civil society concerns about the security of the economic, social and environmental rights of local communities living and working in the vicinity of the mines.

The recent wave of land acquisitions in Senegal is limiting poor households' access to land. Some investors are using 'distress sales' to acquire land from local farmers, especially from Fulani producers in the village of Sao Mekhé II in the Niayes, and the Maure villages of Démézine and El Ngourane in the Delta.²⁴ And whilst fragmentation of family lands can be in part attributed to land division between family heirs, the increasing size of areas designated to agribusiness and the accelerating urbanisation rate seem to occur concomitantly with the fragmentation of family farms in the two zones under study.

In the Delta, land areas per capital are small. Landholders tend to rent their land instead of selling. Sharecropping schemes appear to be a compromise ensuring a certain level of 'land mobility' between individuals holding and seeking parcels. Private investors are acquiring long leases on vast parcels of land in the Delta, limiting local transactions on the parcels concerned but also modifying their usage. These businesses practice horticulture on zones previously used for pastoralism. When operational, PDIDAS will also introduce a completely new system of land allocation based on subleases that will change the dynamic between customary holders, town councils, and land seekers, and create favourable land access mechanisms for large-scale producers.

In the Niayes, mining and associated infrastructure is the dominant form of large-land acquisitions. Such developments have led to the forcible displacement of villagers, who now have to rent land parcels to pursue their agricultural activities or else migrate to the city. For example, a coal plant in Sao Mékhé II has incited owners to pre-emptively sell their land before the actual erection of the plant. Confronted with a lack of tenure security because their plots fall under the state domain, landowners prefer to part with parcels that the state can request at any time. Additionally, the recent construction of a toll highway has facilitated vehicle access and further stimulated the land market in the peri-urban zones of Bambilor and Sangalkam. In areas near Dakar, land is being sold by local land users for the construction of residential housing. Other cities such as Tivaouane and Mboro have also expanded.

²⁴ Although it is important to note that distress sales began in the Niayes in the 1980s and 1990s during periods of drought in the **absence** of irrigation infrastructure. Where populations did not have the technical means to extract water from a shrinking table water, many of them ceded their parcels for small sums.

In both zones, the agricultural space is almost completely saturated. Even the sandy lands of the Niayes and the Delta that were formerly left idle are now coveted by external investors who aspire to practice irrigated agriculture. These actors usually apply for land with the town council. As in Darou Khoudoss, governmental programmes that promote agribusiness often act as a means to allocating parcels to non-residents.

4.2 Drivers of change in the Niayes

4.2.1 Mining operations in the Niayes

The growth of industrial mining operations in the Niayes has encroached on land previously used for agriculture and/or livestock rearing. Several large companies are now operating in the area, including one that has been in the area since 1957. A study from 2004 showed that mining extraction works were already putting huge pressure on land, and that in spatial terms, villagers experience the life cycle of a mine as: 1) expulsion; 2) resettlement; 3) secondary dispossession; and 4) dealing with abandoned mines (Kesseler and Tine, 2004).

In addition to these major impacts, a range of issues associated with the establishment and running of mining operations can cause controversy and threaten a company's social licence to operate. For example, a 44,000 hectare joint venture mining investment in Diogo, which began operations in 2014, reportedly affected 11 village sections and seven Fulani hamlets and led to the loss of agricultural land and of certain livestock routes. The latter appears to have threatened pastoral activities and livelihoods, which were already struggling to share the space with market gardens. Controversy reportedly stems from some of the following perceptions:

- A lack of transparency over the start-up of the investment, and the rapidity with which the company moved in and set up its operations.
- The filling in of depressions in the Niayes and the loss of agricultural land (the affected area is contested).
- The displacement of over 100 family farms by a 20-metre wide road (total numbers are contested).
- The displacement of seven Fulani hamlets, with resettlement to far smaller plots than promised, and with residents forced to leave behind cultural burial sites and pastures.
 Affected persons reported "we've lost our cultural reference points, our ancestors and our freedom of movement as herders."
- Because of land loss and inadequate compensation, some women have shifted from market-gardening to growing rain-fed crops (on Dior soils). But poor yields require other strategies including renting parcels from other producers (providing the financial means are available) and borrowing from microfinance institutions.

