

WHO IS BENEFITTING?

The social and economic impact of three large-scale land investments in Sierra Leone: a cost-benefit analysis

JULY 2013

Abbreviations

Abbreviation		N 4) A (
AC	acre	MW
AfDB	African Development Bank	NBSAP
AFLUA	Affected Land Users Association(s)	NEPAD
AGEH	Association for Development	NGO
	Cooperation (Germany)	NRA
ALLAT	Action for Large-scale Land	PC
	Acquisition Transparency (Sierra Leone)	RACAP
AOG	Addax & Oryx Group	
APC	All People's Congress	RSPO
BFA	Bread For All, Development Service of the	SAC
	Protestant Churches in Switzerland	SCP
BIO	Belgian Development Bank	SilNoRF
BKM	Bureh Kasseh Maconteh Chiefdom (Port Loko	SLA
	District, Sierra Leone)	SLIEPA
CA	Christian Aid (United Kingdom)	
CAADP	Comprehensive Africa Agricultural	SSS
	Development Programme	Swedfund
CFSVA	Comprehensive Food Security and Vulnerability	UNCTAD
	Analysis	
CORDAID	Catholic Organisation for Relief and	UNDP
00112/112	Development Aid, The Netherlands	UNICEF
CPO	crude palm oil	UPHR
CSR	corporate social responsibility	01111
DEG	German Investment Corporation	USD
DFID	Department for International	WFP
DHD	Development (UK)	WHH
EAIF	Emerging Africa Infrastructure Fund (UK)	WHT
EED	Evangelischer Entwicklungdienst (Germany)	VVIII
EIA	environmental, social and health impact	
LIA	assessment	
EPA	Environmental Protection Agency (Sierra Leone)	Ackno
FAO	Food and Agriculture Organisation of the United	T I.:
FAU	0	This rep
	Nations	Transpa
FDP	Farmer Development Programme	Organiz
FEWSNET	Famine Early Warning System Net	the Cath
FFB	fresh fruit bunch	
FIAS	Foreign Investment Advisory Service (World	The Net
5140	Bank Group)	Churche
FMO	Netherlands Development Finance Corporation	Leone N
GDP	gross domestic product	Action F
GoSL	government of Sierra Leone	
GST	General Sales Tax	Rights (l
ha	hectare(s)	
ICCO	Interchurch Organization for Development	The rep
	Cooperation (The Netherlands)	underta
IDC	South African Industrial Development	
	Corporation	Schäfter
IFAD	International Fund for Agricultural Development	for Deve
IFPRI	International Food Policy Research Institute	expertis
IMF	International Monetary Fund	The dire
ITC	International Trade Centre	the inve
JSS	junior secondary school	
km	kilometre(s)	Jibao d
Le	Leone(s), Sierra Leone currency	breaks g
MAFFS	Ministry of Agriculture, Forestry and Food	to resea
	Security	
MALOA	Malen Affected Land Owners Association	organis
MOU	Memorandum of Understanding	Emman
MP	Member of Parliament	people
		contribu

megawatt National Biodiversity Strategy and Action Plan New Partnership for Africa's Development non-governmental organisation National Revenue Authority paramount chief Rural Agency for Community Action Programme (Pujehun, Sierra Leone) Roundtable on Responsible Palm Oil Socfin Agricultural Company (SL) Limited Smallholder Commercialization Programme Sierra Leone Network on the Right to Food Sierra Leone Agriculture Limited Sierra Leone Investment and Export **Promotion Agency** senior secondary school wedfund Swedish Development Finance Institution INCTAD United Nations Conference on Trade and Development United Nations Development Programme United Nations Children's Fund United for the Protection of Human Rights (Sierra Leone) United States dollar(s) World Food Programme Deutsche Welthungerhilfe

T withholding tax

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EXECUTIVE SUMMARY

An agrarian revolution is unfolding in Sierra Leone, but it is not driven by the country's farmers. It is estimated that since 2009 more than a fifth of the country's arable land has been leased to mostly foreign companies for industrial-scale agriculture.

The largest land acquisitions are slated for plantations of oil palm and sugarcane (for ethanol production), although some for rubber and rice are in the works.

Sierra Leone is still struggling to rebuild after an 11-year civil war, which was fuelled by 'blood diamonds' and rooted in inequitable distribution and irrational exploitation of resources.¹ Even a decade after peace was restored, the country still ranks near the bottom of the United Nation's Human Development Index, with high levels of poverty and food insecurity.

This rapid and large-scale takeover of farmland is happening in a country where the majority of the population are smallholder farmers and vast swathes of its territory have been leased out for mining and mineral exploration. Despite claims that just 11-15 per cent of the country's arable land is being 'used' and that there is plenty of extra land available for foreign investors, there is, in fact, already pressure for arable land in Sierra Leone and 'there is no idle productive land that could easily be made available for commercial investment under the current patterns of smallholder upland cultivation and fallow rotation'.²

In view of this, surprisingly little attention has been paid to the potential risks that this rapid and top-down agrarian reform could pose for poverty, food security, rural livelihoods, social cohesion and peace. Nor has there been much consideration of the real costs and benefits of the land deals to local people, the environment and domestic revenue generation.

This report documents the findings of three studies, undertaken in late 2012, which focus

on three aspects of large-scale land acquisition in Sierra Leone, namely social and economic impacts, domestic revenue impacts, and the quality of environmental, social and health impact assessments (EIAs).

1. SOCIAL AND ECONOMIC IMPACTS

This study examined the social, economic, nutritional, health and environmental costs and benefits to communities and individual households in and around lease areas of three large agricultural investors:

- Addax Bioenergy (SL) Limited, lease of 44,000 hectares, sugarcane for ethanol, Tonkolili and Bombali districts
- Sierra Leone Agriculture Limited (SLA), lease of 41,582 hectares, oil palm, Port Loko District
- Socfin Agricultural Company (SL) Limited (SAC), lease of 16,248.54 acres or 6,500 hectares, oil palm, Pujehun District.³

There has been a tendency among proponents of large-scale farmland investments to overlook the full range of resources that rural communities lose when they sign away their land. Investors and the government of Sierra Leone (GoSL) appear not to fully appreciate the value to rural communities of agro-biodiversity and local biodiverse resources found on and around rural farms, the importance of fish, bush meat (game), domestic livestock and poultry, or the wealth of plant genetic resources on which farm families – especially women – depend.⁴

For the people of rural Sierra Leone, land is their most valuable possession and resource. Family farms are extremely diverse and complex mosaics of land types, including upland farms, 'bolilands' (lowland depressions that flood each year), swamps, tree-crop plantations, fallow bush areas, backyard If investors were obliged to pay the real productive value of trees they fell and cropland they occupy with their plantations, some of the real costs of such land deals would be shifted from the local people to the investors.

gardens and 'battilands' (lowlands and riverine grasslands). While there is regional variation, most smallholders depend heavily on the remarkable diversity of crops they cultivate on upland farms, including rice (the staple) and other cereals, legumes, tubers, oil seeds, vegetables, fruits and some medicinal plants and trees. They also rely on fallow bush areas for a wide range of foods, household needs and items to sell, including bush meat, wild fruits, charcoal and firewood, herbal medicines, honey, construction materials and fibre. In some areas, tree-crop plantations are also an integral part of the smallholder farm, and these may include wild or planted oil palm and other cash crops such as coffee, cocoa, and kola nuts along with a wide range of edible products from wild trees that help ensure nutritional security and self-sufficiency and often provide income as well.

The results of this research indicate that it is precisely these components of the farming system - the upland farms, fallow bush areas and tree-crop plantations - that are lost as investors clear land for industrial monoculture plantations. With less access to the full range of land types and crops, including proteins as well as mineral- and vitamin-rich fruits and vegetables, food and nutritional security in the sampled communities on the three leases have been negatively affected. This also has very serious impacts on family livelihoods.

The negative ramifications of the loss of farm produce, resources collected from wild plants and the income they generate are numerous and deemed by some in the communities as 'very serious'. Respondents on all three leases reported increased levels of poverty, poorer and fewer meals eaten each day, children (especially those in junior secondary schools, and girls more than boys) being taken out of school, increased incidences of social ills such as teenage pregnancy, broken marriages and theft, heightened levels of tension, cultural dislocation and a breakdown of traditional social structures, such as male, female, mixed and youth farming and savings groups that contributed to social cohesion and community welfare. There was consensus that they had agreed to the deals because of promises of many benefits and development, and that only a few community members - large landowners that received surface rents and those with jobs - had seen any real benefits.

Corporate social responsibility (CSR) is voluntary, so CSR budgets can include questionable expenditures that do not benefit local people who have given up their land, and also ill-conceived projects that are purely cosmetic. Even where an investor has a sophisticated and extensive programme designed to mitigate the loss of cropland, such as Addax Bioenergy's Farmer Development Programme that involves farmer training and ploughing community plots for three years and providing inputs of seed rice and fertilizer for communities, and has resulted in an increase in rice yields in the Addax Bioenergy project area, it cannot begin to compensate for or replace the full range of products, produce and income that the land once provided to local people. Addax Bioenergy claims that rice yields in 2012 in the project area were three times higher than before the programme started, but respondents in this study were very critical of the programme, which they did not feel benefited them.

Investors and governments often highlight jobs as one of the main benefits of such large-scale

Respondents said they were now struggling to purchase food or even going without the food they once produced for themselves.

agricultural investments. Respondents in the sampled communities, including some that worked for the investors, did not feel that the wages paid to labourers (averaging between US\$2 and \$3 a day on the three leases) were high enough to compensate them for lost land and the revenue and food it had provided. While food prices have been rising in Sierra Leone in recent years, there was a perception, backed up by informal market surveys, that food prices in the lease areas were also being pushed up by the presence of wage labourers and shortages of produce. Respondents said they were now struggling to purchase food or even going without the food they once produced for themselves. There is a need for further research to calculate the number of informal jobs lost in the farming sector compared with the number created on the industrial plantations.

The GoSL has no national and binding list of compensation rates that should be paid for the full range of lost crops, trees and other agricultural assets, which would take into account the productive potential value of these. *If investors were obliged to pay the real productive value of trees they fell and cropland they occupy with their plantations, some of the real costs of such land deals would be shifted from the local people to the investors.*

The same is true of the value of the land being leased. There is no standardised and mandatory surface rent per hectare or formula for its payment that would ensure that non-landowners, particularly women, who do much of the farming in Sierra Leone and rarely own land, receive any compensation for lost farms and agricultural assets. It is often difficult for communities and companies to foresee or fully appreciate the outcomes of land use changes, suggesting a weakness in the impact assessment process, which is not examining and exposing all the possible outcomes and risks associated with land conversion to industrial plantations, and as a consequence these are not being communicated to local communities. The consensus of all focus groups in communities sampled on the three lease areas was that the costs of the investors' operations outweighed the benefits and that life in the communities had become 'worse' since the investors arrived.

2. DOMESTIC REVENUE IMPACT

The Sierra Leone government has so far continued to endorse large-scale agricultural investment, along with smallholder commercialisation, as a key driver of the economy. It has in recent years introduced a range of tax incentives for investors in the agriculture, mining, manufacturing, tourism and infrastructure sectors to attract foreign direct investment into the country. It has recently approved a 'special set of incentives for qualified agribusiness investors', which include complete exemptions on corporate income tax and import duties for up to 10 years. The government has negotiated these special tax deals despite evidence showing that tax incentives are rarely needed to attract investment - and that tax holidays are the least desirable form of such incentives.

Based on the information available, our calculations show that an estimated **US\$188.1 million** or **US\$18.8 million a year on average** over a 10-year period in tax revenue will be foregone by the government as a result of special tax deals with Addax Bioenergy, SAC and Goldtree Ltd.ⁱⁱ

"These figures are disputed by Addax Bioenergy. Its position is that these calculations ignore the realities of investment in countries such as Sierra Leone and the delay in return on investment. If these three companies were to pay standard tax rates and if the government spent just half of this additional tax income – US\$9.4 million – on agriculture development, it could contribute considerably to food security and farmer welfare. For example, the additional income would have allowed the government to more than triple the 2012 budget for food security. Alternatively, it could have increased the 2012 extension budget 13-fold or the agricultural research budget more than five-fold.

3. ENVIRONMENTAL, SOCIAL AND HEALTH IMPACT ASSESSMENTS

The findings of this study show that environmental, social and health impact assessments (EIAs), mandatory for large agricultural investments, do acknowledge some of the environmental, social and health risks of large-scale industrial plantations that supplant smallholder farming. But there are gaps in the EIAs; while they attempt to meet the basic requirements outlined in the Environmental Protection Act 2008, they are not rigorous enough in providing information on their potential impact. For instance, they fail to take into account the crucial importance of agro-biodiversity for local populations and their impact on biodiversity, or to examine the full range of uses of the land and water resources that are affected by the plantations. Furthermore, recommendations made in the EIAs for mitigating risks and negative environmental, social and health impacts are hardly monitored, even where they are binding. The Environmental Protection Agency (EPA) in Sierra Leone should therefore develop guidelines to elaborate the Environmental Protection Act. In the absence of these guidelines, companies should produce EIAs that take into account both the Environmental Protection Act and the EIA best practice guidelines of the United Nations Food and Agriculture Organisation (FAO) for agricultural projects.

RECOMMENDATIONS

Government of Sierra Leone

- undertake a nationwide land-use survey, including assessment of actual total output (of foods, materials, medicines) per hectare
- 2 undertake a nationwide inventory of plant genetic resources and their multiple uses and value to human populations and ecosystems
- 3 develop a binding regulatory framework for foreign investment in farmland that emphasises protection of local people and the environment and limits its size
- 4 develop a binding national compensation list for all crops, trees and important resources based on the *real* value of each over its productive lifespan
- 5 develop a publicly available cadastre system that shows details of all existing large land leases
- 6 establish an independent watchdog monitoring agency for investment on all land leases larger than 1,000 hectares or build capacity of the Environmental Protection Agency as an independent agency to monitor and enforce all elements of EIAs
- 7 ensure all leases and Memorandums of Understanding (MOUs) for land deals ≥ 1,000 hectares go to Parliament for approval
- 8 review existing land leases and MOUs, revoke all, or all clauses within them, that are not in the social, economic and environmental interest of affected communities
- 9 strengthen the impact assessment process and research undertaken before such projects are approved or can begin, to ensure that all possible outcomes of such land conversion are examined and exposed, and that these are fully communicated to local communities
- 10 until all of the above has been done, put an immediate moratorium on large-scale investment in farmland in Sierra Leone
- 11 urgently review tax policy in the agriculture sector with a view to significantly reducing tax incentives

The Environmental Protection Agency in Sierra Leone should develop guidelines to elaborate the Environmental Protection Act.

- 12 stop providing special tax deals signed with individual companies that go beyond general incentives provided to the agriculture sector - all companies must operate on a level playing field
- 13 devise a strategy for using increased tax revenues to invest in food security and smallholder agricultural development
- 14 ensure that the Environmental Protection Agency (EPA) scrupulously assesses EIAs to meet the standards set in the Environmental Protection Act
- 15 ensure that the EPA establishes guidelines (as is already the case for the extractive industry) to assist companies to improve on their environmental standards.

Development finance institutions

- 1 support the 'Country by Country' reporting initiative⁵ and finance only those companies / corporations involved in large land acquisitions that have complied with it
- 2 seek expertise from scientists, biodiversity and agro-ecology specialists who can offer a broad cost-benefit analysis framework for sustainable land use, and involve civil society and international smallholder farmer associations in assessments
- 3 demand full disclosure from the investor, local authorities and national authorities on what benefits (revenue, taxes, development) will accrue in the country
- 4 decline to finance any investment that will convert more than 1,000 hectares of land into industrial monoculture and that is not for food production for domestic consumption.

Investors

- 1 ensure complete respect for all the rights of rural communities to land, food and nutritional security
- 2 engage experts to educate management and staff about the value of agro-biodiversity
- 3 ensure that company agents or representatives do not exaggerate the likely benefits and promises, however well intentioned
- 4 fully disclose the costs and risks of projects

- 5 as far as possible, do not allow traditional or any other authorities to coerce or intimidate local communities on behalf of the company
- 6 respect the principle of free, prior and informed consent during negotiations
- 7 ensure that proper EIAs are conducted in line with the Environmental Protection Act and FAO guidelines, and that they include specific information on chemical and water use, impact on community access to water and water quality, and biodiversity.

NGOs / donor agencies / civil society

- 1 mobilise support to provide legal assistance for affected communities
- 2 support affected communities in developing their national network (ALLAT) for advocating for land user rights, the right to food and nutritional security, linking them to international groups and advocacy campaigns
- 3 support local groups (civil society, NGOs, communities, media) to undertake information gathering and dissemination activities on the issue to sensitise the communities / national population on the potential costs and benefits of such foreign investment
- 4 advocate for sustainable agricultural policies at international and national level
- 5 support alternatives to large-scale investments in Sierra Leone.

