



Socio-economic impact of commercial exploitation
of Rwandan marshes: A case study of sugar cane
production in rural Kigali



Our Mission

A global alliance of civil society and intergovernmental organisations working together to promote secure and equitable access to and control over land for poor women and men through advocacy, dialogue, knowledge sharing and capacity building.

Our Vision

Secure and equitable access to and control over land reduces poverty and contributes to identity, dignity and inclusion.



CIRAD works with the whole range of developing countries to generate and pass on new knowledge, support agricultural development and fuel the debate on the main global issues concerning agriculture.

CIRAD is a targeted research organization, and bases its operations on development needs, from field to laboratory and from a local to a global scale.



RCN Justice & Démocratie (<http://www.rcn-ong.be>) is a Belgian NGO that was created in reaction to the Rwandan genocide (1994). Initially RCN contributed to the reconstruction of the judicial system, so that the rule of law could be reestablished and genocide cases could be processed. As Rwanda gradually moves out of transition, RCN's attention has shifted to preventing a return to violence. Land played an important part in the Rwandan conflict. RCN therefore currently concentrates on land management, land dispute resolution at community level, women's land rights, and creating spaces for dialogue on these matters. RCN's branches in Burundi and Congo (DRC) adopt similar approaches. Muriel Veldman is Research Project Manager, in Rwanda (rp@rcn.rw). Marco Lankhorst is Head of Mission in Rwanda.

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Foreword

The International Land Coalition (ILC) was established by civil society and multilateral organisations who were convinced that secure access to land and natural resources is central to the ability of women and men to get out of, and stay out of, hunger and poverty.

In 2008, at the same time as the food price crisis pushed the number of hungry over the one billion mark, members of ILC launched a global research project to better understand the implications of the growing wave of international large-scale investments in land. Small-scale producers have always faced competition for the land on which their livelihoods depend. It is evident, however, that changes in demand for food, energy and natural resources, alongside liberalisation of trade regimes, are making the competition for land increasingly global and increasingly unequal.

Starting with a scoping study by ILC member Agter, the Commercial Pressures on Land research project has brought together more than 30 partners, ranging from NGOs in affected regions whose perspectives and voices are closest to most affected land users, to international research institutes whose contribution provides a global analysis on selected key themes. The study process enabled organisations with little previous experience in undertaking such research projects, but with much to contribute, to participate in the global study and have their voices heard. Support to the planning and writing of each study was provided by ILC member CIRAD.

ILC believes that in an era of increasingly globalised land use and governance, it is more important than ever that the voices and interests of all stakeholders – and in particular local land users - are represented in the search for solutions to achieve equitable and secure access to land.

This report is one of the 28 being published as a part of the global study. The full list of studies, and information on other initiatives by ILC relating to Commercial Pressures on Land, is available for download on the International Land Coalition website at www.landcoalition.org/cplstudies.

I extend my thanks to all organisations that have been a part of this unique research project. We will continue to work for opportunities for these studies, and the diverse perspectives they represent, to contribute to informed decision-making. The implications of choices on how land and natural resources should be used, and for whom, are stark. In an increasingly resource-constrained and polarised world, choices made today on land tenure and ownership will shape the economies, societies and opportunities of tomorrow's generations, and thus need to be carefully considered.

Madiodio Niasse

Director, International Land Coalition Secretariat

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Acronyms and abbreviations

COMESA	Community for Eastern and Southern Africa
EAC	East African Community
KSW	Kabuye Sugar Works
NLC	National Land Centre (Rwanda)
REMA	Rwanda Environment Management Authority
SADC	Southern African Development Community

Summary

Much of Rwanda's marshland has traditionally been farmed by local subsistence farmers. In 2005 the Government, aiming to encourage more intensive forms of agriculture to supply new markets, passed a new land law which brought all marshes and river valleys under State control. This forms part of a new legal framework that provides incentives for investors to exploit such land commercially.

In 1997 the State leased 3,100 hectares of land in the Nyacyonga and Nyabarongo marshes outside the capital Kigali to a Ugandan-based enterprise, the Madhvani Group, which also acquired control over the country's sole sugar mill. Madhvani produces between 12,000 and 15,000 tonnes of sugar per annum, accounting for 30–40% of national demand. The enterprise grows sugar cane itself and also buys cane from outgrowers. Including mill staff, outgrowers, and labourers, it is estimated that over 10,000 people are involved in the production chain.

Most of the local people who had previously exploited the marshland experienced its takeover by the company as a dispossession. Previously, the State had not asserted its ownership rights, and many people considered that they had accumulated rights through their presence and work on the land. Use of the marshes was free, with no taxes, fees, or rents paid to local authorities. Land was sold or leased, inherited, and transferred between families.

The transfer of the marshlands to the company came as a surprise to many. At the beginning there was resistance, but this was quelled with the intervention of the local authorities. Eventually many local people felt that they had no option but to cooperate, though some left the region in search of land.

Around 1,100 farmers remain as outgrowers; most cultivate less than one hectare each. As a group, they have fared better than other community members, but they are strongly dependent on Madhvani. Few have contracts, Madhvani is the only buyer, and the prices it pays are non-negotiable. The company determines when the cane is ripe, and outgrowers are not allowed to see the harvest being weighed. Some have complained that Madhvani has refused to help them obtain bank loans.

Many local people, especially women, have become labourers, working either for Madhvani or for the outgrowers. The work is hard, and wages are low compared with other forms of employment. Working for outgrowers provides better pay and conditions, though wages are still considered insufficient to support a household. During the cutting season the pay is better, but this attracts rival workers from outside the area. Much labour is performed by minors.

All of those working as labourers all year round consider themselves to be worse off than before the takeover. Some say that the variety of their diet has significantly decreased. Cultivation on the surrounding hillsides has also been affected, with land now used more intensively.

The thinking at the time of the transfer was that communities would benefit because they would be paid for working as labourers, rather than having to continue with subsistence farming. Thirteen years later, the results are disappointing. A small portion of the local population has benefited, but the majority feel impoverished. The study indicates that if a local population is largely dependent on an incoming investor for securing their livelihoods, but they have few enforceable rights to bargain with, the chances that they will benefit from the investment are reduced.

Recommendations to safeguard local communities in future include making a socio-economic impact assessment a requirement of allocating such leases, and regulating negotiations between communities and investors. The results of the negotiations should be incorporated into the investment agreement reached with the Government.

Specific measures could include a minimum wage for labourers, a prohibition on employing minors, and an obligation to help outgrowers obtain credit for investments. More generally, it is advisable to involve local community members as active agents in commercial exploitation, rather than to reduce them to the status of passive labourers.

1 Introduction

This report presents a case study of the socio-economic impact of commercial sugar farming in marshlands located around Kigali, the capital of Rwanda. Rwanda is often referred to as “the country of a thousand hills”. At the bottom of the river valleys in between the many hills and mountains are some 860 marshes of varying sizes, which together cover about 10.6% of the country’s land area.¹ Traditionally, a considerable portion of these marshes and river valleys was farmed by local subsistence farmers, and in many areas these wetter terrains were in use all year round. Cultivation in the marshlands was particularly important for the population during the dry season, when parcels of land on the hillsides become less productive.

In 2005 a new land law was adopted which specifically states that all marshes and river valleys belong to the Rwandan people and are owned and managed for them by the State.² Thus, the groundwork was laid for a legal framework that provides strong incentives for investors to obtain land in the marshes for commercial exploitation. This must be understood in the context of the national poverty reduction strategy. By leasing these lands out to commercial enterprises, the Government wants to stimulate the use of more intensive forms of agriculture or livestock farming that can supply national or international markets.