UNDERSTANDING CHANGING LAND ACCESS AND USE BY THE RURAL POOR IN SENEGAL

- Young farm labourers that used to work for family farmers who lost their land are having to move away from the area, which represents a potentially huge loss to an area with such agricultural potential.
- Lack of consultation over compensation payments. The company paid compensation based on their assessments of land quality and WB safeguards. However decision making on disbursement was not transparent, and communities were reportedly left ill-informed of the rates. Some producers in the locality claim that security forces used intimidation and force to get unwilling individuals to give up their land, while others lost some of their compensation to intermediaries. Members of a land rights defenders' group were imprisoned for several days following protests relating to compensation.
- Some producers feel that the compensation system has not taken account of the
 full value of the land and their investment in it, and that the sums have been too
 small to allow them to invest in in other productive activities. Some have been able
 to rent cultivable land, but the lack of land resources in this area has made it almost
 impossible to buy land.
- Employment generation has not corresponded to the scale of land acquired for mining. The mining project currently employs just 86 people from the whole region, whereas 8 out of 10 people make their living from agriculture. Market gardening is sustained by a local water supply and is the main source of market garden produce consumed in urban centres such as Dakar.

Law No. 76-67 of 2 July 1976 states that "No-one shall be deprived of their ownership rights except in the legally declared public interest and subject to fair and prior compensation." However any legal protection for local land users remains weak when 'ownership rights' tend to be applied only to those holding formal land titles and leases. The public interest or added value for the local community in this case is highly contested. Some duties and royalties are paid to the government, but the level of employment provision is low, and the minerals are generally exported directly rather than providing the basis for further processing or value addition in the local economy. Furthermore, the company made commitments to rehabilitation of the site and to liberating lands for re-use by local people. But the chances of farmers being able to resume activities on the land remain uncertain. In the long term, the ecology of the area could be disrupted, making it unsuitable for horticultural activities. Affected communities generally survive with limited resources and no electricity or running water alongside a highly developed mining town equipped with modern amenities. The mines in this site appear to take up about 40 per cent of the concession, raising questions amongst the communities as to why such large amounts of land has been placed in the hands of a foreign company that is not putting it to productive use. Many of these issues can be seen across the mining sector.

4.2.2 Water: a determining factor in land use in central Niayes

Spatial and temporal analyses of the changes in access to land in the central Niayes show that water access has been a key determinant of land occupancy. Before the 20th century, this used to be an area of great biodiversity, scattered with fish-filled lakes and backwaters, abundant vegetation and lots of wildlife. Although the environment was not conducive to human settlement, there were a few hamlets occupied by palm wine producers and Fulani herders who came to pasture their livestock in the area (IFAN, 2003).

These herders settled along the coast, moving between grazing areas in the small interdunal depressions (*ndiouki*) beside the beach and the large basin (*khour*) or Niayes, and leaving again in the rainy season. According to the village chief in Sao Mékhé II, groups of nomadic Fulani started to become more sedentary in the early 20th century.

In about 1936-37, the colonial authorities decided to exploit the agricultural potential of the Niayes, and set up a fruit and horticultural production station near Mboro. The agricultural incentives offered to the inhabitants of Méouane, Tivaouane and Mékhé soon led to the establishment of the villages of Darou Khoudoss, Taiba Ndiaye and Mboro (Kesseler and Tine, 2004).

Migration to the Niayes intensified during the drought of the 1970s. Its rich ecosystems and high water table attracted many producers from the former peanut basin in the region of Louga and parts of Diourbel and Thiès. Further waves of migration to the Niayes were driven by the decades of drought coinciding with the progressive withdrawal of the state, as structural adjustment policies were put in place during the 1980s and 1990s. Left to fend for themselves, Senegalese producers had to find new survival strategies; this included moving to more promising areas such as the Niayes, where water was available throughout the year (Ndao, 2012). The new arrivals made a living from market gardens, which developed into commercial farms as intensive production of crops such as cabbage, carrots, potatoes and celery took off in the mid-1990s. Before the drought, "the main activities were fishing, farming, hunting, rearing livestock and wild harvesting. But nowadays the vegetation in Diogo is suffering from the effects of climate change and demographic growth" (Diogo village chief).

The Sahelian countries faced successive droughts from the 1970s to the 1990s. These extremely dry decades caused a marked decline in underground and surface water resources as floodplains shrank, water tables fell and water became salinated (Kesseler and Tine, 2004). Although the rains returned in the 2000s and were unusually high in 2005, 2009 and 2010 (Sarr, 2011), they did not mitigate the effects of the earlier droughts. These environmental changes had negative repercussions on local ecosystems, resulting in a considerable diminution of the wetlands and even their disappearance in some areas. The water table in Mboro did not rise after the rains 'recovered' in the late

1990s, due to the repeated lack of rainfall in previous years (Aguiar, 2009). There is also a risk that more cultivable land will be lost to rising sea levels as "the increased ingress of salt water in coastal areas is aggravating problems with soil salinity" (République du Sénégal, 2009: 34). Now this ecological crisis is being compounded by the effects of human activities, with the increasingly intensive exploitation of natural resources for market gardens and mines and unregulated human settlements around the basins. Although the market gardens on the slopes of the basins require very little water as the floods recede, people are constantly looking for new ways to extract water because the water table has sunk as a result of repeated droughts (see Section 3.3.2).