Ensure complete respect for all the rights of rural communities to land, food and nutritional security.

Young SAC oil palm plantation, with Sahn Malen in the distance. Photo: Joan Baxter

1. INTRODUCTION

In response to the triple global crises of recent years – food, financial and fuel – many investors around the world have been setting their sights on arable land. While the recent land rush is a global phenomenon, it is estimated that more than 70 per cent of the demand by investors for farmland has been in Africa.⁶ The lack of transparency in many of the land deals has hampered efforts to document the extent of the recent land rush on the continent, but it is estimated that 700 recent land deals involve 50 million hectares of fertile land in Africa, and two-thirds of the investors plan to export all that is produced on the land, much of it being raw stock for biofuels.⁷

The investors include global commodity companies and their subsidiaries, investment funds (sovereign wealth, pension, hedge and private equity), individual speculators and governments. Farmland is being seen as a new and highly profitable asset class that can give higher returns than more traditional investments.⁸

The large scale of these investments and their impact on local livelihoods and the environment are likely to lead to radical and rapid social and economic transformation in rural areas across many African countries. As a result, they have sparked a polarised debate at global level.

Critics of the phenomenon,⁹ which they term 'land grabbing', argue that the land acquisitions are being shaped by failures of democratic, land and economic governance. Numerous studies have shown that the land deals are being negotiated in a context of low transparency and accountability, which increases the potential for corruption, and also in the absence of public debate or even awareness of the issue in countries where large tracts of farmland have been acquired by foreign investments.¹⁰ Affected people and communities are denied the right to information and to free, prior and informed consent.¹¹

On the other hand, some African governments, donors, development banks and United Nations organisations are framing this form of agricultural investment as a 'win-win' opportunity for both investors and host countries if handled correctly.¹² The argument is that the large-scale investments for industrial plantations contribute capital, technology and access to global markets, creating employment and imparting skills to the investment-starved agricultural and rural sectors of African economies. These investments, argue their proponents, will raise the level of economic activity in the agricultural sector, which, according to the World Bank, is twice as likely to reduce poverty than any other sector.¹³ This belief is clearly captured in the World Bank's principles for responsible agricultural investment that respects rights, livelihoods and resources: 'If done well, resource-intensive agroinvestments can generate new and higher paying jobs, upgrade the skills of the labour force, facilitate technology transfer, open new and better markets, and generate complementary infrastructure.'14

At the same time, there is widespread agreement that investment in the small-scale farming sector will make the most significant contribution to poverty reduction and sustainable and equitable food production.¹⁵ The smallholder agricultural sector is the most threatened by climate change, while also being the one best able to mitigate its ravages.¹⁶ Massive public investment in assets such as schools and health facilities would also be required in order to make rural areas more attractive and stem the flow of young people to urban areas.

Despite the high-level rhetorical commitment to small-scale family farming and rural development, and elaborate and expensive commercialisation programmes for smallholders funded by donors, national agricultural policies that are often informed by the Comprehensive Africa Agricultural Development Programme (CAADP) of the New Partnership for Africa's Development (NEPAD) framework tend to view traditional small-scale farmers as an obstacle to the development of a 'modern' agricultural sector. These policies tend to favour large-scale industrial agriculture and are especially keen to attract foreign investment into this sector.

So far, little substantial research has been conducted on the short- and medium-term poverty impact of this very rapid top-down agrarian reform that is taking place across Africa. Most research has focused on describing the problematic terms and processes of land acquisitions, analysing the drivers of the deals and the immediate effects on some of the communities affected by land losses, such as displacement, lack of compensation, and so on.

This study aims to examine, in the context of Sierra Leone, some of the existing arguments as laid out above, and some of the costs and benefits of largescale land investments in the country. It focuses on three aspects of large-scale land acquisition in Sierra Leone.

1. SOCIAL AND ECONOMIC IMPACTS, including

costs and benefits (social, economic, nutritional, health, environmental) on communities and households in and around lease areas of three large agricultural investors:

- Addax Bioenergy (SL) Limited
- Socfin Agricultural Company (SL) Limited (SAC)
- Sierra Leone Agriculture Limited (SLA)

The three companies have different leases, structures, engagement processes and approaches to development. It is beyond the scope of this study to examine those differences in detail, but it should be noted that Addax Bioenergy, receiving public financing, has been most closely monitored for compliance with international standards and has a more sophisticated and transparent programme for corporate social responsibility.

2. DOMESTIC REVENUE IMPACT in terms of revenue for the government of Sierra Leone (GoSL) from three selected large-scale agricultural investments: Addax Bioenergy (SL) Limited, SAC (SL) Ltd, and Goldtree Ltd.

3. ENVIRONMENTAL, SOCIAL AND HEALTH IMPACT ASSESSMENTS (EIAS) for each of these three investments and how well they predicted these impacts.

The report begins with an overview of Sierra Leone and the context for the land acquisitions. It then provides the main findings and the analysis of the desk study and field research to highlight the major social and economic impacts of the land investments, as well as an analysis of the EIAs and an assessment of real revenue accrued by the GoSL from three selected investments. It concludes with recommendations intended to inform policy makers and advocacy messages, both in Sierra Leone and internationally.

2. SIERRA LEONE: BACKGROUND AND CONTEXT

In recent years, Sierra Leone has seen very rapid expansion of foreign direct investment in its infrastructure, agricultural and rich mineral sectors and rosy forecasts for growth in its gross domestic product (GDP).¹⁷

Nevertheless, the west African country still ranks among the world's least developed countries, at 180th of 187 nations on the 2011 United Nations Human Development Index.¹⁸ More than a decade since peace was restored after an 11-year civil war fuelled by 'blood diamonds' that decimated the country, Sierra Leone is still struggling to address the root causes of the conflict and overcome the negative legacy that has kept development indicators in the country below the average for sub-Sahara Africa. Life expectancy at birth is 47.8 years, under-5 mortality is one of the highest in the world at 192 per 1,000 live births, and adult literacy is about 41 per cent.¹⁹ About 70 per cent of its population of about 5.5 million²⁰ falls below the national poverty line of US\$2 a day.²¹ Roughly half of all Sierra Leoneans are under the age of 18 and population growth is estimated at 2.5 per cent.

Sierra Leone is one of the smallest countries on the African continent, with a total area of just 71,740 square kilometres (7,174,000 hectares (or ha)), just slightly larger than Ireland.²² Of that, an estimated 5.4 million ha are considered arable. Rural areas in the country and its economy are dominated by smallholder agriculture. For nearly half of working age Sierra Leoneans, family farming is a way of life and their main livelihood. Agriculture, most of it smallholder, accounts for nearly 52 per cent of the country's GDP.23 During the 1970s and 1980s, the country was 80-90 per cent self-sufficient in grain production, primarily in the staple rice.²⁴ Agricultural production plummeted during the war, but has been rising steadily in the past decade. However, Sierra Leone still remains a country plagued by food insecurity and malnutrition, largely due to poverty.25

2.1 Agriculture as the economic driver

Solving the acute problems of poverty and youth unemployment are immense challenges for the government of Sierra Leone, led by President Ernest Bai Koroma of the All People's Congress (APC) party. President Koroma was re-elected for a second term in November 2012, the third successful poll since the war ended. In his first term in office from 2007 to 2012, President Koroma's 'Agenda for Change' designated agriculture as the main economic engine to combat poverty and unemployment.

The government's flagship initiative in this direction is the four-year and US\$400 million Smallholder Commercialization Programme (SCP).²⁶ Run by the Ministry of Agriculture, Forestry and Food Security (MAFFS), the SCP aims to promote 'farming as a business' by focusing on value chains for a small number of commodity and cash crops, on value adding and on increasing agricultural production through intensification and mechanisation.²⁷ Implicit in the campaign to promote commercial agriculture is the idea that family farming is inefficient and unproductive, as illustrated by the images on the SCP promotional posters.



Photo: Joan Baxter

At the same time, the government has been very active in promoting large-scale foreign investment in arable land in the country. President Koroma has publicly endorsed the investments by Addax Bioenergy of the Swiss Addax & Oryx Group, the Indian conglomerate SIVA Group, and Socfin, a subsidiary of a Luxembourg-registered Belgian conglomerate.²⁸

The Sierra Leone Investment and Export Promotion Agency (SLIEPA) has been spearheading the drive for foreign direct investment in farmland. Established in 2007 by an Act of Parliament, and under the jurisdiction of the Ministry of Trade, SLIEPA has been supported in the past by the World Bank and its Foreign Investment Advisory Service (FIAS), the UK Department for International Development (DFID), the International Trade Centre (ITC),²⁹ and the European Union.³⁰

Similar to investment promotion agencies in other African countries, SLIEPA advertises extremely generous fiscal incentives to attract large-scale investors to the country. These include exemptions from import duties on agricultural equipment, machinery, agro-chemicals and other inputs, corporate tax holidays, complete foreign ownership and full repatriation of profits.³¹ SLIEPA also offers investors guidance on where they can go in the country to find large land holdings suitable for oil palm and sugarcane plantations and on how to lease the land. While it stipulates that investors 'secure the free, prior, informed consent of affected communities, not limited to only Chiefs and other representatives',³² studies have alleged that these guidelines are not always being fully respected because women and land-users were not fully involved in consultations and not necessarily aware of what decisions had been made, and because they are land-users and not considered 'landowners' did not have any say in those decisions that so affect them.33

Many of the land deals are opaque, involving companies apparently formed specifically for land leases³⁴ or Sierra Leonean subsidiaries of complex webs of parent companies registered in tax havens such as Luxembourg, Cayman Islands and Singapore. The lack of transparency raises serious concerns about the possibility of corruption in the land deals,³⁵ especially given Sierra Leone's designation by Transparency International as a 'highly corrupt' country.³⁶ It also makes it difficult to gauge exactly how much agricultural land has been leased in the country. However, piecing together information from land leases that have been registered with the Administrator and Registrar General, from interviews, media reports and company announcements, and from independent research in the provinces, it was estimated that between 2009 and the end of 2012, foreign investors had taken out or were set to take out long leases (50 years with possible extensions) on at least **1,154,777 ha, about 21.4 per cent of the country's total arable land** for large-scale industrial agriculture.

Two districts appear to have been particularly affected by the land deals, where large percentages of the land mass are under long-term agricultural leases:

- Port Loko: 231,326 ha (40 per cent of total area of 571,900 ha) in seven of 11 chiefdoms
- Pujehun: 246,923 ha (60.15 per cent of total area of 410,500 ha) in eight of 12 chiefdoms

These figures must be considered in the Sierra Leonean context, that of a small and very mineralrich country in which vast parts of its territory have also been leased out for mining exploration and exploitation, and where mining operations are expanding rapidly.

2.2 Land laws, policies and availability

With more than a fifth of Sierra Leone's farmland already signed over to foreign investors for the next three or four generations, some MAFFS officials,³⁷ speaking with candour, say they are becoming concerned about the deals and the fate of the countless farmers in the country whom, paradoxically, MAFFS is working to support with the SCP.

According to existing land laws in Sierra Leone, specifically CAP 122 of the 1927 Protectorate Land Act, land cannot be bought or sold in the provinces (outside the Western Peninsula where Freetown is located). It is viewed as a communal good, the custodians of which are the paramount chiefs, and it is 'owned' by families with usufruct rights, who have inherited the land from their forefathers. While there have been calls for law reforms that would give women and young people more secure access to land, an ongoing land reform process seems designed to increase access to land by large-scale investors.³⁸

A new draft land policy for Sierra Leone has been developed, which presents a wide range of criteria that foreign investors should meet.³⁹ However, it does not say how these are to be monitored and enforced, or by whom. Others have expressed concern that the draft policy fails to ensure that land investment supports local communities or to enshrine and protect the right to land for women farmers, who undertake 75-80 per cent of the farming in the country.⁴⁰

Current land laws state that land leases cannot exceed 50 years, with possible extensions of 21 years.⁴¹ Some foreign investors have signed agreements that give them multiple renewal options (for two 21-year terms and then an additional seven years) that would extend their leases to 99 years.⁴² The land lease signed by MAFFS for land in Malen Chiefdom, and then subleased to Socfin Agricultural Company, appears not to comply with the country's land law by providing a renewal option not for 21 years but for two periods of 25 years.⁴³

A Bioenergy and Food Security Working Group is currently drafting a set of 'quidelines for sustainable bioenergy investment' for Sierra Leone,⁴⁴ but there is no indication that these will be binding. At present, there is no regulatory framework in place to govern large-scale land acquisitions, which could limit their area and duration, or ensure that Sierra Leoneans could revisit the agreements in the future if their impacts are found to be too negative.⁴⁵ The Memorandum of Understanding (MOU) between the GoSL and Addax Bioenergy, for example, has a stabilisation clause that states that Addax Bioenergy shall be exempt from any law that comes into effect, or is amended, modified, repealed, withdrawn or replaced, which has a material adverse effect on Addax Bioenergy (or its contractors or shareholders).⁴⁶ Further, Clause 7 in the MOU that 'applies to any claim, dispute or difference of any kind between the parties arising out of or in connection with this Memorandum (a Dispute)', says that any dispute arising 'shall be

"Addax Bioenergy contests the findings of this survey.

referred to and finally resolved by arbitration in London before three arbitrators under the Rules of Arbitration of the International Chamber of Commerce from time to time in force^{'47} and not in Sierra Leone. An identical clause (5.2) exists in the sub-lease between MAFFS and SAC for the land in Malen Chiefdom.⁴⁸

SLIEPA and other government bodies and officials, including the Minister of Agriculture,⁴⁹ promote large-scale investment in land on the assumption that there are vast reserves of arable land in Sierra Leone and that only 11 to 15 per cent of the country is 'cultivated', with the rest presumably 'unused' or 'under-used'.

A 2011 study of rural finance commissioned by the Bank of Sierra Leone and the German Ministry of Economic Cooperation and Development, has shown that the notion promulgated by SLIEPA and many government officials that there are vast areas of unused land in Sierra Leone is a misconception.^{III} The prevalent farming system in the country uses bush fallows (commonly known as 'farm-bush' or 'bush') to restore soil fertility to fields on upland sites. Ideally, these should be left fallow for 20 to 25 years to restore full soil fertility, during which time they still provide numerous valuable plant and animal resources to rural communities. However, already in 1979, the average fallow period had been shortened to 15.4 years.

Some foreign investors have signed agreements that give them multiple renewal options (for two 21-year terms and then an additional seven years) that would extend their leases to 99 years. By 1996, the fallow period was down to about 10 years.⁵⁰ A 2004 survey showed that in most districts (see Table 1), the area of cropped land already accounted for nearly 2 million ha, or 37 per cent of the 5.4 million hectares of arable land in the country. Fallow periods had been reduced still further to an average of 4.7 years,⁵¹ far short of what is required, which suggests that there is already increasing pressure for limited land reserves.

Table 1. Cultivated land in Sierra Leone in 2004^{52}

Crops	Hectares	%
Upland and inland swamp rice	609,707.6	30.5%
Coffee	344,548.0	17.3%
Cassava	254,410.0	12.7%
Oil palm	232,012.0	11.6%
Сосоа	148,665.2	7.4%
Groundnuts	131,037.6	6.6%
Sweet potatoes	89,719.2	4.5%
Vegetables	73,570.0	3.7%
Maize	60,238.0	3.0%
Citrus	51,922.8	2.6%
Total	1,995,830.4	100%

Based on these findings, the 2011 study states, '... there is no idle productive land that could easily be made available for commercial investment under the current patterns of smallholder upland cultivation and fallow rotation. Smallholder commercialization via the transition to sedentary (stationary) farming and agro-forestry, therefore, is an essential prerequisite to ceding large tracts of land to commercial investments. Otherwise, a major conflict over land for subsistence food production is pre-programmed.'⁵³ It concludes, '... under the present cropping system, **there is no remaining potential to significantly enlarge the area under cultivation** anywhere in Sierra Leone' [emphasis in the original report].⁵⁴

2.3 A complex and diverse land-use and farming system

The pervasive myth being propagated about vast unused land reserves may stem from a lack of knowledge of the complexity or acknowledgement of the productive potential of smallholder farming and land use in Sierra Leone. It also fails to take into account the resilience of such farming systems.⁵⁵

An average farm family in Sierra Leone works 2.74 ha, and there is great regional variation. But those farms are not uniform in composition nor are they limited to the small area under permanent cultivation.⁵⁶ The typical smallholder in Sierra Leone draws on a diverse and complex combination of cultivation patterns, with backyard gardens, upland sites, inland valley swamps, tree-crop plantations or 'gardens' of permanent tree crops, lowlands or 'dry' bolilands that flood each year during the rainy season, and riverine grasslands known as 'wet bolilands' or 'battilands', as well as fallow bush or secondary forest areas.⁵⁷

The country's prevailing farming system is commonly referred to as 'slash-and-burn'⁵⁸ or 'shifting cultivation'. While farmers do slash and burn bush areas to clear upland farming sites, they are generally burning to clear their own bush fallows, not virgin forest. Primary forests now cover barely 5 per cent of the country⁵⁹ and most of that is in forest reserves. So farmers are not slashing, burning, cultivating and then shifting to a whole new area of forest. Rather, they are using fire to clear a small piece of bush that has been left to fallow, which they will cultivate as the upland site on the farm for two or three years. Wildfires that destroy large areas of bush and villages in Sierra Leone are often runaway blazes from fires set by farmers clearing fallows, honey gatherers, pastoralists, hunters or careless passers-by.