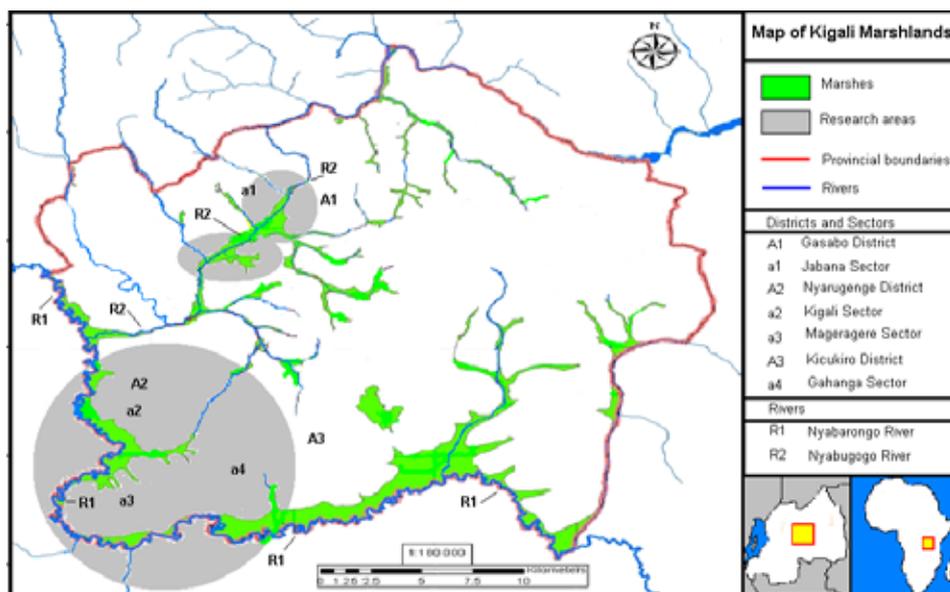
¹ Figures are based on internal documents provided by the Ministry of Environment and Land.

² As explained in Section 6, even before 2005 marshes and river valleys formally belonged to the State. In practice, however, this rule had very little meaning. The local population used these lands without significant interference from the Government. What changed with the 2005 law was that the Government started to assert its rights on a large scale and in a more consistent manner.

Key questions

This case study looks at the effects of this policy on the local population. In particular, it focuses on the effects of commercial sugar cane plantations in the Nyacyonga and Nyabarongo marshes just outside Kigali (see map). The State has given the bulk of these marshes in lease to a Ugandan-based enterprise, the Madhvani Group. As part of the same deal, Madhvani acquired control over the sole sugar mill in Rwanda, which had previously been state-owned. This study addresses the question of the extent to which the transfer of this land to a commercial farming enterprise has affected the people living in neighbouring villages, primarily in terms of their livelihood strategies.

The investment in the Nyacyonga and Nyabarongo marshes by the Madhvani Group is interesting to examine for two reasons. Firstly, the lease of the marshes to the Madhvani Group was signed in 1997. It therefore provides an early example of what was later (in 2005) to become official policy. This means that this case may provide a glimpse of the longer-term effects of this policy for communities living in or near commercially attractive marshes. Secondly, the cultivation by the Madhvani Group in the marshes around Kigali is interesting because of its scale. It represents one of the larger investments in Rwanda's agro-economy, with many thousands of people affected.



Research approach

The case study was conducted during the months of March and April 2010. It involved interviews with key informants at the level of central government and local government and with the management of the Madhvani Group. These interviews were conducted either in English or French. The authors also spoke to 13 persons involved in independent commercial exploitation of the marshlands in the same area. Some of these sell sugar cane to Madhvani, while others cultivate different crops. Most importantly, 68 members of the local population were interviewed (29 of whom were women). Mostly this was done by means of individual semi-structured interviews, but occasionally focus group sessions were held. These interviews and focus group sessions were conducted with the help of a translator, who was also involved in the design of the study and the interview format. More is said about the methodology in Section 6 of this report.

Organization of the report

The case study is divided into six sections. It starts by providing some background information on the land situation in Rwanda (Section 2), and then gives an overview of the country's most important land laws and policies (Section 3). It discusses sugar production, trade, and markets, first from global, regional, and national perspectives (Section 4) and then from a local perspective (Section 5); this includes a detailed description of the investment process. It concludes with an assessment of the socio-economic impact of the way in which the marshlands are being brought into production (Section 6) and with a set of recommendations (Section 7).

2 Background on land use and socio-economic trends in Rwanda

Rwanda is a small landlocked country in central Africa.³ It is one of the poorest countries of the world, ranking 167th out of 182 countries on the UNDP's Human Development Index (UNDP 2010). It is also one of the most densely populated countries in the world (NISR 2009).⁴ In contrast with other densely populated countries such as Holland or Japan, over 80% of the population live in rural areas (Ibid.). As a consequence, much rural land is divided into very small plots. On average, families have access to a collection of plots measuring about 0.76 hectare in total, which they use essentially for subsistence farming (NISR 2008). Continued population growth is putting further pressure on land, even though the population is growing faster in the cities than in the countryside.⁵ Rwanda's economy has developed at a steady pace over the past five years, with an average annual GDP growth of over 5%.⁶ Much of this growth in income is concentrated in the capital, Kigali. This growth in urban incomes and in population is considered to be one of the main factors contributing to the emergence of commercial farming, which is also actively encouraged by the State. At present, however, apart from high-value crops such as tea and coffee, which are exported in substantial quantities, overall surpluses of basic commodities remain relatively small and the cities are partly dependent on food imports from neighbouring countries. This applies to refined sugar for household consumption, which is the commodity at the centre of this investigation.⁷

In line with global trends, Rwanda has adopted a comprehensive poverty reduction strategy. The key documents expressing this strategy are the Economic Development and Poverty Reduction Strategy⁸ (which sets medium-term objectives) and the Govern-

³ It has a surface area of 26,338 sq km (this is 0.86 times the size of Belgium and 0.04 times the size of France). See Bart (1993, 1).

⁴ The National Institute of Statistics Rwanda (NISR) estimates that in 2009 the country had 10,117,029 inhabitants, giving it a population density of 384 inhabitants per sq km.

⁵ According to the NISR (source: Indicateurs de Développement du Rwanda 2005, NISR CD-ROM made available to RCN by the NISR in 2008), between 1991 and 2002 the population grew at an annual rate of 2.1% (note that this period includes 1994, which saw the genocide against the Tutsi). The NISR National Population Projection 2007–2022 (published in July 2009, at: <http://www.statistics.gov.rw>) estimates that in 2022 Rwanda will have a population of 14,591,018. By then, around 2 million people will live in the capital Kigali.

⁶ In 2009 the growth rate stood at 6% (source: <http://www.statistics.gov.rw>).

⁷ Data made available to RCN by the Rwandan Customs Commission show that in 2008 more than 24,000 tonnes of sugar were imported, and in 2009 more than 30,000 tonnes.

⁸ See: <http://www.minecofin.gov.rw/squelettes-dist/edprs.html>.

ment's so-called Vision 2020⁹ (which sets long-term objectives). Unsurprisingly, land distribution and use receive considerable attention in these documents; as part of the overall strategy, a new land law¹⁰ and land policy¹¹ were adopted in 2005. These documents call for a thorough transformation of land use and land governance in Rwanda. The Government's long-term aim is to switch to high-yielding forms of agricultural production, to reduce pressures on land, and to allow for land consolidation by stimulating urbanization and by creating off-farm job opportunities in the service sector and in industry.