4.2.3 Irreversible urbanisation in rural areas: southern Niayes

One of the most striking changes over the last decade has been the rapid urbanisation and demographic growth in the hinterland of the Dakar agglomeration. In the southern Niayes, agricultural land is disappearing under new urban housing developments and public infrastructure. Dakar is the most urbanised region of Senegal (96.4 per cent), home to 49.6 per cent of the country's urban population and growing at an annual rate of 3.7 per cent (ANSD, 2014: 252).²⁵ This galloping urbanisation is one of the consequences of the centralisation of economic, administrative and political activities in Dakar from the colonial period until the present day, making it the main target for people leaving rural areas.

This high population density creates a huge demand for housing and places enormous pressure on the region's remaining land reserves (in southern Niayes) where the 'overflow' from Dakar is now heading. The village chief in Bambilor told us, "Housing is expensive in Dakar. It takes less than half an hour to get from here to Dakar on the motorway, so there's not much difference between living there and living here now — except that you pay 10,000 CFA francs for a room here and 20,000 to 30,000 CFA francs in Dakar." Spiralling housing costs in the capital have prompted city dwellers to seek lodgings in southern Niayes, attracted by the lower rents and more accessible housing plots.

Peri-urban development in southern Niayes started slowly in the 1990s and 2000s as city dwellers bought land for orchards and 'weekend farms'. This phenomenon has its roots in the cycles of drought that forced farmers to sell land as it became increasingly difficult to obtain water. Some plots required sophisticated water extraction systems that made it very expensive to use the land productively, opening the way for high-ranking religious and political dignitaries to acquire it for poultry farms or orchards (with support from the state). Some purchasers built second homes on their new holdings, while farmers put the

^{25 &}quot;In Senegal, the definition of urbanisation relates to communal-level urbanisation: urban areas are made up of all the localities that have been turned into communes, regardless of how many inhabitants they have" (ANSD, 2007: 223). This means that the high rates of urbanisation could also be due to the transformation of numerous rural communities into communes in 2008 (ANSD, 2014: 219).

money they made from selling their land into modern housing, further contributing to the process of urbanisation.

In 2003 the rural community of Sangalkam launched a huge village extension programme that transformed this hitherto rural area into an urban setting (Sarr, 2011). The rural council decided to undertake a major housing development programme in order to honour its election promises to improve the overcrowded living conditions in the locality. Around 125 hectares of land was subdivided and sold off as housing plots for the villages of Kounoune, Bambylor, Niakourab and Ndiakhirat (Sarr, 2011), and these operations were followed by a number of private and public initiatives. According to the urban planning department in Rufisque, nearly 764 hectares of land was formally developed in the rural community of Sangalkam between 2003 and 2009. Major building projects in Plan Jaxaay and the Lac Rose-Déni Biram Ndao sector during this period included the urban development zone of Kounoune and Tivaoune Peulh (91 hectares), the United Nations housing project (100 hectares), the Hôtel OCI (80 hectares) and the Peace Village (100 hectares). The Peace Village was a state project initiated in 2006 to provide 20,000 dwellings for victims of the previous year's floods, with 3,000 of the new homes planned in the rural community of Sangalkam (Sarr, 2011). Surveys for our study conducted in southern Niayes show that this initiative was followed by a large number of projects in the Bambilor area led by housing co-operatives such as employees from BICIS Bank (12 hectares), those from the Deposit and Consignment Fund (154 hectares), the Office of Social Security, and private property developers such as Télium (88 hectares).

These building programmes resulted in a rapid population shift from the overcrowded suburbs of Dakar to the former rural community of Sangalkam²⁶ (Sarr, 2011) and contributed to the conversion of fertile land suitable for market gardens and orchards into modern housing developments. Livestock corridors, pools and pastures were obliterated and rural areas and agricultural activities progressively gave way to modern townscapes. The process is now irreversible, and the state urban development master plan for Dakar envisages that the entire area will be urbanised by 2025 (Diop, 2009). In 2014 Prime Minister Boun Abdallah Dione set out plans for a major housing and infrastructure development programme in Bambilor for the future urban hub of Diamniadio, including 16,000 new homes between 2014 and 2017. This will include social housing large hotel complexes, modern trading platforms, sports and leisure centres and various services.²⁷ This policy, which reportedly required some forcible evictions, confirms the irreversible process of urbanisation in this locality.