2.4 Differing approaches to agriculture and poverty reduction

A recent agricultural household survey in Sierra Leone illustrated the diversity of agriculture in Sierra Leone, where households cultivate not just a large number of different crops but also a range of different types of crops (cereals, tubers, legumes and tree crops).⁶⁰ In spite of this important diversity, donor agencies, MAFFS and the SCP tend to concentrate on just a handful of commodity crops for value-chain development and commercialisation of agriculture for development. However, just a decade ago, donor agencies were supporting the Sierra Leone government to develop a National Biodiversity Strategy and Action Plan (NBSAP), which emphasised the importance of biodiversity and particularly agricultural biodiversity on which 70 per cent of the population depends for a living, for food security and also poverty alleviation.⁶¹ Despite the importance of biodiversity, there are few sources available on the country's plant resources, and these are already out of date.⁶²

Agrobiodiversity or agricultural biodiversity in Sierra Leone involves well over 70 crop species, as well as many undomesticated plants and trees with products important in the diet - products which are found in tree-crop plantations, bush fallows and remnant forests. The most important perennial cash crops include oil palm (Elaeis guineensis), cocoa (Theobroma cacoa) and coffee (Coffea robusta), and MAFFS is now also promoting cashew production. Rice, both the Asian species (Oryza sativa) and the African one (Oryza glaberrima) and various combinations of the two, is the country's staple and has been cultivated in the region for thousands of years. Other major annual crops include cassava (Manihot esculenta), sorghum (Sorghum margaritiferun), maize (Zea nays), and sweet potato (Ipomea batata). Although livestock was decimated during the war, many rural households are trying to restock with domestic livestock, including (depending on the region) cattle, sheep, goats, pigs, rabbits, chickens, ducks, guinea fowl and pigeons.63

The 2003 NBSAP, which has not been implemented, made strong arguments for fighting poverty by cataloguing the country's remaining biodiversity and building on these resources. It has also been stated that, 'the irrational use of the environment and natural resources over the years has resulted in considerable environmental degradation. The exploitation of natural resources has not been effectively managed to the benefit of the country, its people, but has rather increased poverty.'⁶⁴

Bald and Schroeder identify 'bankable opportunities' for smallholders, which would involve 'better management of the farm as a diversified business with multiple income streams', and an 'overdue transition to a **sustainable sedentary farming approach**' involving 'long-term investment in improving soil fertility through introduction of organic matter and nitrogen fixating cover crops and hedge rows' and where suitable, agroforestry models.⁶⁵

A recent study by the Deutsche Bank notes that if agricultural growth is to boost food availability and incomes and generate demand for locally produced goods and services, it should include smallholders.⁶⁶ This can lead to sustainable rural development driven by smallholder farming. Large land deals, by contrast, lead to monocultures that are far less resistant to disease and crop failure. The same study notes that a further decrease in the diversity of crops, the inevitable result of industrial plantation agriculture favoured by large-scale foreign investors, increases the risks associated with loss of biodiversity and a reduced capacity for adapting to climate change. Additionally, it warns about investors' preference for commodity crops for export: 'Directing agriculture towards crops for export markets also increases the vulnerability of the host country to price shocks.'67

'Directing agriculture towards crops for export markets also increases the vulnerability of the host country to price shocks.'

2.5 The right to food, food security and sustainable agriculture

In recent years, some landmark studies have found that in the face of a growing global population and climate change with its threats to water resources and arable land, the only truly sustainable approach to land use and increased food production is 'agro-ecological' agriculture. Such farming produces more than just a handful of commodity crops, stresses agro-diversity and biodiversity, reduces chemical inputs, and performs a range of environmental services.⁶⁸ The FAO's new 'Save and Grow' agricultural paradigm for smallholder production emphasises conservation agriculture. According to the outgoing director general of the FAO, 'Economizing on agrochemicals and building healthy agro-ecosystems would enable low-income farm families in developing countries - some 2.5 billion people - to maximize yields and invest the savings in their health and education.'69

These, however, are the antithesis of the industrial agricultural model being encouraged by the GoSL, with its unwavering support for foreign direct investment in the country's farmland, much of which is for industrial monocultural plantations of oil palm and sugarcane [raw stocks for biofuels] and rubber - so not for food at all. Once an area has been cleared and planted as an industrial plantation, if it is determined that the costs outweigh the benefits, it will be too late to undo the damage done; local biodiversity will have been lost, a way of life will have been disrupted completely as will social norms and values, and local knowledge of soil, plants and farms may be lost forever. Concerns have also been raised about the disproportionate impact that such investments have on already marginalised groups, such as women and young people. ⁷⁰

There have already been early warning signs about the investments, which have sparked protests, strikes, confrontations and arrests.⁷¹ Also, there are ongoing efforts to develop a strong network of civil society organisations and land-user associations called Action for Large-scale Land Acquisition Transparency, or ALLAT, which could defend the rights of smallholders and landowners throughout Sierra Leone.⁷²

A recent European Union study on land investments notes that, '... the acquisition of land is currently happening much faster than policies to regulate land deals are adopted. Under current legal, political and institutional frameworks it is doubtful whether positive effects of large-scale land acquisitions can outweigh the negative ones.'⁷³ Some studies have shown that land deals in Sierra Leone do not measure up to the international corporate social responsibility (CSR) principles for responsible agricultural investment or voluntary guidelines on responsible governance of land or the right to food.⁷⁴

Food insecurity and malnutrition remain acute problems in Sierra Leone, despite a rapid expansion of rice-producing areas and agricultural production since the war. But no independent studies have yet been carried out on the effect that large-scale acquisition of farmland will have on livelihoods and food security in the country.⁷⁵ To date, no independent field studies have been carried out to assess the costs and benefits to local communities of this form of investment in Sierra Leone.

'Under current legal, political and institutional frameworks it is doubtful whether positive effects of large-scale land acquisitions can outweigh the negative ones.'

3. SCOPE AND FOCUS OF THE SOCIAL AND ECONOMIC STUDY

The aim of the field component of the study on the social and economic impacts was primarily to collect qualitative data, given the limited time frame and resources of the study, and where possible, to obtain some quantitative data not for statistical analysis but to highlight overall trends, assess real costs and benefits, and indicate areas of concern that merit further in-depth research.

The main areas of enquiry in this study included:

- changes in the livelihoods of land users / owners before and after an investment, with an assessment of economic, cultural and social use of land, income sources, consumption of local goods and services
- access to water, housing, health, education and other resources and services before and after an investor's operations began
- changes to social relations as a result of land investments (causes of conflict or tension within families and communities, between communities and the company, traditional leaders, government)
- cost-benefit analysis of the land deals based on the above
- analysis of the shortcomings of the existing social and environmental impact assessments of the three investments, how the companies, government and development finance institutions (if relevant) used these assessments, and how or to what extent they shaped project design.

The field component of the research on the social and economic impact of large-scale foreign investment in farmland was undertaken in October and November 2012 in the lease areas and districts where three large foreign investors have acquired large land holdings for industrial plantation agriculture. These were selected because they were large (over 5,000 ha) and their agricultural operations the most extensive in the country at the time the research was undertaken.

3.1 Methodology

Research was undertaken in three lease areas in 10 communities, divided among six chiefdoms in four districts and two provinces of Sierra Leone, as follows and in this order:

Socfin Agricultural Company (SL) Ltd (SAC) lease area (Pujehun District)

- Bassaleh / Banaleh,⁷⁶ Malen Chiefdom, Southern Province
- 2. Hongai, Malen Chiefdom
- 3. Kortumahun, Malen Chiefdom
- 4. Kassay, Malen Chiefdom

Addax Bioenergy lease area, Bombali and Tonkolili Districts, Northern Province

- 5. Wareh Yeama, Makari Gbanti Chiefdom
- 6. Ropotor, Bombali Sheborah Chiefdom
- 7. Mara, Malal Mara Chiefdom

Sierra Leone Agriculture (SLA) lease area, Port Loko District, Northern Province

- 8. Mayorsor, Bureh Kasseh Maconteh (BKM) Chiefdom
- 9. Bantoro, BKM Chiefdom
- 10. Romene, BKM Chiefdom

Focus group discussions were held in all 10 communities, but the one in Romene was not included in the analysis because several members left midway through as a result of interference from a section chief. So analysis is based on nine focus groups, in which 84 individuals participated, with 38 women and 46 men, of whom 80 were married, three were single and one was widowed. They ranged in age from 17 to 90 years, with an average age of 46. Eight of the 10 focus group discussions were included in the cost-benefit (before/after) analysis, as one (Bassaleh) is still resisting inclusion in the SAC lease, and in another (Romene, SLA lease), the results of the focus group discussion were discounted after several members of the focus group left when the town chief joined in.

The research team undertook semi-structured interviews with individuals (seven men and seven women) in each community where time permitted, for a total of 14. The field research was taken in the pre-electoral period in November 2012, which meant the research team had to juggle community visits around campaign days for the major parties. As a result, six individual interviews (three men, three women) were undertaken in communities in the SAC lease area, four (two men, two women) were undertaken in the Addax Bioenergy area and four (one men and three women) in the SLA lease area. However, two of the individual interviews begun in the community of Romene were interrupted by the paramount chief before they could be completed, so they could not be used in the cost-benefit analysis.

Interviews were also conducted in district capitals and in Freetown with key informants representing traditional authorities (paramount chiefs, chiefdom speakers, regent chiefs), the government of Sierra Leone (GoSL), district councils and administrations, investors and MAFFS. A list of interviewees is provided in Annex 1. More details on the methodology of the study are included as Annex 2. In addition, where time permitted, in seven of the 10 communities the research team completed resource inventory forms with key informants (four women, three men). The results of this resource inventory are presented in Annex 3.

A copy of the full report was provided to the three investors with land leases on which this research was undertaken. Written comments were received from Addax Bioenergy and SAC and are incorporated as appropriate into the report. The Siva Group (of which Sierra Leone Agriculture is a subsidiary) responded but did not provide any comments.

3.2 The investors and their operations in Sierra Leone at a glance

The investors are part of transnational conglomerates that are either owned or partially owned by some of the richest men in the world.⁷⁷ The majority shareholder and founder of the Addax & Oryx Group, parent of Addax Bioenergy, is the Swiss billionaire JeanClaude Gandur.⁷⁸ At the head of the Siva Group (parent company of Sierra Leone Agriculture) is the Indian billionaire C Sivasankaran.⁷⁹ The Bolloré Group, of which the prominent French billionaire Vincent Bolloré is chair and chief executive officer, holds 39 per cent of the shares of Socfin, the parent company of Socfin Agricultural Company (SL) Ltd.⁸⁰

Written comments were received from Addax Bioenergy and SAC and are incorporated as appropriate into the report. The Siva Group (of which Sierra Leone Agriculture is a subsidiary) responded but did not provide any written comments.

A copy of the full report was provided to the three investors with land leases on which this research was undertaken.

1. Addax Bioenergy, Switzerland

Subsidiary of Addax & Oryx Group (AOG), registered in the British Virgin Islands ⁸¹					
Lease	44,000 ha (after relinquishing 10,000 ha to communities, which Addax Bioenergy decided it did not require) ⁸²				
Location	Bombali Shebora, Makari Gbanti, Malal Mara Chiefdoms, Tonkolili and Bombali Districts, Northern Province				
Lease duration	50 years, renewable for 21				
Surface rent	US\$8.89 per hectare per annum, divided as follows: 50 per cent to landowner, 20 per cent to district council, 20 per cent to chiefdom council, 10 per cent to national government; Acknowledgment Agreements signed with landowners in 2011 added an extra annual payment of US\$1.40 per acre (3.46 per ha) per annum for the landowners, bringing the annual rent they receive to US\$7.90 of the US\$12.35 per hectare that Addax Bioenergy pays per year ⁸³				
Purpose	sugarcane for ethanol production, export to Europe				
Number of people affected	13,617 according to one source; ⁸⁴ 30,000 on the lease area belonging to 92 land-owning groups, according to Addax Bioenergy's spokesperson ⁸⁵				
Investment	€267 million, 2008-2013 ⁸⁶				
Financing	Swedish Development Finance Institution (Swedfund), Netherlands Development Finance Company (FMO), African Development Bank (AfDB), German Investment Corporation (DEG), UK-based Emerging Africa Infrastructure Fund (EAIF), Infrastructure Fund managed by Cordiant Capital, the South African Industrial Development Corporation (IDC), Belgian Development Bank (BIO) ⁸⁷				
Estimated outputs	85,000 cubic metres ethanol per year / 15 megawatt (MW) electricity for national grid				
Estimated workforce	2,000 ⁸⁸ (originally said 3,000 in Phase I; 4,000 in Phase II ⁸⁹)				
Actual workforce	1,444 people at December 2012, ⁹⁰ down from 1,669 in August 2012 ⁹¹				
Operations	 began setting up sugarcane nursery in 2009, preparing land in 2010 will be using about 2,000 ha for infrastructure (such as factory site, roads, power lines, ecological corridors, etc) and 10,000 ha for sugarcane,⁹² which should be planted by 2014⁹³ minimum daily wage 16,500 leones [US\$3.25], deductible benefits included⁹⁴ at the time of the research, Addax Bioenergy's operations were being hampered by strike actions by the workers complaining, among other things, about lack of transport, lack of drinking water and medical allowance, expatriates lacking respect for local staff and culture, discrimination and marginalisation.⁹⁵ 				

2. Sierra Leone Agriculture (SLA)

Part of SLA Luxembourg, which was acquired by Geoff Palm, which is also the holding company for Biopalm Energy and Biopalm Star Oil (also working in Sierra Leone). Geoff Palm is, in turn, held by Broadcourt Investments, a company of the Siva Group,⁹⁶ an Indian conglomerate registered in Singapore, which holds other large land leases in Sierra Leone. Geoff Palm is a member of the Roundtable on Responsible Palm Oil (RSPO).⁹⁷

Lease	41,582 ha, SLA lease acquired when Geoff Palm acquired SLA from the CAPARO Group $^{\rm 98}$ in 2011 $^{\rm 99}$
Location	Bureh Kasseh Maconteh (BKM) Chiefdom, Port Loko District, Northern Province
Lease duration	50 years, renewable for 21 years, option to renew for another 21 and then another seven years 100
Surface rent	US\$2 per hectare per year; 5 per cent of net profit to be paid each year to community development fund ¹⁰¹
Purpose	oil palm (crude palm oil)
Number of people affected	32,174 (2004 population of BKM) ¹⁰²
Estimated outputs	85,000 cubic metres ethanol per year / 15 megawatt (MW) electricity for national grid
Estimated workforce	1 per 4 ha of estate, which, if accurate, means 8,500
Actual workforce	as of October 2012, 600 workers, mostly casual, earning 350,000 leones (Le) per month to clear the land, without contracts and reportedly no women ¹⁰³
Operations	 modern nursery with automated sprinklers and capacity for one million seedlings outdoor nursery with drip irrigation, water drawn from Little Scarcies River 270 ha cleared and planted in Bureh section of BKM chiefdom 300 ha cleared in both Kasseh and Maconteh sections of the chiefdom 35,000 ha to be planted with oil palm.
Additional land holdings	Siva Group companies have also secured more land in southern Sierra Leone: 115,000 ha according to the country manager, ¹⁰⁴ but leases state that Biopalm Energy has secured 20,000 'plantable' hectares for 50 years in Kpaka Chiefdom, ¹⁰⁵ and 20,000 'plantable' hectares in Gallines Peri Chiefdom. ¹⁰⁶

3. Socfin Agricultural Company (SL) Ltd (SAC)

Part of Belgian Socfin G	roup, parent holding company Socfin, registered Luxemburg; ¹⁰⁷ RSPO member ¹⁰⁸
Lease	16,248.54 acres, approx. 6,500 ha (seeking to lease and plant an additional 5,500 ha, possible expansion to 30,000 ha) ¹⁰⁹
Location	Malen Chiefdom, Pujehun District, Southern Province
Lease duration	sub-leased from MAFFS. ¹¹⁰ MAFFS lease for 50 years, option to renew for 25, and then another 25 years
Surface rent	US\$12.50 per hectare per year
Purpose	oil palm (crude palm oil) and eventually rubber
Number of people affected	estimated 9,000 in 24 villages ¹¹¹
Investment	US\$110 million in 10 years, ¹¹² return on investment 10-15 per cent ¹¹³
Estimated outputs	30 tonnes/hour processing factory to be built by June 2014 at a cost of US\$26 million, expanded to 60 tonnes/hour in a second stage; 18 tonnes fresh fruit bunches per ha ¹¹⁴
Estimated workforce	2,414 (with 12,000 ha planted, one staff member per 5 ha plus factory)
Actual workforce	as of September 2012, 189 'long-term' jobs. ¹¹⁵ Of 1,938 people employed, most are temporary labourers employed for brushing, spraying (herbicides) and weeding
Operations	 began clearing land in April 2011, very shortly after the 'money meeting' was held in the chiefdom capital, Sahn Malen¹¹⁶ at that meeting, representatives of the company paid landowners approximately US\$40,000 in cash for rent,¹¹⁷ in the presence of the Minister of Agriculture, Forestry and Food Security and Resident Minister South and armed security that accompanied them¹¹⁸ MAFFS lease with Chiefdom Council (for five of nine sections of Malen Chiefdom) and MAFFS sub-lease with SAC were signed the same day¹¹⁹ (5 March 2011)¹²⁰ at time of research, SAC manager said SAC had cleared and planted 3,200 ha of oil palm on its original lease area of 6,575 ha, and would be planting another 300 ha,¹²¹ although in its written comments on this report, SAC maintained it was using only 3,125 ha aims to plant another 4,000 ha by 2014 in Zone B¹²² plans to plant 12,000 ha by 2017/18 negotiating new land lease for additional 5,500 ha (Zone B) at time of research,¹²³ needs the additional holdings to achieve its 12,000 ha of plantation to make its planned processing factory viable ultimate goal is to acquire 30,000 ha.¹²⁴

3.3 The study area and communities

Even before the investors arrived in these districts, food insecurity (based on household consumption) was high, ranging from more than 70 per cent of the population in Pujehun, Tonkolili and Port Loko, to 25-40 per cent of the population in Bombali. The four districts included areas that represent three different livelihood zones, defined in 2010 by the GoSL and Famine Early Warning System Net (FEWSNET)¹²⁵

- Pujehun District (Southern Province): 'Fish and Food Crop'
- Bombali District (Northern Province): 'Rice Bowl Area'
- Tonkolili District (Northern Province): 'Degradation. Short Cycle. Root Crops. Trade. Cassava. Yam'
- Port Loko District (Northern Province): comprises both 'Fish and Food Crop' and 'Degradation. Short Cycle. Root Crops. Trade. Cassava. Yam'.