The land reforms provide for the following interventions in land access and management: (1) a nationwide land registration project (2008–2013) aimed at clarifying boundaries and ownership and hence at reducing the level of land disputes;¹² (2) a land consolidation project that will see smaller plots merged into larger plots;¹³ and (3) a coordinated land use project providing for decentralized authorities to determine the crops that independent farmers may grow in certain areas.¹⁴ In addition, ownership of river valleys and forests is vested exclusively in the State.¹⁵ These lands are to be divided into large units and leased out to commercial farmers and cooperatives; it is particularly in the river valleys that agricultural intensification is intended to take place. This should allow the increasing demand for food to be met by domestic production and, at the same time, will provide a source of income for the population. This is of particular importance in urban and peri-urban areas of Kigali where, due to rapid urbanization, more people are living in poverty.¹⁶ Section 3 takes a closer look at the legal and policy framework that regulates the use of river valleys.

⁹ See; <http://www.minecofin.gov.rw/docs/LatestNews/Vision-2020.pdf>.

¹⁰ Organic Law No. 08/2005 of 14 July 2005. All Rwandan laws can be consulted on the website of the Ministry of Justice, at: http://www.amategeko.net/index.php?Parent_ID=3&Langue_ID=An.

¹¹ See; <http://www.minela.gov.rw/spip.php?rubrique228>.

¹² Article 30 of the Land Law.

¹³ Article 20 of the Land Law.

¹⁴ This is part of the Land Policy and Agricultural Policy (see: <http://www.minela.gov.rw/spip.php?rubrique228>).

¹⁵ Article 3 of the Land Law.

¹⁶ Based on a report issued by the city of Kigali in June 2009: 'Stratégie d'appui à l'agriculture urbaine et peri-urbaine de la ville de Kigali'. The report is not available online.

3 Legal and policy framework governing the use of marshlands

Rwanda is creating comprehensive new legislation regarding marshlands. The core of the relevant legislation consists of three laws passed in 2005: the Organic Land Law, the Organic Environment Law,¹⁷ and a law relating to investment and export promotion and facilitation.¹⁸ A bill determining the use and management of marshlands is in preparation, as are several pieces of secondary legislation, including a ministerial order on review and approval procedures for marshland management agreements and a list of marshes, indicating their boundaries.¹⁹ The investment law aims to facilitate procedures for investors and, crucially, provides significant incentives for investors, in terms of a number of tax breaks (notably on VAT and income tax). In addition, the law provides specific guarantees for the protection of foreign investments and stipulates that the only way for the Government to acquire rights over the investment is by following established expropriation procedures; in this case, adequate compensation will be paid in foreign convertible currency within 12 months.

As regards the marshes,²⁰ the Organic Land Law determines that they are held in private ownership by the State.²¹ In contrast with public state land (referred to in the law as the “public domain”), such “private state land” can be leased out to third parties. The law also recognizes that persons may be using state land without a lease. However, such possession of state land by individuals cannot provide a basis for prescription (i.e. acquisition of

¹⁷ Organic Law No. 04/2005 of 8 April 2005 Determining the Modalities of Protection, Conservation and Promotion of Environment in Rwanda.

¹⁸ Law No. 26/2005 of 17 December 2005 Relating to Investment and Export Promotion and Facilitation.

¹⁹ Draft versions of some of these documents were shared with the authors by the Ministry of Lands and the Rwanda Environment Management Agency. Given that they are likely to change before being promulgated and the fact that the rules as they were formulated at the time of writing did not apply to the situation under examination, they are not discussed here in detail. Section 7, however, discusses certain implications of this case study for these laws and ministerial orders.

²⁰ Article 2 of the Land Law gives the following definition of a swamp (or marshland): “a plain area between hills or mountains with water and biodiversity, papyrus or carex or plants of their species”. Article 2 of the Environment Law defines a swamp as follows: “a flat area between mountains with much stagnant water and biodiversity, with papyrus, cypress or other vegetation of the same family”.

²¹ Article 29 of the Land Law states that “swamp land belongs to the state and it shall not definitively be allocated to individuals”. Article 2, sub-section 19 of the same law states that marshes are considered part of the public land that should be particularly protected to conserve environment and culture.

ownership by the passing of time), even if it extends over a long period.²² In addition, it is prohibited to construct houses in marshlands or to engage in any other construction activity that may damage such environments.²³

The use of marshlands is governed by a national master plan and each individual piece of marshland is governed by an “efficient land structural exploitation chart”, which builds on the master plan.²⁴ Depending on the designation of the land in question, a lease can be concluded either for a duration of 20 years (in the case of the exploitation of wetlands) or 49 years (in the case of land designated for agriculture).²⁵ A ministerial order establishes procedures for how investors should apply for a lease of state land with the National Land Centre (NLC).²⁶ These procedures must be read in conjunction with procedures regarding investments. A business plan has to be presented to the Rwanda Investment and Export Promotion Agency.²⁷ An Environmental Impact Assessment is also required, which is evaluated by the Rwanda Environment Management Authority (REMA).²⁸ According to the NLC, in practice it also requests an assessment of the social impact of the investment, even though this is not a legal requirement.²⁹ This is because many marshes that are not officially leased out are used by the local population; while such users enjoy no formal protection, their interests are considered in the evaluation process. Generally, what happens is that the investor is told to negotiate with local users, before a lease is issued. The results of these negotiations are reported to the NLC by the local authorities, but they are not incorporated into the lease contract. The contracts do contain provisions on the type of crop to be cultivated, obligations to put the land in question to good productive use, and a stipulation that a lease cannot be transferred to a third party.

It is important to point out, however, that the lease on the Nyacyonga and Nyabarongo marshes around Kigali investigated here was allocated to the Madhvani Group well before these new laws and regulations came into force (in 1997). This means, for example, that the deal concluded between the Rwandan government and the Madhvani Group did not involve an assessment of the environmental impact conducted by REMA. Also, as far as it is possible to ascertain, neither does the contract between the parties contain a clause binding the investor to an agreed business plan, as would now be the

²² Article 29 of the Land Law states that “no person can use the reason that he or she has spent a long time [on state-owned swamp land] to justify the definitive takeover of the land”.

²³ Article 87 of the Environment Law.

²⁴ Article 63 of the Land Law. The national master plan is currently being drafted under the direction of the National Land Centre.

²⁵ Presidential Order No. 30/01 of 29 June 2007 determining the exact number of years of land lease.

²⁶ Ministerial Order No. 001/2008 of 1 April 2008 determining the requirements and procedures for land lease.

²⁷ Article 3 and following of the Investment Law.

²⁸ Article 67 of the Environment Law.

²⁹ In addition, according to REMA, it is mostly important donors, such as the World Bank, who ask for an assessment of the socio-economic impact of investment projects.

case. Nor are the provisions contained in the secondary legislation subsequently adopted, regarding the duration and other modalities of the lease, directly applicable. Still, for the purposes of this case study, which focuses on the effects of commercial exploitation on the people living in and near the marshes around Kigali, what is crucial is that, at the time, the property rights issue was dealt with in the same way as it would be now. Just as is now determined in Article 20 of the 2005 Land Law, in 1997 the Government acted on the principle that the marshes belong to the State and that informal users do not accumulate rights to them and can therefore be asked to leave if an investor makes a formal request to exploit the land commercially.

Section 5 provides more details about the Madhvani Group's activities in the Nyacyonga and Nyabarongo marshes and Section 6 considers the impact on the local population. First, however, Section 4 provides some background information on sugar production and trading, by placing it in its global, regional, and national contexts.

4 Sugar production and trade from global, regional, and national perspectives

This section provides some background information on the sugar industry in Rwanda. Given that imports constitute a considerable proportion of national sugar consumption, it also briefly considers certain global and regional aspects of the sugar trade. To better understand these matters, some information on the product itself is helpful.