²⁶ The population rose from 42,071 to 51,972 inhabitants, increasing by nearly 10,000 in eight years.
27 General policy speech delivered to the Senegalese National Assembly by Prime Minister Mohammed Boun Abdallah Dionne on 11 November 2014.

4.3 Drivers of change in the Delta

As discussed above, land in this part of northern Senegal is already saturated, especially in the Walo. Changes in land access and use in this region can be ascribed to two main factors: private foreign investments; and national policies to intensify agricultural production through major new state- and donor-funded developments.

4.3.1 Large-scale private agricultural investments

National policies to encourage private investment have had a considerable impact in the River Senegal valley, which is an area with huge agricultural potential. The Diama dam, for example, has opened up a lot of land to irrigated agriculture, and a number of large private investors have set up operations in the Delta. One such company arrived in the region in 2006 and was granted the status of a free export company. It exports most of the vegetables it produces to Europe (mainly England) and enjoys a number of tax breaks, including a ten-year exemption from VAT and customs duties. The company acquired 1,563 hectares of land between 2006 and 2012 in different places. It employs around 1,500 daily labourers during the growing season, but does not work in partnership with the local producers whose land it has purchased, or with affected producers in the commune of Diama. The company's business model gives it exclusive control over the assets and resources on its land and the entire value chain (decisions, production, processing and marketing). The company does not buy or rent land from local people. All of its land acquisitions are negotiated directly with the local municipal council.²⁸ The company director claimed that it has only acquired land, on Dior soils, that is not used by local people. Testimonies from local actors suggest these transactions only involved the mayor (supported by the village chiefs), which to them amounts to a lack of consultation, consent and transparency associated with the transactions.

In recent years the rain-fed crops that used to be grown in the commune of Diama have largely given way to grazing. Many villagers in this area stopped farming intensively due to declining rainfall, drier soils and their lack of finance, technical capacity and training on water management. Women are now responsible for most cultivation in the area, especially during the rainy season. Although local people no longer use the land acquired by the company throughout the year, they feel that they are still its legitimate custodians as it lies within their territory, and believe that they have the right to be compensated for it. The company argues that they have no social responsibility towards local people as they were granted unconditional access to this land. However they do claim to undertake various social actions and provide periodic assistance for local people. According to local

28 Although no written agreements were seen during the research investigations.

communities, this amounts to managing certain social or medical expenses incurred by the chiefs of surrounding villages and their families. Local communities appear not to know how long the company will occupy the land, nor about the rental contract or agreement on social and environmental responsibility signed by the mayor. This was confirmed by the municipal secretary and a municipal councillor in Diama, who said that they were not aware of any contract of this kind between the town hall and the company. There has also been a major influx of agricultural labourers from other areas seeking work for any wage, presenting a threat to employment for local workers.

4.3.2 Major new state agricultural investment projects

The state has initiated several major projects in the Delta in recent years, most notably, as mentioned, the Programme to Promote Rice Partnerships in the Delta (3PRD), the Senegal Agricultural Markets Development Project (PDMAS), and the Project for Inclusive and Sustainable Development of Agribusiness in Senegal (PDIDAS). The programmes are aimed to boost investment in the agricultural sector. Informants from the villages covered by this study are concerned about the PDMAS and 3PRD projects in particular and the potential gains for foreign operators over local producers.

The specific objectives of PDMAS are to: increase horticultural exports by consolidating structural community investments in exports; make agricultural produce more competitive through a policy to promote quality and improve marketing conditions; increase producer incomes; and develop private irrigation schemes in order to sustain the long-term supply of agricultural products.

PDMAS aims to put 2,500 hectares of land to productive use by developing and rehabilitating structural and collective amenities (CIRAD, 2013). Private operators will be responsible for developing the terminals (tertiary channels in irrigation works) and will receive state support in mobilising the finance needed for this infrastructure. The programme was originally aimed at agribusiness, but after lengthy negotiations prompted by local resistance to this project design, it was decided that the land would be distributed as follows:

- 1,400 hectares of two-hectare plots for small producers (family farms), who will have the opportunity to set themselves up as Economic Interest Groups (*Groupements* d'intérêt économique – GIE).
- 600 hectares for small and medium-sized enterprises, in blocks of up to 20 hectares.
- 500 hectares for national and foreign agribusinesses (agro-industrial companies), in blocks of 20 to 100 hectares.