While rice, the staple grain, is produced throughout Sierra Leone, the main areas where it is produced in surplus are close to, or coincide exactly with, the three large investments. These important riceproducing centres have, at least until very recently, exported to deficit regions in large urban areas and to the north.¹²⁶

The Minister of Agriculture stated in 2010 that raw stock for agrofuels would be grown only on 'marginal lands, not land that is suitable for food production',¹²⁷ but the evidence suggests that this is not the case. The Addax Bioenergy sugarcanefor-ethanol operations will involve 10,000 ha of land being converted to sugarcane in one of the country's three surplus rice-producing areas. The two investors producing palm oil maintain that it is primarily for domestic consumption as an edible oil. There are no binding obligations to this effect and given the burgeoning global market for crude palm oil that is driving the land deals, there is no guarantee of how much will stay in Sierra Leone and the region and how much will wind up as biofuel and in other non-comestible products elsewhere in the world.

Major rivers (the Rokel, Little Scarcies, Male) and streams flow through the investment areas. Local people depend on them for fishing, water for washing and laundering, transport and sometimes also drinking water. Water from these rivers is being used for irrigation by all three investors.

The communities in the study were all badly damaged, some even destroyed completely, during the war. Without exception, inhabitants were obliged to flee their homes and their farms, often for several years, before returning home to their farming livelihoods, usually after peace was restored in early 2002. However, communities' infrastructure (community centres known as court barrays, tree-crop plantations, number of zincroofed homes, road accessibility, water supplies) is still not back to pre-war levels.

Only one community, Bassaleh in Malen Chiefdom in the SAC lease area, has so far resisted the leasing of their land because, in their words, 'It is for our children.' They also appreciate the 'freedom' they enjoy as an autonomous independent farming community. Although none of its land has yet been directly affected by the SAC operations, and 'peace reigns in the community', tension is building with nearby communities that have agreed to lease out their land and that are taking SAC surveyors onto land that the people of Bassaleh claims is theirs. This resulted in 2012 in four arrests.¹²⁸

At the time of the research, varying amounts of land from the other communities examined had become part of the investors' operations. The three investors are at different stages of converting their land holdings to either oil palm or sugarcane plantations. The land conversion is greatest in the SAC and Addax Bioenergy operations area, where the companies have progressed further in their operations than has SLA/Siva Group. Thus, the respondents in the SLA lease area, while affected to some extent by limited land clearing, have yet to experience as much impact from land conversion as have people living in the Addax Bioenergy^{iv} and SAC operations areas.

3.4 Landowner and land-user groups

Opposition to the foreign investors is evident in recently formed grassroots associations concerned with the impact of the deals on their lives and livelihoods. In the Addax Bioenergy lease areas, a collection of Affected Land Users Associations or AFLUAs, has formed.¹²⁹ Addax Bioenergy has met with the AFLUAs in multi-stakeholder dialogue forums organised by the University of Makeni, where media, landowners, civil society, community members, and chiefdom and district council members are present, along with the Sierra Leone Network on the Right to Food (SilNoRF), which monitors the situation in the Addax Bioenergy lease area.¹³⁰ However, the affected landowners' demands - that the land lease itself be reviewed, that clauses allowing Addax Bioenergy to alter water courses be removed, that the company pay fair compensation for trees it destroyed, among others¹³¹ - have yet to be fully resolved.

People from several communities affected by the SAC lease area have formed the Malen Affected Landowners Association (MALOA) to defend the rights of landowners and land users. Several individual landowners have also sent official complaints about tree-crop and oil palm plantations that SAC destroyed, allegedly without their permission, to the senior district officer and other local authorities.¹³² There have been several confrontations in the area between SAC surveyors and heavy equipment operators and local people protesting SAC intrusion on their lands, some of which have led to arrests. In December 2012, more than 100 aggrieved landowners and users met in Pujehun and signed a resolution calling for the Human Rights Commission to intervene on their behalf and saying they would no longer permit Socfin personnel or machines on their land.¹³³

^{iv}According to Addax Bioenergy, the Farmer Development Programme in its area has resulted in a surplus of rice and other crops. MALOA is not to be confused with the Social and Grievances Committee of the Malen Chiefdom, which is funded by SAC, comprising section and town chiefs, company management, the chiefdom speaker, district councillors and the senior district officer in Pujehun. It does not include any women, young people or civil society organisations.¹³⁴ The committee is chaired by the paramount chief (PC) of Malen. Aggrieved local people allege that the PC has from the beginning sided with SAC against their interests. One of the major grievances put to the committee so far has come from SAC itself, about people allowing their goats to graze on the area planted with oil palm seedlings.¹³⁵

The Landowners' Committee in the Bureh section of the SLA lease area appears to be more of an 'AstroTurf'¹³⁶ organisation than a genuine grassroots association concerned about the wellbeing of land users whose agricultural lands and livelihoods are at stake. It is spearheaded by Augustine Noah Kamara, who signed the original land lease on behalf of the landowners of the Bureh section of BKM and has liaised for the company with the local people since 2010. In a meeting in Bantoro on 4 November 2012, the major grievances raised were not about lost livelihoods, which were of major concern to the people of the community speaking to the research team, but about employment with the company and a demand for monthly payments for the 21 members of the Executive of the Landowners' Committee.

Land cleared for SLA nursery.

Photo: Joan Baxter

4. MAIN FINDINGS: SOCIAL AND ECONOMIC IMPACTS OF LARGE-SCALE FARMLAND INVESTMENTS

The main findings and results presented here come from field research undertaken in the lease areas in October and November 2012.

Given the small sample size, determined by the limited time and resources, it was not feasible or useful to undertake the full cost-benefit analysis for individual land leases, although some comparisons could be made of the way the different investors operate and compensate local populations [Section 4.2]. Differences in the extent of changes (both positive and negative) in lives and livelihoods in affected communities appeared to be related more with how advanced an investor was in land conversion than they were on the identity of the investor itself and the way it operates. That is, the more land that has been cleared of traditional crops and vegetation and converted into plantations that provide local people with none of their needs, the more the communities feel the impact and the extent of the loss of their traditional lands and resources. Thus, even though Addax Bioenergy has made efforts to reduce negative impacts (setting up a Farmer Development Programme, establishing a grievance mechanism, and increasing daily wages paid to labourers), it has been in operation longer and so the wider impacts of its operations are more evident.

4.1 Economic, cultural, nutritional and social value of the land

For the people of rural Sierra Leone, land is their most valuable possession, even if that possession is customary rather than on paper by title deed. It has great spiritual and cultural significance. Cemeteries where ancestors are buried and society bushes where rites of passage and important ceremonies are held are considered sacred. Boundaries between communities and different landowning family lands are generally marked by large trees planted for the purpose and land disputes have not been uncommon in rural areas. However, in the past, a disputed area was flagged and left alone if chiefs or local authorities were unable to get the two parties to agree on the boundary. With the advent of the investors, suddenly the stakes are higher and can lead to altercations between communities, as has happened between Bassaleh and its neighbours in the SAC lease area.¹³⁷

In other ways, land is a kind of social glue. The communities sampled all had highly developed social groups (men, women, mixed, young people) that got together to work communal pieces of land and share the harvests and profits from their sale (see Section 4.5.2 Social breakdowns).

Land is also the source of rural livelihoods, not just land under permanent cultivation but the entire mosaic of land and vegetative types and uses (Table 2). The farming systems and land use patterns are extremely complex, with different land types used for different purposes. However, typically, nearly all have some upland sites that are planted at the beginning of the annual rainy season, usually in May, with a wide variety of crops, including upland rice, numerous kinds of vegetables, pulses (a wide range of leguminous bean crops), groundnuts, sesame (benniseed) and other oil seed-crops such as egusi, grains, tubers and leafy greens. The upland areas are also used to nurse rice plants for transplanting in August or September to inland valley swamps.138

Table 2. Land types and their uses

Land types	Crops grown, products harvested or collected
Upland farm	cassava, rice, groundnuts, sweet potato, pepper, pineapple, banana, jakato, yams (including Chinese yams, cocoyams), sesame (benniseed), beans (all types), corn, cucumbers, tomato, okra, cabbage, orange, mango, pumpkin, medicinal trees
Boliland	rice in rainy season, in dry season pepper, groundnuts, vegetables, sweet potato, bitter balls, garden eggs, leafy greens (plassas), beans (all types), okra, ginger, sesame
Swamp	rice in rainy season, in dry season vegetables (such as garden eggs, bitter balls, pepper, okra, cucumbers), cassava, groundnuts, beans (all types), watermelon, sweet potato
Tree-crop plantation / 'garden' in Temne area	kola nuts, palm oil, coffee, cocoa, <i>Irvingia gabonensis</i> ('borboi' in Mende/ 'gbaray' in Temne), tola (<i>Beilschmiedia mannii</i>), <i>Xylopia aethiopica</i> ('spice' or 'hewei' in Mende), mango, pineap- ple, improved oil palm, plantain/ bananas
Fallow bush	kola nuts, honey, 'bush meat' ('fretambo', 'cutting-grass' <i>Thryonomys swinderianus</i> , squirrel), herbal medicines (including 'gbangba'), fuelwood, palm oil, bush yams, 'lokos' (locust bean), chuk-chuk plums, black tumbla, malombo, bush bananas, ruf-skin/ roffin plum (<i>Parinari exel-sa</i>) and other wild fruits, timber, construction materials, fibre for traps, nets, mats and baskets
Backyard garden	vegetables such as jakato, pepper, okra, cucumber, tomato, onion, leafy greens such as crain-crain and potato leaves for plassas, beans (all types), sweet potato, yams, corn, melon, coconut, plantain/ banana, papaya
Battiland (marginal riverine grassland)	primarily for rice, only occasionally for cassava, groundnuts, sweet potato, cassava leaves

Swamps can sometimes be cultivated year-round. Often in August or September, a month or two before the rains end and upland crops are to be harvested, farming families transplant rice they've nursed in the farms to the swamps. While it is maturing, they then harvest upland rice and other crops. In December, weeks after the harvested upland rice has already been on the market, swamp rice can then be harvested. Depending on the rains and amount of water or moisture remaining in the swamp, they may sow another crop of rice or use the swamp instead for groundnuts and vegetables.

Bolilands, depressions that flood each year, are generally used to cultivate rice, which is planted in May and June, like the upland rice. If the rainy season is long, it may be possible to plant a second crop of rice in the bolilands in September, extending in this way the growing season and the number of months with abundant food stocks.

Typically, farmers in Sierra Leone intercrop rice with other valuable crops that they produce for both home use and for sale, including maize, sorghum, sesame (benne), pepper and other vegetables, and cassava. There is no shortage of experience in rice cultivation in Sierra Leone. People have been cultivating rice in the area for many centuries.¹³⁹ Early European explorers dubbed it the 'Rice Coast' and many people from the area were shipped to the Carolinas in what is today the United States because of their skills in rice cultivation.

Diversity of crops is a form of insurance and risk management. Farmers produce a wide variety of crops so that if any fails they still have others.

Tree-crop plantations (sometimes called 'gardens'), which may involve stands of cash crops such as cocoa, coffee and oil palm, are often highly diverse sources of both edible and non-edible plant products. Among them are kola nuts, tola *(Beilschmiedia mannii)*, 'boboi' in Mende and 'An-gbere' in Temne *(Irvingia gabonensis)*, a vast array of wild fruits, bush yams, medicinal herbs, trees producing fibre, fuelwood, construction wood, thatch, etc, all of which help assure a family's financial and nutritional security throughout the year. Backyard gardens that surround communities are also full of valuable economic trees, many of them planted, which provide a wide range of food and non-food products.

Bush fallows are also rich repositories of valuable plant and animal resources upon which rural communities depend for bush meat, construction materials, traditional medicines, fruits, nuts and palm wine. Women rely on tree stands for foods, firewood and medicines, some for sale. They also provide important environmental services, protecting soils from erosion and restoring soil fertility, protecting water sources and fish habitat, and acting as habitat for wildlife. They are anything but 'unused' or 'marginal'.

Diversity of crops is a form of insurance and risk management. Farmers produce a wide variety of crops so that if any fails they still have others. Some are for home consumption and some they view mainly as cash crops, for example cocoa, coffee, groundnuts, kola nuts, tobacco and oil palm. In many parts of the country, palm oil is the family's main source of cash, and many educated Sierra Leoneans say they owe their degrees to their parents' oil palm plantations. Oil palms have been called the 'educational endowment insurance' for the young generation.¹⁴⁰

Sierra Leoneans have several coping strategies to see them through 'hungry seasons' to the next rice harvest. By preserving cassava, using various combinations of fermenting and drying, they create for themselves a food stock for times when rice is not available. They may also rely on their stores of pulses such as 'konsho beans' (pigeon peas, *Cajanus cajan*) to add protein to meals with cassava when other foods and rice are scarce. Cassava can be grown throughout the year and on poor soils, and in Sierra Leone, farm families can take advantage of the diverse land types to engage in almost year-round food production.

Fallow periods in the sampled communities in three lease areas averaged six years before the investors arrived, with the shortest being four years (Ropotor in the Addax Bioenergy lease) and the longest being 10 years (Kortumahun in the SAC lease). These are shorter than the traditional minimum of 20 years, suggesting that there was already growing pressure for land in the lease areas, as predicted by previous analyses of fallow periods in Sierra Leone.¹⁴¹

However, in comparison with their supply of and access to land after the investor's arrival, many respondents in the sampled communities now look back fondly at the days when they maintain there was no shortage of land.

4.1.1 Access to farmland and land availability

Focus group respondents (women, men and young people, including young men and women, each group answering collectively but separately from the others) in eight communities (three each in the SAC and Addax Bioenergy lease areas and two in the SLA lease area) chose 'surplus, not at all lacking' to describe their access to and the supply of land before the investors arrived. Respondents in seven of the eight communities described it as 'seriously lacking' with the investor in the area. The only exception was Mayorsor in the SLA lease area, around which investor operations are so far limited to the planting of 270 ha of oil palm, where the focus group perceived that they now have 'just enough' land.

There was no difference in responses from men, women and young people in the focus groups - the three groups said they all had 'surplus' land before the investors' operations began and that they were equally affected by the shortage of land after the investors' operations began, which they deemed 'very serious'.

The farms in all three of the lease areas were highly diverse, with cultivation done on the full range of land types available in the area. Table 3 documents that diversity, and shows responses from 12 interviewees (six men and six women) on what kinds of crops rural households generally cultivated and resources harvested from each land type, and how many of each were lost after the investor began operations. There was no difference in the way men and women perceived the losses of different land types. Again, it should be reiterated that the reason communities in the SLA lease area were less aware of land loss is that operations to date have been very limited, with only 870 of the 41,582 ha in the lease cleared at the time of the research.