Product characteristics

Sugar occurs naturally in many plants, but it is extracted commercially from only a few crops, notably sugar cane and sugar beet. Sugar cane is a tall grass that is grown in tropical and semi-tropical climates, such as in Rwanda, whereas sugar beet is grown in temperate climates. Sugar cane requires large amounts of sun and water (though its roots may not be waterlogged). It generally takes 12–18 months for the cane to reach maturity – 18 months in Rwanda, due to the high altitude.³⁰ Where cane differs from beet is that it is a perennial plant; after cutting, it re-grows from the roots.

Once harvested, sugar cane, in particular, is highly perishable and must be processed quickly. In addition, the costs for transporting both cane and beet are relatively high, since the weight of the unprocessed product is considerable compared with the sugar content that can be extracted. For both these reasons, processing plants tend to be located very close to production areas. Sugar cane processing, which differs only slightly from processing beet, is an energy-intensive process. First, cane juice is extracted by crushing, then the juice is boiled so that water evaporates and a syrup remains. Finally, the syrup is turned into sugar crystals.

³⁰ Source: Madhvani Group management.

Sugar production and trade from a global perspective

Sugar is produced in 121 countries worldwide and global production exceeds 120 million tonnes a year (Mitchell 2004; Elobeid 2009). Approximately 70% is produced from sugar cane. India, the EU, and Brazil are the largest producers and consumers. Sugar production and trade are subject to considerable government intervention throughout the world, in both importing and exporting countries. The EU and the US have particularly high trade barriers in place, to protect their respective markets, with prices that tend to be much higher than on the world market. This leads to significant over-production, which is sold at subsidized rates on the world market, with the effect of depressing world market prices. Trade protection in the sugar industry is a hotly debated issue that has been high on the agenda of the largely inconclusive Uruguay and Doha rounds of negotiations on trade liberalization.³¹ This is because low world market prices and limited access to Northern markets limit the development of the sugar industry in the South.

Liberalization is expected to lead to an increase in world market prices. Markets that are now strongly protected from imports should witness a drop in domestic prices. In addition to consumers in such markets, Southern producers operating efficiently enough to have export potential will also benefit. It should be noted, however, that in many cases domestic prices in these more efficient producing countries are predicted to rise, precisely because the export market then becomes more attractive for producers. In Southern countries that produce less efficiently (i.e. where the costs of production exceed liberalized world market prices), domestic producers should, in theory, suffer, whereas consumers should benefit from better prices.³²

It should be mentioned, however, that trade barriers are not the only factors influencing global trade in sugar. In recent years, rising fuel costs and mounting concerns about climate change have increased demand for biofuels.³³ Biofuels have historically been more expensive than petroleum-based fuels, but higher oil costs have made them more competitive. In addition, biofuels are often seen as more environmentally friendly, which has led to stimulus measures being introduced in many countries. Ethanol, which can, for example, be used to power conventional car engines, is one of the main forms of biofuel and is essentially made from the same products used to make sugar – sugar cane and sugar beet. Rising sugar prices on the world market are, amongst other factors, attributed to the increase in demand for ethanol.

³¹ The Uruguay and Doha rounds of trade negotiations have produced few tangible results in terms of liberalizing the global sugar trade. In the latter round, commitments were made to reduce agricultural tariffs, especially by the EU and the US. However, it is expected that by labelling sugar as a “sensitive product”, real change will be avoided. In this regard, see e.g. Pruznin 2010.

³² It could be argued that Rwanda falls into this latter category. As explained below, however, recent experiences in the Rwandan sugar industry cast some doubt on these theoretical assumptions.

³³ On biofuels, see e.g. Demirbas 2009.

Sugar production and trade in Rwanda and the region

Sugar cane production in Rwanda is held back by the nature of the country's terrain. The areas of land in its narrow river valleys are too small to allow for mechanized production, which means that in comparison with countries in the region with better terrain conditions, such as Zambia and Malawi, the costs of production are high.³⁴ It is not surprising, then, that sugar produced in such countries competes with sugar produced domestically. Rwanda is a member of both the East African Community (EAC) and the Community for Eastern and Southern Africa (COMESA), and the rules it has put in place concerning sugar imports are largely determined by these affiliations.³⁵ From 2002 onwards, a 25% surcharge was levied on imported sugar. In July 2009 tariffs were reviewed across the board in response to EAC obligations; sugar is now regarded as a sensitive product and there is a 100% external tariff in place. This tariff does not apply, however, to non-EAC countries that are members of COMESA or the Southern African Development Community (since one of the five members of the EAC, Tanzania, is also a SADC member). These countries, which account for the bulk of sugar imports into Rwanda, enjoy free market access.

It is interesting to note that this shift from a 25% to a 0% tariff for sugar from other countries in the region appears to have had little effect on the market. While it might be expected that a tariff cut would lead importers to expand their business – with a tempering effect on price – no significant change in the trend in imported volumes was discernable in the data made available by the Rwanda Customs Commission, and the price of sugar has continued to rise gradually. It is true that there are a number of global forces pushing up the price of imported sugar. In addition to higher sugar prices on the world market due to the demand for biofuels, transport costs to landlocked Rwanda have increased. Moreover, significantly increasing transport capacity appears to pose a problem for at least some importers. Still, it might be expected that a 25% reduction in the costs of importing sugar would have a more than negligible downward effect on the market price, particularly since the surcharge was scrapped entirely with immediate effect, whereas these other factors have all been predominantly gradual in nature. This case study is not designed to explain this curious market failure. Still, it would appear that at least part of the explanation lies in the fact that the Madhvani Group (which is examined more closely in the following section), enjoys a position of considerable strength in

³⁴ In this regard, the Madhvani management made the following statement: "While sugar factories in other parts of East Africa are surrounded by plainlands with extensive, well irrigated plantations of cane, here in Rwanda we are faced with very difficult terrain, where mechanization is just not possible. Every stage of sugar production, from planting, harvesting, transport, crushing, and extraction of sugar presents unique problems which we have overcome with much labour and cost over a period of time. Our cost of production is much higher than what obtains in other parts of Africa."

³⁵ Rwanda is also a member of the World Trade Organization.

Rwanda's sugar market, due to the fact that it is the sole domestic producer.³⁶ This is important to note, given that (as Section 6 explains), the firm also enjoys a position of strength vis-à-vis members of the local population involved in sugar cane production who, on the whole, do not appear to have benefited in a meaningful way from increases in the price of sugar.

³⁶ As Section 5 explains, the Madhvani Group meets about 30–40% of national demand for refined sugar for household consumption (the rest is imported). The company can therefore safely be assumed to have some measure of market power. In this regard, it is worth mentioning that Madhvani's management indicated that it sets its prices not as a direct function of the costs it incurs, but at a level slightly lower than those of imported sugar. When shortages risk encouraging importers to speculate, Madhvani itself will import substantial amounts of sugar from its sister company in Uganda, Kakira Sugar Works, if necessary at cost price. This strategy appears to be designed to ensure that there are no hikes in sugar prices. At the same time it appears to discourage importers from substantially increasing the amount of foreign sugar they bring onto the Rwandan market. This points to a wider concern. The fieldwork for this study produced consistent indications that Madhvani refuses, at times, to buy all the sugar cane harvested by outgrowers in Rwanda. Moreover, it seems that those parts of the leasehold area that are exploited by the firm itself are farmed less intensively than those exploited by outgrowers, which results in significantly lower production levels (Madhvani's management indicates that the land it exploits is of poorer quality but outgrowers, in contrast, suggest that to the extent to which this is the case, it is at least partly due to neglect.) In sum, Madhvani does not appear to be very eager to expand output (though its management indicates that, on the contrary, it is committed to expanding output, but is prevented from doing so by poor soil conditions and the volatility of the Nyabarongo river). Micro-economic theory suggests that when powerful firms expand their output beyond a certain level, marginal costs increase more than marginal revenues – i.e. for every extra unit (beyond this point) that a dominant firm puts on the market, it incurs more costs than it earns in extra revenues. It could be, for example, that switching to the more labour-intensive methods used by the outgrowers would have such an effect for Madhvani. If so, this means that overall profits would be negatively affected by such an expansion of output. It also means that under more competitive market conditions more units would be produced, the profits made in selling them would be lower and, by implication, consumers would transfer less of their resources to producing companies. At the same time, the sugar industry would provide work for more Rwandan citizens, since larger volumes would be produced. It is very important to emphasize, however, that the findings of the current research were insufficient to conclude that this was indeed the case. Other plausible explanations for the behaviour adopted by Madhvani may exist. It should also be stressed that, although excessive exploitation of consumers through the exercise of market power can be found objectionable from a moral point of view – it is in fact classified as a crime in many countries – to the knowledge of the authors such business behaviour is not prohibited under Rwandan law.