The (3PRD is co-funded by the French Development Agency, the European Union, the West African Development Bank and the Senegalese state. Its main objective is to contribute to economic growth and food security in Senegal by improving productivity and rice production in the Delta and consolidating a competitive rice value chain. The project will follow a similar public-private partnership procedure to that of PDMAS in order to develop and cultivate irrigated fields, and will help finance private growers who are allocated land parcels (ibid). Project activities are structured around two main components. Component 1, which will be implemented in the rural commune of Diama, will develop 2,500 hectares of land for private production; while Component 2 will provide institutional support to the different actors involved in the rice production chain across the River Senegal valley.

Analysis of these two initiatives suggests they are both more oriented towards large-scale private entrepreneurs than local producers. They appear to be designed in ways that provide entry points for wealthy operators into Senegalese agriculture over providing livelihood opportunities to local producers. While both projects eventually included small producers in the value chain, they have done little to help them gain access to land. Producers in Ndiagambal reported that the land allocations for PDMAS were very slow and costly for them,²⁹ and so whilst it has developed the land, most of it goes to outsiders. PDMAS controls a total of 5,085 hectares of land in and around the village, whose residents only have access to fields on 212 hectares that were developed for three villages in the 1980s. Very little has been done in the way of hydro-agricultural developments for rice-growing, and the lack of developed land is aggravated by the constant fragmentation of land as the community has grown. PDMAS has done little to improve land access for local populations and has further reduced the already scarce land available. It has also resulted in some changes in land use as beneficiaries will grow horticultural crops. No producers in Ndiagambal accessed land under the 3PRD project.

The 3PRD project could have been a great opportunity to put land in the village of Boundoum to productive use, but the developed parcels are too expensive for local producers and family farmers (as in PDMAS, land costs 700,000 CFA francs per hectare). This automatically favours wealthy private actors who can take their pick of the 5- to 25-hectare parcels. One interviewee reported that only 1 per cent of producers in Boundoum [fewer than 30 people] gained access to land developed by this project. Compensation reportedly never materialised. The result is that producers in this area still cultivate small plots in public irrigable lands that were developed in the 1980s. Some have found other ways of obtaining land in order to increase their holdings, produce more, and earn extra income, mainly by renting parcels. Overall, 3PRD has done very little to improve local people's access to land.

29 Land costs for PDMAS are reportedly 700,000 CFA francs per hectare.

Whilst some local community members with the most precarious land access (women and youth) have been able to access land through a 10 per cent quota for developed plots, the main beneficiaries of land developed by 3PRD and PDMAS in the villages of Boundoum and Ndiagambal have been wealthy private operators. Most local producers have had their hopes dashed and their access to land restricted to the cramped spaces developed in the 1980s and 1990s. A men's focus group in Ndiagambal told us, "Most of the developed parcels have gone to outsiders, to city dwellers, political dignitaries, etc.. Local people weren't involved in selecting the beneficiaries, raising questions about its legitimacy."

The analysis shows that 3PRD and PDMAS are aimed at large-scale operators, and rather than helping local producers they constitute a threat to the structure of family farming and pastoralism because they have accelerated the processes of land concentration.

5

The negative impacts of change on livestock-rearing activities

5.1 An important but unsupported activity

Livestock rearing is a key sector of the national economy. Its contribution to national GDP rose from 0.1 per cent in 2009 to 0.3 per cent in 2010, and the national herd is currently valued at around 500 billion CFA francs. But despite its important role in both national and household economies, this activity is extremely precarious due to the lack of public investment in the livestock sector (between 0.7 per cent and 1.1 per cent of the national budget).

Rural production systems in many parts of Senegal are based on a close association between livestock rearing and agricultural activities. The historic profile of the study areas show that most villages were founded by agro-pastoralists, and that larger herds led to the creation of a number of villages in both the Niayes and the Delta. The village chief of Boundoum in the Delta told us that his village "was founded in 1896 by an agro-pastoralist called Ndiawar Diop who originally came from the village of Ndiawar, but had to settle in Boundoum when he expanded his herd." In the Niayes, the villages of Diogo, Sao Mékhé II and Bambilor were founded by pastoral communities that subsequently switched to market gardening. Bambilor was the last village created in the Sangalkam area in 1924.

5.2 Changes, challenges, and continuity in livestock rearing

Rapid urbanisation over the last decade has eaten into agricultural and pastoral lands and led to agro-sylvo-pastoral spaces being used for other purposes, such as road and tourist infrastructures and private agricultural, industrial and mining operations. Herders have seen their ways of life and modes of production change, and had their mobility restricted.