The greatest perceived loss was the upland farms, the part of the land that families generally associate with 'farming', where they cultivate upland rice and the widest variety of annual crops, as well as some fruit and medicinal trees. Eleven of the 12 respondents deemed the loss of their upland sites a 'very serious' loss, while just two (one in Mayorsor on the SLA lease, one in Hongai on the SAC lease) saw it as 'manageable'. The next greatest loss was of fallow bush areas, a loss that all respondents who had had such lands judged as 'very serious', with two going further and describing the loss as 'beyond very serious' and 'unimaginable'. Seven of the nine respondents (six men, three women)

Table 3. Household access to and use of different land types before and after investor activities

Land type	SAC (of 3 male, 3 female respondents)		Addax Bioenergy (of 2 male, 2 female respondents)		SLA (of 1 male, 1 female respondents)		Total number lost (of 12 respondents)
Land type	Before	After	Before	After	Before	After	
Upland farm	6	0	4	0	2	1	-11
Boliland	3	2	4	2	0	0	-3
Swamp	4	4	3	0	2	3	-3
Tree-crop plantation / 'garden' in Temne area	4	1	3	0	2	1	-7
Fallow bush	5	0	3	0	2	0	-10
Backyard garden	5	2	4	3	2	2	-4
Battiland (marginal riverine grassland)	5	5	2	2	0	0	0

who had tree-crop plantations before the investors arrived said that the loss when they were cut down was 'very serious'. One respondent in the SLA area said his had been 'reduced', a 'very serious' loss and another respondent (SAC lease area) still had his because he has so far refused 'to give it up'.

Respondents in all lease areas, both in focus groups and individuals, said that the investors are clearing their productive upland sites, bush fallows, tree-crop plantations and other lands where they cultivate annual crops. They say that as a result they are losing access to the full range of lands and vegetative types that help assure food and nutritional security as well as livelihoods in the communities.

4.1.2 A wealth of resources in the balance

It is well beyond the scope of this study to compile an exhaustive list of local resources that rural people in Sierra Leone have traditionally used and on which they depend for their livelihoods and wellbeing. Such a list, which was to have been compiled as part of the unfulfilled tasks of the National Biodiversity Strategy and Action Plan of 2003, would require not just translations of names in several languages, but would require an extensive amount of fieldwork throughout the country at various times of the year to catalogue the full extent of the agro-biodiversity and biodiverse resources that are important to rural livelihoods.

However, it was deemed extremely important for this study to put together a partial inventory of some of the major cultivated crops, as well as tree and other resources on which rural communities have traditionally depended. Many will no longer be available or accessible after land is converted to large industrial plantations. Even the partial inventory of plant and animal resources available in the three lease areas shows that people's knowledge of and dependence on those resources is considerable, as is the loss when they are removed for industrial monoculture agriculture. The full list of resources and the number of communities producing or accessing them before and after the investor's arrival is found in Annex 3.

In all, 117 different kinds of resources - cultivated crops, edible and inedible (but useful) plant and tree products, land and aquatic food sources - were available before the arrival of the investor in at least one of seven communities where inventories were done on the three land leases. The total number of incidences of these diverse resources was 454 before the investor's arrival. There were just 201, less than half as many incidences of these resources after the investor's operations began, and even if they were still available informants said the availability was much reduced. In the seven communities, there were 252 incidences of the resources being lost altogether after the investor's arrival.

There are many wild trees and shrubs that do not appear on the list, which are multipurpose and appreciated for a wide range of uses – medicinal, spiritual, for construction materials, resins, dyes, mats, traps, nets and others, too many to name here.¹⁴² Some of the resources collected from bush fallows, forests and tree-crop plantations are known and used more by women than by men. These include slow-growing indigenous tree species that provide important nutritional or medicinal products such as:

- 'lokos' (Parkia biglobosa) that produces the mineral-rich 'kenda' (sometimes referred to as 'native Maggi')
- 'tola' (*Beilschmiedia mannii*) that produces a nutritious nut ground up and used in sauces to thicken them
- 'boboi' in Mende / 'An-gbere' in Temne (Irvingia gabonensis), a non-timber forest product with enormous nutritional and medicinal value,¹⁴³ which produces a nutritious nut used to make sauces slippery, now becoming popular in the multi-billion-dollar global dietary and nutritional supplement market

 'hewei' (Mende) or 'spice' (*Xylopia spp*) comes from an indigenous forest tree that rural people know and appreciate for its medicinal properties. In the SAC lease area it was an important source of income, particularly for women who collected the black, pepper-like pods and sold bags of them for Le 80,000 [US\$20] to traders who came from Guinea and Liberia to supply the west African market with this cherished spice and medicinal plant.

When such important local food and medicinal resources disappear from the land, they also disappear from diets, household income sources (particularly women's) and lives. This increases the risk of malnutrition in rural Sierra Leone, where it is already chronic.

In Bassaleh, a community that is resisting leasing its land to the investor (SAC), 'boboi' is still common and greatly cherished for its nutritious nuts. Women in the community said the 'boboi' trees were planted by their grandmothers.



Photo: Joan Baxter

Many of the resources on the list, when no longer accessible, must be bought by rural people, increasing their cost of living just at a time when farm incomes are decreasing because of lack of land. No respondents in this study felt that wages paid by the investors could compensate the workers or the communities for increased household expenses now that so many products previously obtained at no cost from the bush – firewood, bush meat, wild fruits – either had to be purchased or were simply no longer available.

Before more of these resources are lost, household budget studies are needed to determine their real economic value, both for rural livelihoods and potentially for national economies (see section 4.2.1 Compensation for lost crops and trees).

4.1.3 Income and economic benefits from the land before and after investor

Communities in the three land lease areas depended heavily on their farming activities not just for their own subsistence, but also for cash income. Many of the crops that they have traditionally produced are not exclusively for home use, but are also sold as cash crops.

This surplus, as well as crops produced especially for market such as groundnuts, cassava/gari, beans, yams, vegetables and palm oil, are now increasingly in short supply in the sampled communities where investors have cleared the farmland and fallows for their industrial plantations. Respondents said they have little or nothing now to sell, and rarely enough even for home consumption. In the SAC lease in Malen Chiefdom, for example, they maintained that beans are now hard to come by.

Table 4 shows the number of respondents (from the 12 interviews) in the three lease areas that produced main crops or food items in surplus for sale, both before and after the arrival of the investors. The list of crops and produce that were formerly sold is not complete; a few respondents also mentioned pineapples, kola nuts, watermelons, honey and palm wine as items they grew or collected in surplus before the investors arrived, but which they can no longer produce or obtain to sell.

When such important local food and medicinal resources disappear from the land, they also disappear from diets.

		No. of respondents (M = Male, F = Female) with surplus to sell before and after investor				
Crop/produce		SAC (of 6)	Addax Bioenergy (of 4)	SLA (of 2)	Total	
palm oil (all types: red,	Before	3 M, 3 F	1 M, 2 F	1 M, 1 F	11	
'masanke', 'nut' oil)	After	0 M, 0 F	0 M, 0 F	0 M, 0 F	0	
cassava/gari	Before	3 M, 3 F	1 M, 2 F	1 M, 1 F	11	
	After	0 M, 0 F	0 M, 2 F	1 M, 0 F	3	
vegetables (pepper, garden	Before	3 M, 3 F	1 M, 2 F	1 M, 1 F	11	
eggs, jakato, cucumbers, okra)	After	0 M, 0 F	0 M, 0 F	0 M, 0 F	0	
groundnut/egusi/sesame	Before	3 M, 3 F	1 M, 2 F	0 M, 1 F	10	
	After	0 M, 1 F	0 M, 0 F	0 M, 0 F	1	
rice	Before	3 M, 3 F	1 M, 2 F	1 M, 0 F	10	
	After	0 M, 1 F	0 M, 0 F	0 M, 0 F	1	
yams (all types) cocoyams/	Before	2 M, 3 F	1 M, 1 F	1 M, 1 F	9	
sweet potato	After	0 M, 0 F	0 M, 0 F	0 M, 0 F	0	
beans (all types)	Before	2 M, 2 F	1 M, 2 F	0 M, 1 F	8	
	After	0 M, 0 F	0 M, 0 F	0 M, 0 F	0	
leafy greens (plasas)	Before	1 M, 2 F	1 M, 2 F	1 M, 1 F	8	
	After	1 M, 1 F	0 M, 0 F	1 M, 0 F	3	
corn/maize	Before	1 M, 2 F	1 M, 2 F	1 M, 1 F	8	
	After	0 M, 0 F	0 M, 0 F	0 M, 0 F	0	
tree fruits (all types, wild and	Before	1 M, 1 F	1 M, 2 F	1 M, 1 F	7	
exotic)	After	0 M, 0 F	1 M, 0 F	0 M, 0 F	1	
plantain/banana	Before	2 M, 2 F	1 M, 1 F	1 M, 1 F	8	
	After	0 M, 0 F	1 M, 0 F	0 M, 0 F	1	

Table 4. Individuals	producing surplus	food crops f	for sale in co	ommunities before	and after investor
	<u> </u>				

The most important and lucrative cash crop in the sampled communities in the three lease areas has traditionally been palm oil (Table 5). This included oils from two types of trees. Indigenous 'native' dura trees produce 'nut' oil from the palm kernel and also a rich red variety of palm oil processed locally that is much preferred over other cooking oils and also very nutritious.¹⁴⁴ The higher yielding 'improved' tenera varieties produce an oil known as 'masanke' that is less appreciated as a cooking

oil and thus fetches a lower price, as well as the 'nut' or kernel oil. Other important cash crops, particularly for women, were cassava (and gari) and groundnuts. Other crops (leafy greens, yams, plantains, vegetables, fruits) and also honey were other sources of farm income, but none brought in more than Le 400,000 per year. However, households now cannot produce them at all or struggle on the little land still available to produce a little for home consumption.

According to residents of Kortumahun village these battilands on the Maleni River are the only agricultural land left to them new that Socfin has taken out a lease on farmland in the area. Photo: Joan Baxter

Crop	Average sales /year		Highest (Le/ US\$)	Lowest (Le/US\$)	
	Le	US\$			
palm oil (all types)	1,522,210	354	4,000,000/930	56,000/13	
cassava/gari	849,213	197	2,500,000/581	218,700/51	
rice	823,527	193	2,000,000/465	125,000/29	
groundnut, sesame, egusi	412,143	96	1,000,000/233	90,000/21	
Total	3,607,093	840			

Table 5. Income (cited by individuals) from sale of major 'cash' crops before investor operations (Le/US\$)

The average income for individuals for each crop is not enough to lift them out of poverty. But the incomes from the diversity of crops and products cannot be viewed in isolation; they are combined with levels approaching self-sufficiency in many important food crops that have traditionally contributed immensely to livelihoods and health in rural Sierra Leone. Furthermore, the Smallholder Commercialization Programme (SCP) offers the potential for increasing farm income through farmer-based organisations and agricultural business centres. However, to benefit from the SCP a farm family needs to have access to sufficient land to make the farm commercially viable.

4.1.4 Sources of income and their importance before and after the investor

Male and female respondents in the eight sampled communities said that before the arrival of the investors they had two main sources of income:

- selling farm produce (rice, cassava/gari, beans, groundnuts, vegetables, yams of all kinds, sweet potatoes, coffee, cocoa, palm oil)
- selling produce/products collected, harvested or made from resources on the land or waterways (palm oil, soap-making, medicinal herbs, firewood/charcoal, fish, bush meat, kola nuts, bush yams, honey).

Also important as sources of income in some communities before the investors' arrival for both men and women were:

- paid farm labour or group work on others' farms
- petty trading of purchased consumer goods.

Other sources of income included:

- sale of ruminants/poultry (men and women)
- carpentry/furniture-making/masonry (men)
- sand mining in rivers (men and women)
- barbering (for men)
- diamond digging (for men).

The sources of income after the investor were dramatically different. The most important sources of income (sale of farm produce, sale of products and produce from the land resources, farm labour and group work) were either greatly reduced or gone altogether.

Overall, petty trading reduced because respondents said there was no longer enough capital to purchase goods to sell and because regular customers in the communities no longer had money to buy from them. Eight of ten focus groups said petty trading of purchased consumer goods went from being 'very important' or 'important' to being 'not at all important' for women, while seven said the same for men. In no cases had petty trading become more important after the investor than it had been before. Carpentry suffered because of the lack of construction materials and wood formerly collected in bush fallows. Hairdressing became, for the first time, a source of income as 'poverty' drove people to charge for services they once offered freely to their neighbours and friends.

The negative ramifications of these losses are diverse and wide reaching, affecting everything from parents' ability to pay school fees for their children to the loss of communal funds that previously could be used to help community members facing health or other emergencies. There were also suggestions that the loss of these sources of food and income had negatively affected men's and women's social groups, the Poro and Bundu respectively, because of the lack of funds to cover important activities.

There were new sources of income in the sampled communities. The main one is direct employment with the company. The community with the largest number of local people working for the investor was also the largest one sampled, namely Mara on the Addax Bioenergy lease. The focus group, which included two men working for Addax Bioenergy as labourers, were unable to say exactly how many of its male indigenes were employed by the company, replying only 'many', but did say that five women from Mara were employed. According to the other focus groups in the Addax Bioenergy area, in Ropotor two local women and nine men worked for the company and in Wareh Yeama just one woman and three men were employed.

In the SAC lease area, focus groups in Kortumahun, Kassay and Hongai spoke of many 'strangers' (between 20 and 200) that had moved to their communities to find work, while far fewer local people were employed, an estimated 20 in Kortumahun, 15 in Hongai, and 23 in Kassay, where respondents were able to provide the gender breakdown: 3 women and 20 men. In Bassaleh, the community that maintains it is not part of the SAC lease, the focus group said none of its indigenes were working for SAC and they had no intention of seeking employment with the company.

In the SLA lease, focus groups said that no women were employed by the investor and that those men who were (more than 40 in Mayorsor and 10 in Bantoro) were temporary workers hired only to do the land clearing.

Surprisingly, focus groups in the three lease areas deemed the jobs and the income from the companies less important than might have been expected, given that these are among the main benefits cited by proponents of such investment. First, respondents said even if someone in a household does have work with the company, they consider the wages too low to compensate for all the other sources of income and the loss of costfree foodstuffs and products previously made or collected from the various kinds of land resources now gone.

Wages are not uniform among investors. Addax Bioenergy had the highest daily minimum, paying labourers Le 16,500 [US\$3.25]; that is the same amount paid for a half-day's work on Saturdays when work ends at 2pm, and on Sundays workers are paid double time. Allowances are built into that minimum daily wage; the basic rate can be lower.¹⁴⁵ An Addax worker in Wareh Yeama said he receives Le 325,000 [US\$75] per month. SLA labourers were being paid Le 350,000 [US\$81.50] per month at the time of the research, but the jobs involved land clearing and were not permanent. SAC labourers said they were being paid Le 10,000 [US\$2.31] per day, and a 'captain' supervising weeding and spraying would receive an additional Le 1,000 [US\$.23] allowance for a total of Le 11,000 [US\$2.54] per day, for a monthly total of between Le 250,000 [US\$58] and 300,000 [US\$69].

Some women interviewed in the SAC and Addax Bioenergy lease areas said they earn money by selling food (rice, cake) to workers, and so have new sources of income related indirectly to the investors' presence.^v *Addax Bioenergy disputes these findings. It claims that its annual household surveys (of households in its project area) establish that gross income for all affected villages has increased between 2010 and 2012.
THE HIGH COSTS OF SUBSISTENCE WHEN THE FARM IS GONE

In normal times in Sierra Leone, it is common for those doing the cooking to calculate one cup of rice per person per day, usually with a few extra cups for leftovers for the children or for visitors. The stew, soup or sauce is generally rich with red palm oil or oil seed pastes, beans and other vegetables. In rural areas when cassava is abundant, people may begin their day with cassava or with dry rice, prepared with hot pepper or 'kenda' from the seed of the 'lokos' tree. During the day they may also cook some yams and snack on fruit that abounds in the communities. Without their land resources, or access to rice and other crops through other means, much or most of what they consume must be purchased. A very rough calculation based on just two basic household expenses, a survival budget including food (absolute minimum ingredients for only *one* meal per day) and education for a household of seven (one elderly parent, a husband and wife, with four school-age children, two in junior secondary school (JSS) and two in primary classes) is given below. This sample budget is not meant to be realistic for any rural household; rather, its purpose is to show that it is extremely difficult if not impossible for a rural family, deprived of its farm production and income, to make ends meet, stave off hunger and malnutrition, and pay school costs (let alone cover healthcare costs, transport, clothing, shelter or any other basic necessities) on a monthly wage of Le 350,000.