5 Commercial sugar production in the Nyacyonga and Nyabarongo marshes

The Kabuye Sugar Works (KSW) mill for processing sugar cane was established in 1976 by a Chinese company, and passed into the hands of the State in 1978. At that time the mill had a crushing capacity of about 200 tonnes a day and was fed by sugar cane grown on some 550 hectares of the Nyabarongo valley. The 1994 genocide against the Tutsi and its aftermath disrupted production, which led to the closure of the run-down facility in 1996. In the second half of 1997, the government transferred ownership of the factory to a private foreign investor, the Ugandan-based Madhvani Group.

The privately-owned Madhvani Group is one of the largest private sector groups in East Africa, employing over 10,000 people. The company was founded in Uganda in 1914 and has since developed into a widely diversified conglomerate with affiliates in various African countries, the Middle East, India, and North America. The Group's current turnover in Rwanda is USD 12 million on average.³⁷

Together with the sale of the mill, about 3,100 hectares of land in the Nyabarongo and Nyacyonga river valleys were given in lease to Madhvani for a period of 50 years. The authors were not able to see a copy of the agreement, but were informed that the price paid by Madhvani for KSW was around USD 1 million. The Group rehabilitated and renovated the factory within about six months, installing new equipment and making use of its technical expertise in the sugar industry in Uganda. According to its management, the Group has since invested USD 13 million in the factory. Not all the land given in lease was immediately available for production. In some areas where the local population had been cultivating the marshes for generations, the Government had to intervene to ask them to vacate the land.³⁸ Respondents in this study reported that initially there was considerable resistance on the part of the local population; in some locations sugar cane was set on fire or otherwise damaged. As a consequence, sugar cane was introduced at different times in different places. For instance, cane was cultivated from the beginning

³⁷ Madhvani's management was not able to provide figures on the Group's worldwide turnover. On the firm's website (<http://www.madhvanifoundation.com/madhvani-group.html>), it is reported that in Uganda its annual turnover exceeds USD 100 million and that its assets in its home country are valued in excess of USD 200 million.

³⁸ See Section 6.

near the KSW mill, whereas other areas were effectively acquired only between 1998 and 2001. Only part of the land leased to the Madhvani Group (2,035 hectares, or 65% of the total leasehold area) can be put into production: the remainder is either infertile or waterlogged.

According to the company's management, the KSW mill employs about 570 local staff. This includes 80 guards (approximately one per 20 hectares), 80 overseers (called "captains", approximately one per 20 hectares), eight supervisors (approximately one per 150–250 hectares), and 400 persons working at the mill in shifts. KSW grows sugar cane itself and also buys cane from outgrowers. KSW estimates that on average it employs between 4,000 and 5,000 labourers per day to cultivate those parts of the leasehold area that it exploits directly. It was not possible to obtain more accurate information, since (as explained in Section 6) these workers generally do not receive contracts and their numbers vary greatly during the year, depending on whether it is the planting season, harvesting time, or the period in between.

Outgrowers are private commercial farmers who sell their crops to Madhvani.³⁹ Although formally they are independent, in practice they are fully integrated into KSW's operation. Most of them work on land leased by Madhvani, without a sub-lease contract, while some work on other parts of the marshes. Madhvani provides them with seeds free of charge, and is the only buyer available. In total, the company works with about 1,100 outgrowers, whose production accounts for 60% of the KSW mill's sugar cane input.⁴⁰ Interviews and observations confirmed that the outgrowers' methods of production are considerably more labour-intensive than those employed to cultivate land managed directly by the Madhvani Group. It can be assumed, therefore, that together the outgrowers employ at least another 2,000 or 3,000 labourers. This suggests that, in all, over 10,000 people may be directly or indirectly involved in sugar production in the Nya-cyonga and Nyabarongo marshes.

Over recent years, KSW's sugar production has varied between 12,000 and 15,000 tonnes per annum.⁴¹ This accounts for about 30–40% of national demand for refined sugar for household consumption, with the rest being imported. The Rwandan government is concerned with the mill's production levels and the extent to which the land under lease is being productively used, as evidenced by recent debates in parliament (April 2010). Madhvani cultivates no more than 1,000 hectares of the 2,035 hectares that are considered to be exploitable, which has led to many complaints from the people living in surrounding villages. Madhvani, in turn, complains of a shortage of sugar cane supplies.

³⁹ The situations of the outgrowers and labourers are described in detail in Section 6, including a description of how they fared before the start of the investment process.

⁴⁰ This information is based directly on interviews with the Madhvani Group's management. The Group works with an average production of between 50 and 80 tonnes per hectare. Outgrowers confirm that their production levels are considerably higher: between 120 and 200 tonnes per hectare.

⁴¹ In the initial crushing season of 1999–2000, 2,496 tonnes were produced.

According to its management, this is due to frequent floods and changes in the course of the Nyabarongo river, which leads to the canes rotting before they reach maturity and renders large portions of the land leased unfit for production.⁴² For this reason, KSW and the Government have been engaged in discussions about river management. Thus far these discussions have not produced tangible results.

⁴² It is quite evident, however, from the interviews conducted, that Madhvani quite frequently refuses to buy all of the outgrowers' crops. The main reason advanced for this by the company is that there is too little transport capacity available. This is contradicted, however, by the fact that outgrowers have tried to buy a lorry together but failed because Madhvani would not underwrite their request for a bank loan. There were more reports of this nature, suggesting that Madhvani has refused to provide support to help the outgrowers obtain credit to finance investments that would increase their production. It could be the case that Madhvani considers the financial risks of supporting such initiatives to be too high. At the same time, however, the company does not appear to undertake many activities to increase productivity itself. It has already been mentioned that outgrowers appear to achieve significantly higher levels of production per hectare than Madhvani does on the portions of land it exploits directly. Madhvani has, over time, adopted some of the outgrowers' planting techniques, which make its cane less vulnerable to rotting, but generally their more labour-intensive (and thus more costly) methods of production have not been copied. Together, these factors seem to suggest that operating below capacity is at least in part a free choice.

6 Impact analysis

This section considers the socio-economic impact of the commercial exploitation of the Nyacyonga and Nyabarongo marshes. It focuses on two questions: first, access to land in the marshes and then the socio-economic effects for various sections of the local population.

A few preliminary remarks on the methodology used to produce this study are in place. In the analysis below it is indicated, as far as possible, how many respondents answered a question in a certain way. It should be understood, however, that, given the open nature of the interviews, not all respondents were asked exactly the same number of questions in the same way. It was frequently the case that the number of respondents answering a specific question was smaller than the total number of respondents interviewed.⁴³ It should be realized, also, that although each interview was conducted with a prepared list of themes, respondents were encouraged to speak freely and to use their own words. Some elaborated more on a certain theme, while their neighbours had more to say on another. This means that interviewees all responded in different ways. As a consequence, the exercise used to calculate how many respondents gave a certain type of answer often involved a process of inference (or interpretation); it should not be understood as a matter of ticking boxes on survey forms.