Today sedentary herders in the Niayes have lost many of their livestock and switched to market gardening, which is not easily compatible with extensive livestock rearing. The village chief in Bambilor, reported that, "It's hard to raise livestock here. There are constant problems between herders and market gardeners. Last year there was very little grass because of the poor rains, and there were constant conflicts over animals causing damage in market gardens. Sometimes people come to me with cattle that gardeners have confiscated and ask me to keep them, but I haven't got anywhere to put them. People often go to the police to settle this kind of problem."

Livestock rearing seems to have become a secondary activity or occupation that is less valued than agriculture. People rear livestock as a periodic activity, fattening sheep and cattle to meet the increase in urban demand for sheep: One informant reported that "rearing livestock is a way of saving money, it allows me to earn a bit more during the hungry season and helps secure some of the money I make from growing rice."

In the Delta, pastoralists traditionally moved backwards and forwards between the Delta and the *diéri*, covering huge distances with their herds. Now their traditional routes on this natural circuit are obstructed by hydro-agricultural developments that cause numerous conflicts between herders and farmers. 'Land-use plans' were introduced in an attempt to resolve these disputes. Between 1998 and 2000, SAED provided support and training to enable actors to identify their priorities in resource allocation, and different rural interest groups were asked to create land-use plans by jointly developing and applying collective land management rules in order to avoid conflicts over land and resource use (Galpin and Koffi, 2011: 33; Touré *et al.*, 2013: 54). Yet the statistics from 2013 show that only 52 of the 385 rural communities in Senegal had a land-use plan (13.5 per cent). These communities were mainly concentrated in the River Senegal valley (48 in this area) (ibid: 55). Furthermore, because land-use plans secure land uses rather than land rights (Galpin and Koffi, 2011, 34), the state was able to declassify the Ndiael sylvo-pastoral reserve (which was covered by a land-use plan) to allocate to a private investor.

Support from certain projects has led to a resurgence of interest in livestock rearing. For example the Millennium Challenge Account (MCA) is helping local governments publicise and implement land use plans as part of a project to secure land in the Delta, and has erected signs marking out livestock corridors. However, the signs are often moved and

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local people feel that there hasn't been enough training on how to read them. This was confirmed by a land tenure expert working for MCA in the Delta: "People don't understand the importance of these signs. Information isn't getting down to the grassroots level in these four communes." In any case, the herders we spoke to do not think that signs are the answer to the problem, because "pastures in areas exclusively reserved for pastoral use and agro-pastoral areas prioritised for pastoral use are being encroached on by farmland, and access routes to the pastures are permanently blocked by farmers who put fences around their fields."

The major constraint to livestock rearing is its extensive nature. Public development policies do not regard this as a priority activity, and the conditions for accessing and withdrawing land from the national domain set out in the National Land Law bear little relation to extensive livestock rearing practices. The disconnect is such that one subprefect in the department of Linguère refused to approve a decision allocating land to herders on the grounds that rearing livestock was not a sufficiently productive use of this land. There has been some progress since then, as Article 14 of the agro-sylvo-pastoral framework law addressed this lack of recognition for livestock rearing in 2004, stating that "pastoralism is recognised as a productive use of rural land and natural resources. Pastoral activities should be undertaken in a manner that respects the environment and other agricultural, forestry and rural activities" (Law No. 2004-16 of June 4, 2004; Official Journal No. 3692, p. 905). Pastoralists' access to land in the study zones has also been affected by private agribusiness operations and new state agricultural investment projects. For example, PDMAS operations in the *diéri* present a serious threat to pastoral activities as they have reduced the available grazing and disrupted livestock routes.

Although the activity faces numerous constraints, pastoral and agro-pastoral livestock rearing still has the potential to be an important lever for economic and social development. In fact, the emergence of an increasingly solvent regional market of some 440 million consumers demanding ever more animal protein makes the development of this sector crucial for food security, sustainable economic growth and the development of pastoral and agro-pastoral areas.

In the meantime, the state and private companies are seeking to promote an intensive sedentary system of modern farms and milk production that would force herders to change their traditional use of land resources.

6 Civil society action

Civil society organisations (CSOs) in rural areas have long been concerned with defending and promoting family farming. In the early 1990s, CSOs in Senegal were structured around a producers' platform, the National Council for Consultation and Cooperation of Rural People (CNCR), whose political battles have always centred on land. CNCR built on its successful participation in the negotiations over the structural adjustment programme for agriculture and positioned itself as a key actor with the state and its partners. Its capacity to defend and promote family farming was further strengthened during the formulation of the Agricultural Services and Producer Organisations Support Programme between 1995 and 1999, which recognised the producers' movement and concerns, and by CNCR's participation in the programme.