Expense	Details	Le / day	Le / year
ingredients for one meal	7 cups rice	7,000 ¹⁴⁶	2,550,000
per day	2 ties greens	1,000	365,000
	smoked fish	5,000	1,825,000
	pepper	500	182,500
	onion	500	182,500
	salt	100	36,500
	okra	200	73,000
	2 pints oil	4,000	1,460,000
	Maggi	500	182,500
firewood		500	182,500
2 children JSS	Fees, books, uniforms		350,000
2 children primary (1 in examination class 6)	Books, uniforms, evening classes, development fees		210,000
TOTAL			7,599,500
TOTAL MONTHY EXPENS	633,292		

Focus groups and individuals on all three leases complained that some people who had secured jobs with the investors were let go without warning, that the jobs were not permanent or secure, there were frequent layoffs, and people might work only two or three months before finding themselves without any income at all. Focus group respondents said that the wages are considered important to workers' immediate families, but are insufficient to make ends meet in a household that has lost its other sources of income. Some workers in the Addax Bioenergy lease reported that they are taking out loans midway through the month to buy food for their families, and finding themselves increasingly in debt.

There have been some spinoff sources of income. In addition to the sale of foods to workers on the Addax Bioenergy and SAC leases, other new forms of income include lending money or renting rooms to workers. Focus groups in the Addax Bioenergy and SAC lease areas said there was an increased prevalence of sex work as a source of income in some affected communities.

Respondents in all three lease areas said the four most important sources of income for women and men in the communities before the investors' presence were the same. In order of descending importance they were: (1) sale of farm produce, (2) sale of products collected or harvested from land holdings, (3) paid farm work and (4) petty trading of purchased consumer goods. They said that all four of these had either disappeared or been reduced by investor operations, and that no income sources of equal importance had replaced them.

4.1.5 Household expenses in the lease areas before and after the investor

The large land deals also resulted in a major shift in what people in affected communities viewed as the major and most pressing household expenses. Before the investors' arrival, schooling was considered the major priority expense in all the sampled communities, followed by food and healthcare. After the investor, food became the biggest and most important household expense in the communities, with education and healthcare moving into second and third positions respectively. Some said that food now consumed the entire household budget; that there was nothing left for education and healthcare.

While urban dwellers need to pay for everything they consume, rural people are either partially or fully self-sufficient in a range of consumables, including food, firewood or charcoal, cooking oil, soap, construction materials (poles, thatch, fibre) and traditional herbs. When their land is cleared for industrial monoculture, many of these are lost, as is their self-sufficiency. They either have to purchase things that previously they had produced themselves, or they have to go without. Either way, the losses are substantial. Figure 1 (with results from interviews in the sampled communities) indicates the trend away from surplus production and self-sufficiency in food production and household needs towards shortages and dependency after investors' operations began. There has been a tendency among proponents of large-scale farmland investments to ignore the full range of resources that rural communities lose when they sign away their land. There appears not to be enough acknowledgement by investors and their proponents of the value to rural communities in the lease areas of agro-biodiversity and local biodiverse resources found in bush fallows, treecrop plantations, backyard gardens and remnant forest areas.



Figure 1. Level of household self-sufficiency and dependence on purchased foods and goods before and after the investors



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4.2 Benefits and services provided by the investors

4.2.1 Compensation for lost crops and trees

Given the extent of the loss of food crops, income and other important materials previously collected from the land, there is a need for in-depth studies to assess their full value and compile an official, complete compensation list for all these resources. At the moment, there is no such list, which means it is up to individual investors to decide how much, if anything, they will pay for crops, trees and lost resources on their lease areas.

The only official compensation list available at the time of the research was one compiled by MAFFS in 2006/07 for communities affected by the titanium dioxide mining operations of Sierra Rutile.¹⁴⁷ Not only is it incomplete but the prices offered as compensation are, even in the views of some MAFFS officials, far too low (see Annex 4).¹⁴⁸ Only 30 kinds of crops/trees/rural resources are on the list and the very highest compensation rate is Le 200,000 [US\$46.35] for an orange tree or a half acre of upland rice. The lowest is Le 400 [US\$0.09] for a single plant of local garden egg. The compensation for an 'economic tree (timber)' is, for example, Le 20,000 [US\$4.60]. Compensation for an indigenous oil palm is Le 25,000 [US\$5.80] and for an improved variety is Le 40,000 [US\$9.27], not even close to the value of the oils that each type of tree produces in a single year (see box: Calculating the real losses when the oil palms come down, page 42).

ADDAX BIOENERGY COMPENSATION

In the absence of an official and binding national crop compensation list, Addax Bioenergy should be credited for its transparency and documentation of compensation paid to affected landowners, and for having developed a detailed agricultural asset list. This states compensation values for 59 different crop and tree types, and includes values for farm huts and fence lines.¹⁴⁹ The compensation rates that Addax Bioenergy pays for lost crops and felled trees are higher than those that MAFFS put together for Sierra Rutile's mine, and include:

Banana (1 acre) Le 26,620 [US\$6.14]

Beans and other legumes (.5 acre) Le 100,000 [US\$23.05]

Breadfruit Le 53,240 [US\$2.27]

Cashew Le 148,000 [US\$34.12]

Mature cassava (.5 acre) Le 350,000 [US\$80.68]

Immature cassava (.5 acre) Le 175,000 [US\$40.34]

Mature cassava (not dense, heaps, .5 acre) Le 200,000 [US\$46.10]

Immature cassava (not dense, heaps, .5 acre) Le 100,000 [US\$23.05]

Citrus Le 72,500 [US\$16.71]

Lokos (locust bean, produces 'kenda') Le 26,620 [US\$6.14]¹⁵⁰

Improved oil palm Le 57,000 [US\$13.21]

Wild oil palm / Mango (wild) Le 33,275 [US\$7.71]

Plum (wild) Le 66,550 [US\$15.42]

'Economic' [timber] Yemani/Karonko Le 54,400 [US\$12.61]¹⁵¹ However, the compensation paid by Addax Bioenergy is in the form of one-off payments, and in the case of the trees, they do not reflect the real productive value of the crops the trees produce over their lifetimes. To put this in perspective, the price paid for wild ('native') oil palm is less than half the value (Le 83,300) of one year's production of red palm oil and 'nut' (kernel) oil from a single tree. The compensation for an 'improved' oil palm (tenera variety) is about one-quarter the value (Le 240,000) of a single year's production of 'masanke' and nut oil from one tree (see box: Calculating the real losses when the oil palms come down, page 42). At the time of the research, a single wild plum was selling in Freetown for Le 1,000-2,000 [US\$.25-.50] and a single plum tree can produce hundreds of plums a year over several decades, for a value of millions of Leones over the lifetime of the tree.

Despite the efforts by Addax Bioenergy to compensate for a fuller range of crops and at rates higher than ones previously developed by MAFFS for Sierra Rutile, the Affected Land Users Associations have complained that, 'trees and other perennial plantations and vegetation necessary to communities have been destroyed by Addax without fair compensation paid to affected land users or owners'.¹⁵²

> So-called 'green-belt' of original vegetation left by SAC after clearing and planting of oil palm. Photo: Joan Baxter

CALCULATING THE REAL LOSSES WHEN THE OIL PALMS COME DOWN¹⁵³

(see Annex 5 for details of the calculations)

Estimated value of oils ('masanke' + 'nut' oil) from 'improved' oil palm

- from 1 improved palm in 1 year = Le 240,000 [US\$55.43]
- from 1 improved palm in 30 years = Le 7,200,000 [US\$1,663]
- from 1 acre/60 improved palm in 1 year = Le 14,400,000 [US\$3,326]
- from 1 acre/60 improved palm in 30 years =Le 432,000,000 [US\$99,772]

Estimated value of oils (red palm oil + 'nut' oil) from 'native' oil palm

- from 1 native palm in 1 year = Le 83,300 [approx. US\$19]
- from 1 native palm in 30 years = Le 2,500,000 [US\$577]
- from 1 acre/60 native palm in 1 year = Le 5,000,000 [US\$1,388]
- from 1 acre/60 native palm in 30 years =Le 150,000,000 [US\$34,643]

Additionally, the red palm oil that comes only from the 'native' tree is considered the best tasting and most nutritious. It fetches higher prices than the pale 'masanke' oil from the improved variety. The native tree also has other products and services, including thatch for homes, 'poyo' (palm wine), brooms, an emergency food called 'cabbage' that is the young part of the tree (although this kills the tree), soil protection and shade for a host of other valuable plants and crops.

SAC COMPENSATION

Respondents in the SAC lease area reported that the compensation SAC paid was a one-off payment for private oil palm plantations of Le 1 million or US\$233 per acre, equivalent to Le 2,471,050 [US\$570] per hectare. This falls far short of the real productive value of an acre of oil palm trees, either indigenous 'native' trees or improved varieties, for even a single year, let alone the productive lifetime of the trees. Respondents in the SAC lease area said they had not received any extra compensation for economic trees or crops in the area and if the company was paying for these, they were unaware of it.

SLA/SIVA COMPENSATION

SLA/Siva management told the research team that it will not pay for any 'native' oil palms or 'ill-managed plantations'.¹⁵⁴ Its nursery manager seemed to be unaware of economic trees and well-known food trees such as 'tola' and timber species such as 'karonko' in the lease area. Furthermore, the plantation manager stated that no economic trees were damaged in the clearing of nearly 1,000 ha in BKM Chiefdom, an account that was challenged by focus group assessments of the loss of tree crops in the affected communities.

One person in the area that SLA is clearing in the Maconteh section of the chiefdom is asking for compensation of Le 250 million [US\$57,738] for his 2-ha oil palm plantation, which the SLA plantation manager interprets as 'greedy', an attempt to 'exploit the company'.¹⁵⁵ Yet, as shown in the box 'Calculating the real losses when the oil palms come down', the real productive value of oils from 2 ha (4.94 acres) of improved oil palm trees over 30 years would be over 2.1 *trillion* Leones [US\$492,854], *more than eight times* the Le 250 million the landowner is asking for.

Addax Bioenergy has developed a transparent and accountable system for compensating affected landowners for lost agricultural assets, with a list of prices and documents to show what payments are made for these assets. But even there, because the GoSL has not developed a binding official list of compensation rates for lost agricultural assets, the ones applied by Addax Bioenergy do not reflect the real potential value of some of those assets. *If investors were obliged to pay the real productive value of trees they fell and cropland they occupy with their plantations, some of the real costs of such land deals would be shifted from the local people to the investors.* But for that to happen, the GoSL would have to develop a realistic compensation list based on the productive value of the country's plant genetic resources and make it binding for *investors.*¹⁵⁶

4.2.2 Surface rents

The surface rents being paid by investors vary between investors. Addax Bioenergy pays US\$8.89 per hectare per annum, divided as follows: 50 per cent to landowners, 20 per cent to district councils, 20 per cent to chiefdom councils, and 10 per cent to national government. In addition to this, in 2011 Addax Bioenergy signed direct Acknowledgment Agreements with landowners that added an extra annual payment of US\$1.40 per acre (3.46 per ha) per annum for the landowners. This brings the annual rent to US\$12.35 per hectare per year, of which US\$7.90 (64 per cent) goes to the landowners.¹⁵⁷

SAC pays US\$5 per acre (12.50 per hectare) a year. That amount is distributed according to the same formula developed by MAFFS,¹⁵⁸ with 50 per cent going to landowners, 20 per cent each to the district councils and chiefdom councils, and the remaining 10 per cent going to the national government. This distribution has been criticised by civil society groups, which view it as a possible incentive for authorities that do not suffer damage from land deals to support them.¹⁵⁹ In keeping with the country's land laws, the surface rent is to be reviewed every seven years, but SAC's sub-lease with MAFFS states that the rent increase between review periods cannot exceed 17.5 per cent.¹⁶⁰ SLA/Siva pays just US\$2 per hectare [US\$5 per acre] a year, an amount to be reviewed every seven years, as stipulated by the country's land laws. Focus groups in the lease area said they did not know the actual surface rent agreed to in the SLA lease, which was acquired by SIVA when it purchased SLA in 2011. Respondents also said they had not received any regular payments so far for the surface rent. Regardless of how much surface rent is paid, it is up to the landowner (the family head that agreed to sign the deal) whether any of the rent money is shared with other affected land users, many of them women, who are rarely landowners. In any case, only those few landowners who have signed over large pieces of land have any substantial income from their land each year. Some former land users in the focus groups on all three leases said they have received no compensation for the loss of their farms.

4.2.3 Investor promises, programmes and corporate social responsibility

Respondents in the focus groups in all three lease areas said that they would not have agreed to the land deals were it not for promises made to them about the development that the investors would bring, including employment, roads, improved health and education, electricity, water wells, and court barrays. They said the promises were made by traditional leaders, politicians, company representatives and respected local people engaged by the companies to promote the investment to communities and convince people that it was in their interest to agree.

The promises raised expectations, which if unfulfilled could lead to deep anger and despair, signs of which are already evident from focus group discussions in the sampled communities in all three lease areas. For their part, the companies and their proponents maintain that they need to start full

Respondents also said they had not received any regular payments so far for the surface rent.

production and receive returns on their investment before they can begin fulfilling their corporate social responsibilities. However, there are no legal guarantees for any of these, which appear as nonbinding mitigation measures in EIAs, leases and MOUs.



Despite ADDAX's conversion of their land to giant industrial sugarcane plantations, ironically for participants of its Farmer Field and Life Schools it provides t-shirts promoting smallholder farming. Photo: Joan Baxter

ADDAX BIOENERGY - PROMISED BENEFITS AND CORPORATE SOCIAL RESPONSIBILITY

Addax Bioenergy maintains that it never promised anything except 2,000 permanent jobs and 'development', which did not include schools or hospitals. It states that it has delivered what was promised in public messages and cannot be held responsible for other claims. Affected communities that were sampled, however, allege that the Addax Bioenergy representatives and local politicians (whether or not authorised by Addax Bioenergy) made many lofty promises. It has been alleged that those who raised expectations of the benefits Addax would bring included 'Addax Social Team Members, Honorable Martin Bangura, Paramount Chiefs, President, Lawyers ostensibly hired to represent the communities', and the 'people traded their land for the hope of these promises'.¹⁶¹

SiLNoRF acknowledged in its 2012 Monitoring Report some positive changes at Addax Bioenergy between June 2011 and June 2012. Among these, it noted that Addax Bioenergy was open for dialogue with its stakeholders, that it paid the land lease fees according to the provisions of the Land Lease Agreements and the compensation payments for destroyed crops and economic trees, that there were more workers and they now had written work contracts.¹⁶² Moreover, Addax Bioenergy has implemented a grievance mechanism, a Stakeholder Engagement Plan, and 29 environmental and social management plans.¹⁶³

The MOU signed in 2010 between Addax Bioenergy and the GoSL states that in the first phase (2010-2013) the company would employ 3,000 people (4,000 in the second phase, 2013-2015)¹⁶⁴ and that the 'expected benefits' include 'job creation, education, stable income and infrastructure'. However, at the time of this research, it was still employing just 1,669 nationals,¹⁶⁵ fewer people than promised, and many are temporary labourer positions that do not provide a stable income. By December 2012, that figure had dropped to just 1,444.¹⁶⁶ The company states that more people will be employed as the project is completed.

Addax Bioenergy states that it has 285 km of road constructed in the area. Apart from the main thoroughfares required for its new headquarters, its nursery site and its sugar plantations, however, other roads in the lease area have not improved and some have deteriorated. The road leading to Ropotor had been made impassable by Addax Bioenergy altering nearby waterways at the time of this research in November 2012. Addax Bioenergy says that its investment model includes a number of steps to ensure the project 'improves the quality of life for local residents',¹⁶⁷ referring to its Farmer Development Programme. The programme is organised with FAO and MAFFS to 'sustainably improve food security' through 'better adapted farming methods'. It involves the ploughing of 2,000 hectares of land throughout the lease area for crop cultivation and the training of 1,441 farmers.¹⁶⁸ The ploughed lands are around communities, and vary in size from a few hectares to 50 and sometimes more.¹⁶⁹

Community assessments of the Farmer Development Programme (FDP) by the three focus groups on the Addax Bioenergy lease area were not positive. First, they said it focuses almost exclusively on rice, runs for just three years and will expire in 2013, leaving the affected communities with just one small plot of land (and no more seed or ploughing) to produce all their food crops. Second, they asserted that the trainers did not appreciate the value of crop diversity and did not encourage intercropping with rice, and in any event, could not restore the economic trees and farmlands that the affected communities have lost.