In addition, it is important to point out that a relatively small portion of the affected population was interviewed (fewer than 100 out of probably more than 10,000). Therefore, where it is stated that x out of y respondents gave answer z, it is not suggested that this must necessarily be so for the entire population. These proportions should rather be understood in an indicative sense, although it is worth adding that if all or virtually all respondents answered a particular question in the same way, this should be seen as a powerful indicator.

To conclude, it should be emphasized that when a specific question is relatively unexplored in terms of empirical research – as is the case with the impact on the local population of the commercial exploitation of the marshlands – a first step must be to get a sense of the diversity of experiences and perceptions of the process. By concentrating resources on interviewing a relatively small number of people in a very intensive way, the aim was primarily to bring out this richness.⁴⁴ The question of how exactly these different

⁴³ For example, some respondents were uncertain how to answer a specific question or a respondent's age meant that there was little point in spending time discussing the pre-1997 period.

⁴⁴ As previously indicated, it is estimated that over 10,000 people have been affected by the investment process. These 10,000 people were affected in many different ways: some became managers for Madhvani; others became overseers of the labourers; there are outgrowers who supply cane to Madhvani and outgrowers who produce flowers or bananas; outgrowers vary in their scale of production; a large number of people have become labourers, but some come to the area only in harvest time to make good money while others are forced into this role on a permanent basis; and still other community members have left the

experiences and perceptions are distributed over the affected population as a whole is one that remains a matter for further research. The same applies to the question of how the contribution of such investments to the development of Rwandan society as a whole should be evaluated.

Perceptions on access to land

This section looks at people's perceptions of access to land in the past (before KSW was taken over by the Madhvani Group) and in the present. It shows that even if previously respondents had no formal rights as land users – and many were in one way or another aware of this – the vast majority indicated that they experienced the process whereby the land was taken over by the Madhvani Group as a dispossession.

The pre-Madhvani period

Even before the adoption of the Organic Land Law in 2005, marshlands formally belonged to the State. Some commercial enterprises exploited Rwanda's marshes throughout the period of independence – KSW is a good example. The bulk of the marshlands, however, were used by the local population, and in most areas the State made no efforts to assert its ownership rights. This was also the case in the areas studied, apart from the 550 hectares immediately surrounding the KSW plant. The local population made use of this land mainly for farming and, to a lesser extent, for cattle herding. Respondents gave the following description of the way in which they organized their work on the land.

Plots in the marshes were cultivated mainly during the two dry seasons (from January to February and from June to mid-September), whereas in the rainy periods, when the valley floors could become quite wet, they would cultivate plots on the hills. This allowed them to harvest frequently, sometimes up to four times a year. It also permitted them to let their land on the hills, which is of poorer quality, rest. Five respondents said that they often did not even bother to cultivate their land on the hills; they would be in the marshes all year round on account of the fertility of the land there. Care should be taken not to idealize the "before" period, but the fact that a significant portion of respondents (57 out of 81⁴⁵) indicated that they would take their produce to market with some frequency and that trucks came by regularly to collect vegetables to be sold in town suggests that some surplus was generated during this time.

region, concentrated on cultivating their plots on the hills, or sought other types of employment. The purpose of the study was to create a holistic picture and to interview persons in each category.

⁴⁵ This question was also put to the outgrowers interviewed.

Many respondents (48 individuals) said that, at the time, they had been aware that the land at the bottom of the valley was owned by the State but, as an older man pointed out, "We always thought that we were part of the State and since nobody had ever objected to us cultivating this land, we thought we had a right – a real right – to do so." Others (13 respondents) said that they had never heard of the State being the owner of the land they used before the arrival of the Madhvani Group; and some still consider that the State has sold their land to the investor. Others again (eight respondents) said that in their area the authorities had always been very clear that, as the land belonged to the State, it could come and reclaim it. Generally speaking, however, because there were no deeds clearly stating that the land was owned by the State, all respondents who discussed this issue (63 in total) indicated that they considered that they had accumulated rights through their presence and their work on it and that, at the time, they considered these rights to be fairly secure.

All the respondents questioned on this matter (64 in total) insisted, very consistently, that the use of the marshes had been free, in the sense that they were not required to pay taxes, fees, or rents to the local authorities. This contrasts with one source (Musahara and Huggins 2005, 328), which reports that the marshes were managed by local administrations and that households were given leases of three to five years in exchange for a fee or gifts. It is possible that the loss of access to land in the marshes that most respondents experienced led some of them to idealize the conditions under which they had used these lands in the past. It should be noted, however, that the same response was given by persons who had not fared so badly after the arrival of the Madhvani Group. It is possible, therefore, that there were regional differences in the way that the marshlands were managed.

Most of the persons interviewed (49 out of 53 with whom this matter was discussed) said that before 1997 the parcels of land in the marshes had clearly established boundaries (often marked by certain types of plant) and were passed down from father to son. Quite a number of somewhat older women (at least eight respondents) said that, when they got married, their husband's family gave the couple one parcel of land on the hills and one in the marshes. Sale or lease of plots in the marshes was common.⁴⁶ Apparently, the local authorities were relied upon to solve any boundary disputes in the marshes that families could not resolve themselves. In other places, it was stated that there was simply so much land available in the marshes that anybody could go there and choose a piece that he considered suitable. For such users, there was no need to return to the same spot each season or to keep a specific parcel of land in the family. This flexibility also helped farmers to cope with changes in the course of the Nyabarongo and Nyabugogo rivers and with flooding.

⁴⁶ The term "sale" is used in a practical sense here, to refer to transactions between individuals whereby the possession of a certain piece of land was transferred to another person in exchange for money or goods, even though neither person could make a formally recognized claim of ownership.

The arrival of the Madhvani Group

Several respondents (23 persons) reported that the transfer of the Nyacyonga and Nyabarongo marshlands to the Madhvani Group came as a total surprise to them. At the beginning, there appears to have been considerable resistance to what was felt to be a dispossession.⁴⁷ As a rule, there was no compensation for persons who had lost access to land in the marshes; only those who had crops ready to be harvested and could organize themselves quickly were allowed to do so.

Local authorities were instrumental in informing the population of the transfer and in overcoming resistance. It was reported that in several places the local authorities emphasized the benefits of the transfer of the land and the switch to sugar cane production both for the nation (claiming that domestic sugar prices would fall) and for the local population (who would be paid for their labour). In quite a few other places, however, those interviewed indicated that the lowest levels of the local authorities initially supported the population in its resistance. The forms of resistance mentioned were burning or cutting of immature sugar cane; communities would also collectively go very early in the morning to cultivate their plots to show that the land was being used. However, as some supportive officials were dismissed, the population sensed that resistance would be useless. Interventions by the local defence force and the police were also said to have played a role. In addition, the Madhvani Group started bringing in labourers from outside, who picked up the work that the communities refused to do. Since this directly threatened their livelihoods, many considered that they had no other option but to cooperate. It was stated (by eight respondents) that other families, particularly those who had no land on the hills or only very little, left the region to search for land in the east of Rwanda. In one village, for example, 15 families were said to have left.⁴⁸ Many more respondents (at least 19) said that if they had had the means themselves, they too would have left the region.

The fact that considerable portions of the land leased out to Madhvani are not used and are overgrown with papyrus is very disturbing in the eyes of people living nearby and has been the cause of many complaints made to both the local and national governments. While the Group considers these lands to be unfit for production, due to excess water or the risks of flooding, many respondents indicated that they had been able to cultivate these same areas before. It was also asserted on several occasions that leaving the land unattended worsened the situation by increasing water levels.