The new political regime that came to power in 2000 invited non-state actors to contribute to the formulation of the Agricultural Framework Law (LOA). A group of independent experts supported CNCR in an iterative, participatory process to consult all its member federations on the state's draft bill. This grassroots consultation process led to the proposal that the chapter on land matters should be treated separately from the LOA, and sought consensus among stakeholders at every level.

Producer organisations were worried that the government would try to use the vote on the law to push the land reform through, so CNCR made a counter-proposal during the negotiations that the state accepted almost in its entirety. This proposal subsequently led to the Agro-Sylvo-Pastoral Framework Law, which was promulgated in 2004 and can be seen as a precursor to the land reform of 2006.

The GOANA initiative and other special programmes that were set up in response to the food crisis of 2008 also prompted CSOs to build strategic alliances to broaden the fight against land grabbing in Senegal. Among other things, they were concerned

that a presidential directive³⁰ requiring the president of each rural community (most of whom belonged to the ruling party) to set aside 1,000 hectares of land for the GOANA programme would prioritise land for wealthy foreigners and high-ranking politicians, impeding efforts to secure family farms.

In April 2011, civil society groups set up the Framework for Reflection and Action on Land Matters in Senegal (*Cadre de réflexion et d'action sur le foncier au Sénégal* – CRAFS). The purpose of this platform was to enable civil society and producer organisations to pool their efforts, strengthen the synergies in their analytical and lobbying activities to halt land grabbing, move towards an inclusive land reform that provides greater security for family farmers, and encourage responsible land governance that reflects the principles of the UN Voluntary Guidelines (FAO, 2012).

The political will that led to the creation of a national land law reform commission in 2012, and the existence of an organised civil society that has been able to build on previous (unfinished) processes are positive factors that should contribute to a successful negotiated land reform in Senegal.

The composition of the new land reform commission, the National Commission for Land Reform (CNRF), which includes key CSOs such as CNCR and the Association of Senegalese Lawyers, opens up new prospects for the future. The CNRF has adopted an inclusive, participatory approach, organised regional development committees across the country, and started planned consultations in 45 departments of Senegal. In order to prepare local communities for CNRF's departmental consultations, civil society groups used CRAFS as a platform to organise a national tour on the land reform in May 2015. This has the objectives of informing member organisations, raising awareness about the issues associated with the land reform among all local civil society actors, updating them on the progress of the process, mobilising local actors and improving participation in the consultations on the land reform. The tour created space for critical debate and helped consolidate CSO proposals for the new reform.

30 Issued by the president of the time, Abdoulaye Wade.

Conclusions and recommendations

This research was undertaken to improve understanding of the social, economic and political issues associated with access to and use of land in Senegal. The research findings reveal the complex nature of land issues in the study zones and nationwide.

The amount of agricultural land in Senegal has increased slightly (Tappan *et al.*, 2004), while family farm holdings have diminished (IPAR, 2012). There has been renewed interest in agriculture (and new types of produce) in order to meet urban and international demand for agricultural products, meanwhile small-scale producers face difficulties as result of land saturation and fragmentation. Various drivers are behind these changes, most notably demographic growth, climate change (variable rainfall), LSLAs, state agricultural projects, and increasingly dynamic local land markets.

Public policies and large donor-supported state agricultural investment projects have so far tended to favour large-scale operators at the expense of small producers. In addition, the state's objectives of self-sufficiency in rice, mono-cropping and specialisation contrast sharply with those of family farmers, who tend to opt for diversification in order to increase their profitability and manage the risks they face during the hungry season.

Land users in the Delta face a number of specific changes in both land access and land use. Modes of access are becoming more polarised as lands under old developments become increasingly fragmented and land concentration is accelerated by private foreign investments and national policies promoting big new state- and donor-funded developments to intensify agricultural production. Rather than supporting local producers, these large-scale development programmes tend to provide land and market access

opportunities for new wealthy entrepreneurs, create further pressures on family farming, and contribute to greater social differentiation.

The renewed interest in agriculture has increased monetised land transactions in both the Niayes and the Delta. In the Niayes, producers have been left to themselves to deal with a lucrative land market (a source of conflict and unlawful monetised land practices) and poor land governance. Local people in both areas fear that they will become 'landless farmers' as access to land is increasingly controlled by the rich and powerful (borrom doolé).

The groups that find it hardest to access land are women, young men and herders. Rural women find this particularly hard, partly because of sociocultural factors that deny them control over land resources, but also because the land legislation that does support them is not enforced. This is a critical issue that needs to be addressed with some urgency.