The SiLNoRF Monitoring Report also reports a number of areas of concern on Addax Bioenergy:

- the sustainability of the FDP, which relies on expensive external inputs
- communities in the Makari Gbanti Chiefdom indicated that the 2010 and 2011 rice harvests on the FDP fields were low and therefore not sufficient to ensure their food security
- two communities asked for an additional MOU from Addax Bioenergy committing the company to use only the demarcated lands
- unfulfilled 'juicy' promises made by the company and/or its agents that 'lured' people into agreeing to lease their lands for 50 years
- water issues in some communities.¹⁷⁰

In its response to this report, Addax Bioenergy dismissed criticisms from the FDP (the Field and Life School). It stated that the FDP is continuously updated and that it has so far trained and supported almost 2,000 smallholders and developed 2,000 hectares of crop and rice land for the villages in the project area. It claimed that its project is making 'verified contributions' to sustainable local development', citing reports of increased sales of agricultural commodities, employment of local people and unspecified job opportunities created by contractors and suppliers. It also claimed that rice yields in 2012 in the project area were three times higher than before the programme started, although respondents in this study reported low yields.

Community assessments of the Farmer Development Programme by the three focus groups on the Addax Bioenergy lease area were not positive.

Women from the village of Ropotor in the Addax Bioenergy lease area say they now have to walk all the way to market with produce because the road has been made impassable for vehicles because of Addax. Photo: Joan Baxter

SAC PROMISED BENEFITS AND CORPORATE SOCIAL RESPONSIBILITY

According to SAC, its expenditure on corporate social responsibility (CSR) in 2011/12 was US\$557,679, with US\$485,000 projected for 2013.¹⁷¹ On its list of completed and ongoing social projects, SAC includes three roadwork projects, but does not provide details on which ones have been developed primarily to serve the company and its vehicles or machines. The roads account for US\$384,500 or 69 per cent of the CSR budget for two years.¹⁷² It is questionable whether such infrastructure costs, like the property taxes (US\$10,465) that SAC is paying for the landowners whose land they leased, should be included in a budget for 'social projects'.

To date SAC's CSR accomplishments include eight water wells (total US\$34,120), one ambulance (US\$40,000) at SAC headquarters in Sahn Malen, a primary school and improvements on one JSS (US\$35,546), some footwear and jerseys for Kortumahun residents (US\$1,290) and US\$209 for a friendly football match. Another 'social project' involved US\$3,221 for a generator and paint for the police station in Pujehun,¹⁷³ which is not in the SAC lease area.

Another element of SAC's CSR is the Social and Grievances Committee of the Malen Chiefdom, which it funds. The committee is chaired by the paramount chief (PC), who has always strongly endorsed and promoted SAC in the area, and it will be partly responsible for how SAC's CSR budget will be spent. In this vein, the PC recently requested that US\$25,000 of CSR funds be spent on a presidential guest lodge in the chiefdom headquarters, Sahn Malen, and this request was approved.¹⁷⁴

To date, SAC's CSR has not included agricultural programmes, nor has it looked at how local people, particularly women, who lost many food trees and crops, can be compensated with assistance to find alternate livelihoods. Its CSR priorities are health and water, and improving facilities for these.¹⁷⁵

Focus group and individual interviews indicated that dissatisfaction with SAC is quite high in the sampled communities, and there is tension related to the investor presence. Authorities in Pujehun said they have heard the complaints and are aware of the dissatisfaction.¹⁷⁶ The dissatisfaction stemmed originally from the way the land was obtained.¹⁷⁷ It now also includes the loss of farm income and produce from the bush and tree-crop areas, the impact on food and nutritional security, new social ills and discord in the communities, and the limited and short-term employment opportunities available with SAC. There is also dissatisfaction among SAC labourers interviewed that wages of Le 10,000 [about US\$2.30] per day cannot compensate them for their lost farm income and produce, a problem exacerbated by what they said were escalating food prices in the lease area.

To date, SAC's CSR has not included agricultural programmes, nor has it looked at how local people, particularly women, who lost many food trees and crops, can be compensated with assistance to find alternate livelihoods.

SLA/SIVA - PROMISED BENEFITS AND CORPORATE SOCIAL RESPONSIBILITY

The SLA lease, signed in May 2010, when Sierra Leone Agriculture was still a business of Caparo Renewable Agricultural Development Limited (Crad-I),¹⁷⁸ contains non-binding clauses on how it will 'endeavor' to employ local people and assist them:

- Clause 2 (x) To reasonably assist in providing and supporting the primary and secondary education of the direct dependents [sic] of the LESSEE's employees.
- Clause 2 (xi) To use its best endeavor in providing healthcare, housing, sanitation and water for the benefit of the LESSEE's employees and their direct dependents [sic].

The lease also states that 5 per cent of the company's annual net profit would be paid as a royalty to a community development fund, and the SLA country representative estimates that could eventually amount to US\$25 million per year,¹⁷⁹ which means the company calculates US\$500 million net profit per year in full operation. Such an arrangement would require close monitoring with checks and balances that are currently not in place, and would also require more transparency than currently exists in how the holding/parent companies of SLA - Geoff Palm/Siva Group - are structured and operate as an offshore conglomerate.

At the time of the research, 600 local people were working for SLA and they did not have contracts¹⁸⁰ or appointment letters,¹⁸¹ let alone permanent employment or any of the benefits mentioned in the lease. Focus groups said that communities had been convinced to accept the lease in the first place because they had been told that the company would bring jobs, give scholarships for children, build houses, clinics, hospitals, schools, wells and bring development and an improved living standard.¹⁸²

SLA/Siva has made donations outside the lease area; it contributed US\$50,000 to the 50th anniversary celebrations of Sierra Leone's independence, US\$20,000 to the national museum and US\$30,000 to three chiefdom councils (US\$10,000 each) where SIVA companies are working in the country.¹⁸³

None of the many, extensive development initiatives detailed in the SLA Community Development Action Plan¹⁸⁴ appear to have been implemented or even begun, although US\$900,000 has been budgeted for the first five years of operations. To date, its CSR activities are very limited.

SLA has imported 10 small mills that can produce crude palm oil, two of which will be kept for community use in the Port Loko lease, with the others slated for its affiliates' (Biopalm Star Oil/ Biopalm Energy) lease areas in southern Sierra Leone.¹⁸⁵ There are also 10 small refining plants for distribution, but their usefulness when local people have lost their own oil palm plantations is unclear.

Another SLA CSR project involves multiplication of vegetable seeds in the company's original nursery site.¹⁸⁶ An additional one hectare of groundnuts and one of soy have also been planted at the nursery site, and income from those is to be passed on to 'the people'.¹⁸⁷ At the time of the research, the groundnut and soy beds were covered with weeds and apparently untended. The vegetable seeds were neither local nor for vegetables that are widely consumed in the area, and included lettuce seeds from Holland and bok choy from Asia. The seedlings produced are supposed to be transplanted to small farming blocks that SLA is to prepare, 3-ha plots in each of the three sections of the chiefdom, which are to be managed by 20-24 women.

This is a naïve project, which is unlikely to be of any significant benefit to the wider community. Even if three such vegetable gardens are created and become productive, they can hardly contribute in any meaningful way to the livelihoods of more than 30,000 people in BKM who have lost their farmland. It is of immense concern that the country representative of Siva Group believes that a village of 200 or 300 people can sustain itself with just 'an acre' or 'a few hectares' of land, and that the SLA nursery manager contends 'there is no palm oil' in Sierra Leone.¹⁸⁸

'The Paramount Chief and Honourable [PC Bai Bureh Sallu Lugbu II MP of BKM] gathered us all. He said he was bringing prosperity to our town. He said the company will plant and this planting will benefit parents, children and children as yet unborn. He called the land "waste land". He said the investors will come and take the waste land in our community. We said, "This is where we were born and this is what we were left by our fathers. It is this land that pays school fees for our children." He said that the company will build a school, a hospital, help with education, and those in classes will be awarded scholarships, and they will build a community centre and electrify the town here and build water wells and pumps and all our children will be employed. And all these things, they have not done. We have no one to cry to. The Honourable and the PC won't help, so we have to cry all by ourselves. We are helpless.'

Elder in Bantoro, SAC lease area, 3 November 2012

4.3 Education, food and nutrition, health – before and after investor

4.3.1 Access to education

According to the focus groups, access to education did not improve in any of the eight communities. It remained the same in one (Mayorsor, SLA lease), and was perceived as having got worse in the other seven (Table 6), largely because of lower attendance. Youngsters in JSS and senior secondary school (SSS) were the most likely to be withdrawn from school when farm income was lost and parents found themselves unable to pay the education costs; girls were more likely to be withdrawn than boys. Distances to the nearest schools remained the same. One of the three investors has constructed school facilities; SAC lists as one of its CSR accomplishments a primary school in Sinjo Malen.

Table 6. Access to education before and after investor

The reasons given by focus group participants for the perceived negative impact on access to education by the investors' operations included:

- increased poverty, can no longer afford school fees, books, exams
- lost farm income and investor has not offered support for education
- young men [of working age] quit school to seek jobs with investors
- teachers left seeking work with company.

Average km to nearest primary school	Average km to nearest JSS	Average km to nearest SSS	Attendance higher after investor (no. communities)	Attendance same after investor (no. communities)	Attendance lower after investor (no. communities)	
2.1	12.9	24.3	0	1	7	



Sallay Koroma is the father of three children, living in the community of Bantoro in BKM Chiefdom where SLA has leased nearly 42,000 ha of land for oil palm plantations. After the family farmland was signed over to SLA and Sallay's farm income all but evaporated, he took two of this three children out of school to cope with the loss of income. One of these, his 17-year-old son Mohamed, had performed well in JSS and had been ready to continue to SSS. But his father, unable to cover the costs, now sadly and angrily presents his son's documents as evidence of what the family has lost.

Photo: Joan Baxter

Location	Lease	Item	Price (Le) per unit before investor	Price per unit at time of research
Sahn Malen	SAC	Bush meat (whole)	50,000	100,000
Sahn Malen	SAC	Chicken (live)	7,000-8,000	20,000-25,000
Sahn Malen	Malen SAC	Fish	1,000-2,000	15,000-20,000
Sahn Malen	SAC	Sweet potato (pile)	500	2,000
Wareh Yeama	Addax	Bush meat (per cut)	5,000	20,000
Massory Luma	Addax	Plassas (per tie)	200	500-1,000
Massory Luma	Massory Luma Addax Massory Luma Addax	Beans (cup)	500	2,000
Massory Luma		Groundnuts (cup)	500	2,000
Massory Luma		Pepper (cup)	500	2,000
Mayorsor		Cassava (pile)	500	1,000
Mayorsor	SLA	Yam (portion)	500	1,000-2,000
Mayorsor	SLA	Palm oil (pint)	1,200	1,800
Mayorsor	SLA	Sesame (cup)	500	1,000

Table 7. Differences in prices of selected foods before and after investor presence in lease areas

4.3.2 Access to food and nutritional security

The conversion of land to industrial plantations has led to a dramatic reduction in food crop production, access to food, and access to the full variety of foodstuffs that respondents enjoyed in the sampled communities before the investors came. The results are most evident in the reduction of the number of meals that households in all three lease areas said they consume every day. Before the investors arrived, people in the sampled communities (both focus groups and individuals interviewed) said they tended to eat two or three meals a day after harvest. During the hungry season, that might drop to two or just one. After the arrival of the investors, they began to eat just once and at most two meals a day, even at harvest time, formerly considered a time of abundant food. Some respondents also said they had lost their year-round access to a wide range of nutritious fruit from trees on their land, which had complemented their diets and nutritional status before the trees were felled for the investors' plantations.

The quality of the meals had also deteriorated. Observations included:

- cassava and sweet potato missing, meals not as rich
- missing meat, vegetables, beans and wild fruits
- sometimes no palm oil, no fish and no bush meat
- missing beans, crabs, groundnuts, the soups are weak
- fewer vegetables now, no garden eggs or okra.

As they have been around the world, food prices in Sierra Leone have been rising rapidly in recent years, with the price of a cup of rice in the country's markets doubling between 2009 and 2011. Clearly, many of the price rises reflect increased global costs, rising fuel and transport costs and other inflationary pressures. However, there is a perception among respondents in the three land lease areas that investor presence in an area is also responsible for pushing up prices of some foodstuffs. In the SAC lease area, respondents said prices of some basic foods rose much more than could be accounted for by inflation between 2011 and 2012. The price for raw cassava in the area, for example, rose nearly 90 per cent.¹⁸⁹ The presence of wage-earning labourers, who are obliged to purchase all their food, creates greater demand and thus higher prices. In addition, there are local shortages of various foodstuffs (beans, bush meat, and so on) created by the loss of farmland and bush; this increases demand for and prices of the produce, causing dramatic price rises in local markets. Table 7 provides an overview of some of the price changes cited by respondents in the sampled communities in three lease areas.

4.3.3 Health before and after investor

Since the investors began their operations there has been no change in the distance to the nearest health facilities in any of the sampled communities. The average distance remains 6.3 km. Only the community of Mara has its own health clinic, constructed by the government and rehabilitated by Concern, an NGO.

Addax Bioenergy and SAC both have ambulances, but respondents in the study had no knowledge of these and for whom they are to be used. SAC states that it will be extending the hospital in Sahn Malen in 2012-2013 and constructing a house for a medical doctor and nurse.

In the Addax Bioenergy project area there was a perception that there are new health problems related to the investor's presence, such as stress caused by the struggle for food and work, poorer nutrition and more malaria caused by an increase in the number of mosquitoes in the sugarcane. At the same time, some respondents claimed that without farm income, they had less money to get to health clinics, and in the words of one woman in Wareh Yeama, 'If you can't pay [for] transport, you die.' In contrast, one respondent in Ropotor (Addax Bioenergy lease) felt that people were now healthier because of the zinc roofs that he said were paid for with surface rent and crop compensation. In Wareh Yeama, some former labourers for the company said they had benefited from operations on their hernias.

In focus group discussions in the SLA lease area, there was a perception that less nutritious food and the lack of livelihood activities on the farms resulting from the investor's operations were adversely affecting people's health.

Clearly, these are merely impressions and cannot be verified without independent in-depth health studies. What can be concluded, however, is that much of the positive rhetoric about improved health facilities, which focus groups said helped convince people in the lease areas to give up their land, has yet to manifest itself.

In addition, the effect on human and animal health of chemicals used by the companies on their plantations requires monitoring. All three companies are or will be using chemical fertilizers and also herbicides, including Triclopyr 480 EC (SAC),¹⁹⁰ Roundup (SLA)¹⁹¹ and glyphosate (Addax Bioenergy).¹⁹²

4.4 Community assets, human resources

As in much of Sierra Leone, communities in the lease areas suffer from a serious lack of infrastructure, amenities and agricultural assets, both those that would reduce post-harvest losses such as drying floors and storage facilities, and equipment and tools that could help increase production and add value to farm produce.

One of the benefits that proponents of large-scale agricultural investment often mention is improved infrastructure, including better access to safe water, more roads, and more community assets such as community centres (court barrays).

Perceived improvements in community infrastructure and assets mentioned by some respondents in focus groups were:

- more zinc roofs for homes purchased with compensation/surface rents in three communities (Addax Bioenergy and SAC lease areas)
- the presence in two communities (Addax Bioenergy and SAC lease areas) of generators purchased after the investors' arrival, which permitted charging of mobile phones (although the mobile phone service itself did not improve in any sampled community)
- one new water well constructed by SAC in Hongai; one constructed by Addax Bioenergy in Wareh Yeama.

4.4.1 Access to safe water

There were 11 working water wells in eight sample communities before the investors arrived, 10 of them funded by foreign donor agencies or NGOs and one paid for by relatives living in Freetown. Two new water wells were put in by investors (SAC and Addax Bioenergy). But focus groups in two communities (Kortumahun in SAC lease and Mara in Addax Bioenergy lease) reported that one of their existing wells stopped working, reportedly because of increased use due to the influx of workers.

Most communities also depend on local water bodies (rivers, streams, swamps) as sources of water to drink, as well as for laundering and washing, and for fishing. Civil society organisations calculate high risks for the all-important Rokel River that runs through the Addax Bioenergy lease area, estimating that the company will be withdrawing 26 per cent of the river's flow during the driest period from February to April each year.¹⁹³ In an interview, the Health, Security, Social Affairs and Environment Manager of Addax Bioenergy said he didn't know how much water the project would use, but he stated that the company has agreed to stop irrigating if the flow of the river drops below 8m³ per second during the dry season, and that during the dry season of 2012, it was flowing at 16-18m³ per second.

On the SAC lease, focus groups in Kortumahun and Hongai are concerned about the potential risk of contamination of waterways from the chemical fertilizers and herbicides being sprayed on the oil palm plantations. In Kortumahun, respondents were concerned that the Maleni River, which is being used to irrigate the SAC nursery, is being negatively affected by the water extraction, but an independent study would be required to validate the concern.

4.4.2 Agricultural and other community assets

There was no change in community and infrastructural assets in any of the communities sampled in the three lease areas. The three communities with court barrays had built them themselves or with the assistance of NGOs after the war ended, and no new structures have been built in any of the communities. Of the eight sampled, just two communities have stores and three have drying floors for produce – no change from before and all paid for by donor funds.