⁴⁷ Reactions were partly conditioned by the policies adopted by the government in the immediate aftermath of the genocide. During this period, many displaced persons and returning refugees were in need of a place to stay and work. The authorities encouraged them to find a spot in the marshes to cultivate.

⁴⁸ The Madhvani Group's management refutes the idea that large numbers of people left. This cannot be the case, it argues, since 2,000 hectares of the 3,100 hectares it leased were virgin land. The current research provides no indication of the scale of this process, yet there were persistent indications that one of the effects of the Madhvani Group's arrival was that certain families left. In this regard, see also the remarks on methodology at the start of Section 6.

Effects on different sections of the population

This section considers the effects of the investment process on the livelihood strategies of different sections of the population living around the marshes. The two main categories looked at are private commercial farmers supplying sugar cane to the Madhvani Group (the outgrowers) and the labourers who work on the fields for the Madhvani Group or for the outgrowers.

The outgrowers

A relatively small number of individuals were able to retain access to land in the marshes. Most of these (some 1,100, including 320 women⁴⁹) grow sugar cane, which they supply to the KSW mill. Others grow bananas or a local type of tall grass used to feed livestock. Their operations differ greatly in size. The majority – some 940 of them – are small farmers, cultivating less than one hectare each. Of the rest, only 15–20 could be said to be large-scale cultivators.⁵⁰ The number of labourers employed varies between outgrowers, from just a couple to several hundred. Nonetheless, it is safe to say that outgrowers, as a group, are well off compared with their fellow community members (they can afford decent clothing and better housing, for instance) and have managed to cope relatively well with the takeover of the mill and the marshes by Madhvani.

What is important to understand is that the bulk of the outgrowers running larger operations – and many of those running smaller ones – were commercially-oriented farmers before Madhvani came onto the scene. The way in which they were able to hold on to their land varies. Some sought government support and obtained this in one way or another. Others joined forces and approached Madhvani as a group.⁵¹ Others still were simply able to react quickly and start providing the sugar cane that Madhvani needed. The outgrowers interviewed seemed to agree that the people who got involved in the sugar production process were the ones who understood the authorities' message and who had sufficient means and experience to hire labourers rapidly to prepare the land.⁵² One outgrower reckoned that he had had to invest some RWF 700,000 (approximately USD 1,300 at current rates) per month over a period of several months to make the switch and to start supplying KSW. Non-outgrowers confirmed that the more organized and wealthier farmers were able to hold on to the land they were exploiting.

⁴⁹ Source: Madhvani management.

⁵⁰ Seven outgrowers in this category were interviewed, all of whom were men. While there are no hard data on this matter, it appears that outgrowers running bigger operations are predominantly men.

⁵¹ Strong young men were able to hold on to the land they had by threatening anybody who might cut down their banana plantations. Others were simply lucky, as they were farming in parts of the marshes that Madhvani considered unfit for exploitation.

⁵² Some of these farmers not only acted quickly but were, in addition, able to "expropriate" some of the other farmers' land, thus obtaining a larger parcel than they had cultivated previously.

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Despite faring better than most other community members, the outgrowers live and work in a situation of strong dependency on Madhvani. Only about ten larger outgrowers have a contract with the company. These contracts are drawn up for one season (18 months) and renewed after each harvest. The outgrowers complain that only Madhvani's interests are protected by these contracts; they claim, for instance, that they lose their entire harvest in the event of an accident with the truck or a bushfire. There is no buyer for their harvest other than Madhvani and the prices that are paid are non-negotiable. An agronomist employed by Madhvani determines whether the cane is ripe and gives the go-ahead for the harvest. Quite frequently, Madhvani does not buy all of the cane that an outgrower harvests, and the rest of the crop is then left to rot unless KSW staff can

⁵³ Source: Madhvani management.

⁵⁴ Seven outgrowers in this category were interviewed, all of whom were men. While there are no hard data on this matter, it appears that outgrowers running bigger operations are predominantly men.

⁵⁵ Strong young men were able to hold on to the land they had by threatening anybody who might cut down their banana plantations. Others were simply lucky, as they were farming in parts of the marshes that Madhvani considered unfit for exploitation.

⁵⁶ Some of these farmers not only acted quickly but were, in addition, able to "expropriate" some of the other farmers' land, thus obtaining a larger parcel than they had cultivated previously.

somehow be persuaded to take the load. Outgrowers are generally also not allowed to enter the factory premises in order to be present when the truck carrying their harvest is weighed. Finally, several outgrowers reported that Madhvani was unwilling to assist them in obtaining a bank loan for investment purposes.

In order to reduce their dependency, in 2009 a group of outgrowers started to hold regular meetings to come up with joint solutions for their problems.⁵⁷ They are confident that, by acting together, they are less vulnerable to repercussions, such as not being able to sell their production as a form of punishment. Although it has not yet been done, the plan is also to invite the local authorities to the meetings. There used to be meetings with outgrowers organized at the KSW mill, but these had stopped before the outgrowers started meeting on their own.

The labourers

Planting and cutting cane for Madhvani is not the only work opportunity in the Nyacyonga and Nyabarongo valleys. There is work in construction and in mines; some people are members of a rice cooperative and others have sufficient land on the slopes of the hills to make a living. The members of the population interviewed for this study (68 in total) generally agreed that working in the fields for Madhvani or for outgrowers is the worst of the different options.

To begin with, the wages that labourers get during the year for planting and maintenance of the crop are considered to be very low, while the labour is hard. Madhvani pays RWF 500 a day (less than USD 1), and on average the outgrowers pay RWF 700 a day (another difference is that Madhvani pays its labourers with a considerable delay).⁵⁸ Work in other sectors pays better; miners earn about RWF 1,200 a day, construction workers get about RWF 1,000 a day, and cooperatives employ people for about RWF 700–1,000 a day. There was consensus amongst respondents (43 persons were asked about this) that even the amount paid by the outgrowers is insufficient to support a household. The bulk of the labourers are women (65–70%),⁵⁹ and their family situations vary considerably. Some have husbands who are employed in the mines or in construction, or who till their own fields on the hills. Others have husbands without an occupation or are on their own, being young girls or single mothers. Also, on several occasions during the fieldwork, minors were seen to be working the land, some of whom were said to be orphans.⁶⁰ Most

⁵⁷ The meetings are also used to exchange information on cultivation techniques.

⁵⁸ These amounts are based on the responses given in interviews, which were very consistent. Madhvani's management does not refute these numbers but argues that they paint the wrong picture. The continuity and type of work should be taken into account, it claims. Temporary work, such as laying cables, does pay more but is very strenuous and of short duration. However, these arguments are beside the point, since the comparison that is made here is not between laying cables and working as a labourer for Madhvani, but between working as a labourer for Madhvani and working as a labourer for an outgrower i.e. the comparison made is between the compensation paid for the same type of work by a different employer.

⁵⁹ Source: Madhvani management.

⁶⁰ Madhvani's management indicated that it has a policy of not engaging minors for any work.

minors earned between RWF 50 and RWF 100 a day (between USD 9 and 18 cents), but others appeared to receive wages that were more in line with those earned by adults.

During the cutting season the pay is better. Labourers are then paid on the basis of the amount of cane harvested and, in this way, individuals can earn up to RWF 2,000 a day. Transporting cane to the road pays around RWF 800 per 40 bundles (the strongest worker can carry up to 90 or 100 bundles a day). In some cases contracts are for the harvesting of a certain land area for a fixed price. However, these opportunities also attract the attention of people working in other sectors and even from outside the Nyacyonga and Nyabarongo river valleys, notably from Ruhengeri, Shyonggi, and Byumba. A number of outgrowers go to these areas to recruit young men to come and assist with the harvest, and Madhvani is starting to use the same approach. It appeared to the research team, from its observations of the harvesting process, that particularly in this period the involvement of minors is substantial. On average, about one-quarter or one-third of a harvesting group would consist of young local boys between the ages of eight and 15. Women also participate in harvesting in considerable numbers. Given that the harvesting work is very hard and exhausting, those women who do so are mostly young. Although it was very hard to obtain information on this, it seems that locals still make up the majority of the people involved in cutting cane.