Despite their numerical dominance, young men are struggling to secure access to land adequate for productive agricultural work. They are caught between the traditional decision-making authorities and the lack of productive resources, as well as economic factors such as limited access to credit. Numerous studies have shown that the agricultural sector has huge potential to create productive jobs for the large number of young men in rural areas – provided they have the opportunity, technical and financial means, training, market information and above all, the land they need to get into production. There are some laudable public policies that should be extended and generalised, such as setting up farms specifically for young men in order to settle them in their home territory and contribute to more equitable socioeconomic development.

Herders are another disenfranchised group, not only because they are not allocated land to rear their livestock, but also because the livestock routes shown on local land-use plans are blocked by works to extend access routes into northern Senegal. Although these plans do identify existing livestock routes and provide for the opening and maintenance of new ones, they are increasingly encroached on by agricultural activities, as local producers and councillors want to extend farming activities rather than support pastoral developments (livestock corridors).

In response to land grabs and endogenous and external pressures on their land, a number of 'anti-land grabbing' movements have sprung up across the country in recent years (such as in Fanaye, Mbane, Diogo). Local people in Mboro and Darou Khoudoss in the Niayes are fiercely opposed to the land allocations for GOANA; and in Diogo there have been confrontations between local people and security forces during demonstrations over a particular land deal. While some dismiss this as 'temporary disagreements' or caused by 'troublemakers', a social licence to operate is a pre-requisite for any new mining, agricultural or development project.

Some communities have found innovative and effective ways of dealing with local land saturation. For example, a highly organised village group in Thilène in the Delta realised that water management is a key factor in boosting agricultural production, and generated their own funds to install a system to irrigate the village *diéri* with water from one of the tributaries of the Walo. This has enabled men, women and young people to grow agricultural produce throughout the year, and is an example of good practice that should be replicated in order to reduce pressure on land in areas where soils are leached and fields have shrunk due to land fragmentation. The state and producer organisations should support such practices in order to help secure family farms, which are having to compete with big investors with the resources to acquire and develop huge tracts of land.

Establishing a complete picture of risks, opportunities and recommendations for policy at the national level in the absence of reliable and precise national data on land uses and changes remains a challenge. As discussed above, the Niayes and the Delta regions exhibit specific characteristics that make it difficult to generalise their experience to the entire territory. These two areas are distinct in terms of land uses, presence of infrastructures, and levels of attractiveness to outsiders. However certain remote zones are also beginning to attract interest from private actors and donor-financed initiatives. For example, the administrative regions of Tambacounda and Kédougou located in eastern Senegal are receiving greater attention from investors, both in the agricultural and mining sectors. With the improvement of roads that facilitate transport to these remote areas, it is possible to expect heightened pressure on land even in these previously isolated regions and where customary tenure remains the dominant mode of land access.

There is an urgent need to find sustainable solutions that will help small producers and vulnerable groups access and secure their lands and improve livelihood opportunities. Drawing on the issues uncovered in this research some key recommendations for decision makers and researchers are presented below:

- Future research must build on this effort to explore drivers of change in particular agro-ecological contexts and implications for the most vulnerable groups. Following on from this, laws should be rethought into framework laws that can take account of the different agro-ecological qualities of different parts of the country.
- In-depth analysis is needed of the roles and responsibilities of elected officials, other land governance actors and the General Directorate of Taxes and Land Matters in land transactions and other aspects of land governance.
- More action in needed by all relevant stakeholders to ensure that private investors, particularly in the mining sector, comply with the law; this includes compliance with Environmental Impact Assessment requirements, to ensure local land rights are protected, including reserves for future generations.

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- More attention needs to be paid to the threat to the environmental equilibrium of the Niayes (particularly the green belt of casuarina trees) posed by mining operations and urbanisation.
- Greater emphasis should be placed on initiatives that promote and support family farming.
- Initiatives that promote private sector access and partnerships need to emphasise inclusive and responsible business practices.
- A land reform agenda must carefully and sensitively consider the interests and priorities of different groups, focusing on the protection of and opportunities for the most vulnerable. These could include considering limitations to foreign land leases or promoting traditional land management practices.

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Research Report

Law, Land acquisitions and rights

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Senegal currently has a complex and poorly regulated system of land governance, which — combined with an urbanisation trend and increasing outsider interest — is leading to land privatisation and a consequent reduction in the availability of cultivable land for small producers. Young farmers in particular are struggling to gain sufficient access to land to maintain viable enterprises. This research report draws on field research to understand the drivers and impacts of trends in land use and ownership in rural Senegal, and suggests that government-backed land reform offers the best immediate chance of addressing the power imbalances that threaten rural livelihoods.

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