Those who work as labourers all year round, without exception (42 out of 42),⁶¹ indicated that they consider themselves to be poorer now than they were before the takeover by the Madhvani Group of the marshland they had previously cultivated. Local authority officials repeatedly said the same about the population in their areas. In addition, several respondents indicated that the variety of their diet had significantly decreased. Certain foodstuffs that they had previously grown themselves, including beans and sweet potatoes, were too expensive for them to purchase with their wage earnings.⁶² Many of the married female labourers interviewed (at least 14) insisted that nowadays it is unavoidable that both the man and the woman work. This is the only way in which they can afford to pay for education for their children and for health care, and occasionally buy a chicken or a goat.⁶³ Such expenditures are often facilitated by small informal saving groups, called *tontines*. Yet quite a few unmarried and poorer respondents (11 out of 23 questioned on this matter) said that they could not afford to join such groups.

It should also be emphasized that the local people see significant differences between labouring for the outgrowers and labouring for Madhvani. The pay is 40% better, it comes more quickly, if needed they can often get an advance and – a crucial factor for many –

⁶¹ Fifty-two labourers were interviewed in total, but ten of them worked for Madhvani or the outgrowers only on an irregular basis. It should be noted, however, that these ten responded to this question in the same way.

⁶² The labourers interviewed consistently indicated that they no longer, or much less frequently, generate surpluses that can be sold on the market than they did in the period before Madhvani was allowed to take over the land.

⁶³ Two married women said that they had been able to buy a small plot of land on the hills.

from time to time outgrowers allow them to intercrop (for free or against payment). This is a practice where, mostly after excess rains, labourers are allowed to clear the field of rotting cane and plant crops that suck up water in between the newly planted cane, offering them a chance to harvest other crops once or perhaps twice.

Effects on cultivation on the hills

As might be expected, the transfer of control of the marshland to Madhvani has had a number of effects on cultivation on the surrounding hills. These are now used more intensively; respondents said that people who had previously left certain plots unused had started to cultivate them or now rented them out to others. Steep slopes and other pieces of land that had previously been communally used for grazing are increasingly used for agriculture. Fallow periods have shortened considerably and quite a few families (12 respondents) indicated that they could simply no longer afford to let their land rest. Asked whether this had affected soil fertility, many (nine respondents) responded that it had.

7 Discussion and policy implications

Rwandan law provides strong incentives for investors to engage in commercial agriculture in the country's marshlands. This should be seen in the context of a wider policy intended to transform and invigorate the agro-economy. By leasing these lands out to commercial enterprises, the Government wants to stimulate the use of more intensive forms of agriculture that can supply national or international markets. One of the cornerstones of this policy is a provision in the Land Law which provides that marshlands belong to the State and that informal users – the local population – do not accumulate rights and can therefore be asked to vacate the land if an investor makes a formal request to exploit it commercially.

This case study provides indications that if, as a consequence, members of the local population find themselves largely dependent on the incoming investor for securing their livelihoods (as wage labourers), but have few enforceable rights to bargain with, the chances that they will benefit from the investment are reduced. Those who are well connected or have resources and a sense of entrepreneurship may do well, but those who start without these advantages risk seeing their situation deteriorate. A brief recapitulation of the investment process examined in this case study will help to put these arguments and the related recommendations into context.

Before doing so, it is important to make clear that the aim of this study is not to criticize the deal with Madhvani that was made in 1997. Doing this, 13 years later, would not be useful for any of the parties involved. In any case, it must be realized that in 1997 Rwanda had only just emerged from the worst turmoil, and the government, the economy, and the legal system had to be rebuilt almost from the ground up. Today's Rwanda is very different: the Government has been able to stimulate the economy and, as has been seen, there is now a considerable amount of legislation regulating investments in commercial exploitation of the marshlands.⁶⁴ Rather, the purpose of this study is to see what lessons can be learned from these experiences so that future investments can be made that will contribute more to sustainable and evenly distributed development. The focus is on aspects that are not covered by existing legislation.

⁶⁴ Moreover, there are also a number of regulations protecting the environment and thus controlling investments to a certain extent.

The facts

Domestic sugar production in Rwanda had come to a standstill in 1997. The only sugar mill of significance, the Kabuye Sugar Works, was run down and inoperable. The government managed to find an investor, the Madhvani Group, which was ready to believe in Rwanda's stability and in the business opportunities of its markets, and which agreed to buy, restore, and upgrade the mill. Given that a sugar mill must be fed with cane grown in the immediate surroundings, large portions of marshlands in the Nyacyonga and Nyabarongo river valleys were given in lease to Madhvani.

The bulk of this land, while it was formally State property, had been used for generations by local communities. The livelihood of most members of these communities depended to a great extent on marshland cultivation. No direct compensation was paid to those who lost access and, thus, the ability to farm in the marshes. The thinking, at the time, was that these communities would benefit from the transfer of the land, because their members would be paid for working for Madhvani as labourers, rather than having to continue with subsistence farming.

Thirteen years later, the results are disappointing. A relatively small, but significant, portion of the local population has been able to benefit from the situation. The outgrowers quickly understood the new reality and rapidly switched to sugar cane production, which in some cases required a sizeable investment. Yet the majority, which is made up of those who have no alternative but to labour for Madhvani or for the outgrowers, feels impoverished.

Policy implications

As suggested, policy-makers would do well to consider what market conditions an investment will create. It is not desirable that the investment process is designed in such a way that a significant portion of the directly affected population, with no other option but to work as labourers, becomes fully dependent on the investor for their livelihoods. In order to benefit, i.e. to be able to improve their socio-economic situation, they must have some rights to bargain with.

Under current law an environmental impact assessment must be conducted as part of the evaluation of an investment proposal. In practice, potential investors are also asked to negotiate with affected community members before the authorities give approval. It appears advisable to formalize and expand this process. The drafting of a new law determining the use and management of marshlands and of a ministerial order on review and approval procedures for marshland management agreements provides a good occasion to do so.⁶⁵

This means that conducting a socio-economic impact assessment would become an established requirement in the process of allocating a lease to an investor, and that some procedures should be put in place regulating the negotiations between the community and the investor. The objective should be to ensure that community members are not adversely affected, or that they are properly compensated, and preferably the procedures would provide for the possibility of having civil society organizations assist the community in the negotiation process. There are good arguments, also, to go further than obliging the investor to negotiate with those affected. The results of the negotiations should be incorporated into the investment agreement reached with the Government. In circumstances such as those described here, it would make sense, for example, to include a provision on the minimum wage to be paid to labourers, a prohibition on employing minors, and an obligation to help outgrowers obtain credits for investments (in this case, by certifying to the bank that over the next 18 months the firm would buy the outgrowers' harvest).

More generally, it seems advisable to involve local community members as active agents in commercial exploitation, rather than reducing them to the status of passive labourers. The outgrowers in the Nyacyonga and Nyabarongo valleys possess useful local knowledge on planting in the marshlands, they achieve higher production levels, and on average they pay their labourers 40% more than Madhvani. Giving them formal rights would improve their bargaining position vis-à-vis the mill owner. Creating such formal rights is essential, also, if less advantaged community members are to be stimulated to emulate the outgrowers.

⁶⁵ See Section 3.

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This report is part of a wider initiative on Commercial Pressures on Land (CPL). If you would like further information on the initiative and on the collaborating partners, please contact the Secretariat of the International Land Coalition or visit www.landcoalition.org/cpl

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