Five of the communities had cassava graters before the investor came, and one (Kortumahun) had four, which they purchased themselves with the proceeds of their communal farming activities. The graters, which permitted them to produce gari for the market, became superfluous after the investor's arrival when there was no longer land for largescale cassava production and the community gave away their four graters to a community across the river in a chiefdom that has so far resisted leasing out any land. Only one community, Mara, has a milling machine, which was funded by a donor and has yet to be installed. Wareh Yeama (Addax Bioenergy lease) had a tractor that was donated by a German charity, which has also provided the community with a school. No respondents mentioned the fleet of 30 tractors that Addax Bioenergy says it has to assist people in the lease area.

4.4.3 Road access

Large new roads have been constructed on the Addax lease (to Lungi Acre and to Mabilafu, where company headquarters are and where the ethanol factory will be based). SAC claims it has rehabilitated or built 375km of roads on its plantation. However, the perception in sampled communities is that roads being developed by investors are largely for their own use and that the roads the community uses have not improved since the investors arrived. Before, eight of the communities could be accessed by roads that were passable all year round. Respondents in two communities, Ropotor in the Addax and Kassay in the SAC lease area, reported that their communities were no longer accessible year-round by commercial vehicles.¹⁹⁴ Three more (Hongai and Kortumahun in the SAC lease and Mara in Addax lease) said that the large machinery had made their roads worse.

The number of fisher folk decreased in two communities on the Addax lease; in Wareh Yeama focus group participants said this was because traditional fishing holes had been lost. In Mara, fisher folk had found employment with Addax Bioenergy.

4.4.4 Human resources

The most dramatic change in human resources in the sampled communities was the shift away from farming. Before the advent of the land leases, farming occupied just about everyone in the sampled communities. Afterwards, it occupied some of the population and even then, on less land and for less time than before.

The presence of the investors had no obvious effect on the number of trained teachers, healthcare workers and trained birth assistants, masons and carpenters in the communities. However, it was linked to the loss of volunteer teachers who went to work for the companies, and of tailors and mechanics who found that local people could no longer pay them after losing their farming income. The number of traditional herbalists and healers did not change, but they said they were experiencing difficulties finding herbs for their work and were walking long distances or paying for transport to get to bush areas that had not been cleared by the investors.

The number of fisher folk decreased in two communities on the Addax lease; in Wareh Yeama focus group participants said this was because traditional fishing holes had been lost. In Mara, fisher folk had found employment with Addax Bioenergy.

The focus group in Mara offered an example of a positive development – the increased production of bread in the community. It was explained that three people had come to the community seeking employment with the company, didn't find it and went to work as bakers instead.

'Life was better before Addax Bioenergy came', says Masiray.

LEARNING TO 'SQUEEZE'

Masiray Kamara is a 37-year-old mother of three in Wareh Yeama,¹⁹⁵ in the Makari Gbanti Chiefdom in Bombali District, in the Addax lease area. In addition to her own children, she looks after four of her younger sisters and her mother. She is not a landowner and the land that she formerly farmed belonged to her husband's brother, who agreed to sign it over to Addax Bioenergy. Before that, the family's livelihood came almost entirely from the crops they cultivated in their upland farms, bolilands, backyard gardens and swamps, and from other products they collected from the bush fallows, including wild fruits such as plums, nutritional condiments and foods from *lokos* (locust bean tree). She estimates that more than 20 people depended on the family land for their livelihoods.

The family never had to purchase firewood or charcoal, made their own soap from palm nut oil, supplied all their own construction materials such as thatch, wood and twine from the bush fallows and collected their own medicinal herbs on the land as well.

Today, Masiray Kamara is facing dual hardship. First, she lost her own farm income, food supply and self-sufficiency in the form of palm oil, groundnuts, beans, vegetables and fruits, so that she is now obliged to purchase much of the family's food. This combines with the rapidly rising prices of foodstuffs in the area.

She has tried finding alternative sources of income by selling food to workers on the Addax Bioenergy site, including bush meat. But she says that 'white men' had their security officers send her away. She has had no choice but to take her daughter out of school, where she was in Form Two at junior secondary school, and now is pregnant and living in the town of Lunsar. Masiray Kamara says the family has learned to 'squeeze' by cutting down on the number and quality of meals eaten. Sometimes she cooks without palm oil, sometimes without any leafy greens, making do with 'water water soup'. They may go days without having any fish in their meals, and bush meat, once common and readily available at 2,000 Leones a 'cut', is rare and when it is available, costs 5,000 Leones.

'We now eat just once a day,' she says. 'And even that one meal is sometimes just gari.' Her small sister has found work with Addax but the pay she receives is not nearly enough to compensate for all the produce and products the land once provided them. In her view, life was better before Addax Bioenergy came.

4.5 Quality of life, social relationships, sources of conflict

4.5.1 Demographic impacts of the investor's presence on communities and households

The investor presence has brought demographic changes to some communities in the lease areas. In some communities, there has been an influx of 'strangers' who are working for or seeking work with the companies. In communities close to the company's headquarters, such as Mara (Addax Bioenergy) and Hongai (SAC), the presence of mostly male 'strangers' has brought new social problems, including broken marriages, more unwanted pregnancies, increased incidence of theft, excess drinking and sex work. At the same time, the community of Hongai has experienced a decrease in its indigenous population as more than 15 young people and elders had left the community and crossed the Maleni River to Bonthe District to try to find land to farm.

4.5.2 Social breakdown

Powerful structures for social cohesion in the sampled communities before the investors arrived (beyond men's and women's societies) were social groups and associations for farming, savings and development. These could be all male, all female, mixed male and female, or all young people. They generally worked communal pieces of land varying from 5 or 10 hectares to more than 50, producing crops such as rice, cassava (for gari), groundnuts, palm oil, beans, egusi and sesame, vegetables such as pepper and okra, and maize. In this way they produced food to share among themselves or sell to generate income for community savings, for selfhelp development projects and infrastructure, for deposits in a traditional 'bank' or 'susu', and also for emergencies.

All the communities in this study had several such groups before the arrival of the investor (Figure 2), with an average of 10 per community, and these contributed to social cohesion, community savings and self-help projects and food security. They represented self-help mechanisms for promoting grassroots development and coping with hardship and conflicts. Many of the groups simply collapsed after the investor took over the land and left the communities with insufficient land for communal plots. One community had formed a new association after the arrival of the investor; in Wareh Yeama (Addax Bioenergy lease) about 32 people formed a group to plant cashews on 5 ha they reserved for this. An in-depth study would be needed to assess the magnitude of the impact that this loss of social and monetary capital has had in the communities.

Figure 2. Breakdown of community groups and associations



Social / farming groups per community before /after investor

4.5.3 Sources of conflict

At the same time as the sampled communities were losing mechanisms for maintaining social cohesion, they were dealing with new or heightened sources of potential conflict that aggravated tension and divisions in their communities. Local communities consider this to be related to the presence of the investor and the loss of their farmland. Focus group perceptions of the gravity of the various sources of conflict showed a dramatic change since the arrival of the investor (Figure 3). Some respondents spoke of a loss of trust among people in the community and a sense that their 'freedom' had been lost.

Figure 3. Sources of conflict and their perceived gravity in the communities



(Perceived gravity of conflict here is calculated by adding the values that eight focus groups assigned to each conflict source, with 0 = notimportant, 1 = manageable, 2 = very serious) Problems that had become more prevalent and 'very serious' since the investor arrived, and reasons given for these by focus groups included:

- Family disputes: disagreements over whether the land should be 'sold'; new hardship meant less sharing; lack of money caused arguments
- Teenage pregnancy: male workers in the area; parents can no longer take care of their daughters
- Land/boundary disputes: neighbouring communities claiming land to get surface rent
- Money: sharing of surface rent money causes conflicts; unable to make ends meet as people are now borrowing money and are unable to repay debts
- Theft and other social ills (including sex work): many 'strangers' in the area now; without farm income, girls need money and 'go with the company workers'
- Jealousies: women leaving husbands for workers when husbands can no longer provide for the family because of lost land.

According to the Malen Affected Land Owners Association (MALOA), there are three 'phases' of reaction after any company starts work on a large land lease in Sierra Leone:

- 1 At first, everybody is **'happy'**; there are promises of money and development and some cash payments for the land or for crops.
- 2 Then, as the money is spent and there is no land left, comes a period of realisation of what has been lost, a period of **'disgruntlement'**.
- 3 As the hardship builds, without farming and the income it brings, tension builds and the next stage is, inevitably, **'fighting'**.

4.5.4 Quality of life and wellbeing

When focus groups in the sampled communities were asked how they perceived the changes in their quality of life and wellbeing, just over half (five out of eight) found life 'good/comfortable' and almost half (three-eighths) found life 'difficult, but manageable' before the investors arrived. However, half of the focus groups interviewed said that they would 'consider leaving as life had become too difficult' after the investors had arrived, while the other half found it 'difficult, but manageable'.

Figure 4 shows how they perceived changes in the risk of conflict/level of tension before and after the investor: community is peaceful and harmonious; there is tension but it's manageable; there is so much tension we fear conflict. There was consensus among focus groups that the situation had deteriorated, that life had become more difficult and that tension and the risk of conflict had increased.

Figure 4. Changes in levels of tension/risk of conflict in the communities



Perceived level of tension in 8 sampled communities before/after investor There was consensus among focus groups that the situation had deteriorated, that life had become more difficult and that tension and the risk of conflict had increased.

Finally, none of the focus groups or individuals interviewed in the sampled communities came to the consensus that their lives had improved since the investors arrived. Asked to list the benefits that the companies had brought and in what ways life had improved, respondents in the focus groups listed:

- 1 more zinc roofs (Kortumahun in SAC lease, Ropotor in Addax Bioenergy)
- 2 some road work in the chiefdom (Kortumahun, SAC)
- 3 certificate from Addax Bioenergy Farmer Field School (Wareh Yeama, Addax Bioenergy)
- 4 'Addax harrowed our land during negotiations' (Wareh Yeama, Addax Bioenergy)
- 5 'My wife is working so life is better' (Ropotor, Addax Bioenergy)
- 6 'Landowners got benefits' [surface rent payment, compensation] (Mara, Addax Bioenergy)
- 7 some jobs, fewer debts from local palm oil producers (Mayorsor, SLA).

The consensus of all focus groups in the three lease areas was that the costs outweighed the benefits and that life in the communities had become 'worse' since the investors arrived. The reasons given mirror the findings of this study, and include:

- loss of food and nutritional security, rising cost of living (Kortumahun in SAC lease, Mara in Addax Bioenergy lease, Mayorsor in SLA lease)
- loss of income and increased poverty, can't afford to send children to JSS and SSS, especially girls
- poor employment conditions, job insecurity and wages that do not compensate for lost income from land resources (Ropotor in Addax Bioenergy lease)
- loss of assistance from NGOs that were working before investors came (Concern had previously worked in Mara in the Addax Bioenergy lease; Deutsche Welthungerhilfe (WHH) had worked in communities on SAC lease)
- marriage breakdown and other social ills (Kortumahun, Hongai in SAC lease)
- new health problems, sexually transmitted diseases, unwanted pregnances (Wareh Yeama in Addax Bioenergy lease, Kassay in SAC lease)
- loss of 'freedom', self-sufficiency and independence of being a farmer (Kortumahun, Kassay in SAC lease).

In the words of an elder in the community of Bantoro (SLA lease), 'What we used to have has been taken away so you now quarrel with your neighbours. If someone now gives you something to give to someone else, now you put it in your pocket and keep it. A hungry man is an angry man.'



Members of the focus group in Kassay village, Socfin lease area. Photo: Joan Baxter

The consensus of all focus groups in the three lease areas was that the costs outweighed the benefits and that life in the communities had become 'worse' since the investors arrived.



5. NATIONAL REGULATORY FRAMEWORK AND GAPS

Environmental impact assessments.

This section aims to analyse the Environmental, Social and Health Impact Assessments (EIAs) of Addax Bioenergy, SAC and SLA, with particular reference to the gaps that exist in these reports. The principal regulatory framework guiding this analysis is the Sierra Leone Environmental Protection Act of 2008,¹⁹⁶ which is binding for companies that are required to undertake an EIA in order to apply for a licence. Attention was also paid to international frameworks such as the UN Food and Agriculture Organisation (FAO) EIA guidelines, which present best practice guidelines for agricultural projects in crop production, forestry and the fishery sector.¹⁹⁷

The Environmental Protection Act requires companies to provide information on the natural resources to be used in the project, the direct or indirect effects that the project is likely to have on the environment, and the social, economic and cultural effects that the project is likely to have on people and society.¹⁹⁸ According to the FAO guidelines, the EIA process and procedures must also adhere to a number of governing principles, such as:

- the preservation of protected areas, natural habitats, and critical ecosystems
- respect for land tenure issues, including the security of rights to land and other natural resources
- management of biological diversity for food and agriculture
- protection of plant and animal genetic resources
- management of agricultural chemicals, including pesticides, with reference to the adherence to various conventions
- avoiding involuntary resettlement
- respecting gender equity.

While the three EIAs analysed here follow the requirements of the Environmental Protection Act, they do not go far enough, as they all have gaps in key areas that require urgent attention. These are highlighted below:

a) Description of location, biophysical and social environment:

Both the third schedule, section 26 of the 2008 Environmental Protection Act and FAO's EIA guidelines require that information on baseline conditions of a project, its location, size and surroundings, as well as its biophysical and social environment are properly presented.

Findings: The reports analysed attempted to present a description of the location of the project and its surroundings. However, given that these projects will have a significant impact on the environment, a thorough inventory of the biodiversity, flora and fauna, their categories, scale or range are required to establish a comprehensive baseline that would inform the process of decommissioning of the project at the end of its life. Furthermore, the agronomic diversity of the regions affected by these projects is not taken sufficiently into account.

b) Water access:

The agricultural sites of all three companies lie close to rivers. Water is a natural resource that will be used by the companies for their operations. It therefore requires a 'true statement and description' in their EIAs, according to the Environmental Protection Act 2008. This should include the projects' impact on water and the water needs of communities, including an analysis of how low water tables will affect communities during the dry season when demand for water is high, especially by industrial plantations. The FAO guidelines also underscore the importance of water and water development, emphasising that changes in water guality and changes to downstream water supply should be avoided. They also highlight the critical issue of avoiding water rights conflicts.

Findings: While Addax Bioenergy presented a certain level of advanced hydrological assessment, the SAC and SLA reports fall short of in-depth assessments of local hydrological systems. The EIAs do not mention the drying up of swamps and bolilands and the impact on water tables serving the water needs of communities through transient flows. This, can, however, be a major source of water depletion in communities.

c) Water safety and condition for use by communities:

All reports state that water pollution is bound to occur from agro-chemicals. Section 58 of the Environmental Protection Act 2008 prohibits the discharge of toxic or hazardous substances into air, land and water. The FAO guidelines on management of agricultural chemicals and pesticides dwell on compliance with the International Code of Conduct on distribution and use of pesticides, referring to relevant Field Programme Circulars and a number of conventions.¹⁹⁹

Findings: Two of the three EIAs failed to provide a list of agro-chemicals such as pesticides, herbicides, etc. The Addax Bioenergy report mentioned herbicides but did not mention insecticides to be used. Information on active chemical ingredients of herbicides was also lacking in the report. Trace elements responsible for efficiency of crop growth were hardly mentioned in any of the reports, even though Addax Bioenergy mentioned that such trace elements will be used. None of the EIAs examined soil contamination and soil structural deformation or destruction from continuous use of chemical fertilizers such as lime, potassium and phosphorous, even though they are apparent.

In summary, while the EIAs of companies follow the standards required by the Environmental Protection Act and the Sierra Leone Environmental Protection Agency, they are not rigorous enough as they do not provide sufficient reporting on water use, impact on biodiversity, etc.^{vi} Therefore:

- i) the Environmental Protection Agency (Sierra Leone) needs to develop guidelines to elaborate the Environmental Protection Act
- ii) in the absence of standard guidelines, companies need to produce EIAs that take into account both the Environmental Protection Act and the FAO EIA guidelines for agricultural projects.

Scofin has confirmed the need for more rigorous controls on and management of environmental and social impact assessments. While Addax Bioenergy presented a certain level of advanced hydrological assessment, the SAC and SLA reports fall short of in-depth assessments of local hydrological systems.

Trace elements responsible for efficiency of crop growth were hardly mentioned in any of the reports, even though Addax Bioenergy mentioned that such trace elements will be used.



6. DOMESTIC REVENUE IMPACT

The government of Sierra Leone has, in recent years, introduced a range of tax incentives for investors in the agriculture, mining, manufacturing, tourism and infrastructure sectors to attract foreign direct investment into the country.

It has recently approved a 'special set of incentives for qualified agribusiness investors', the two most important of which are complete exemptions on:

- corporate income tax 'up to 2020' [ie, for 10 years] for companies in the tree crops sub-sector (such as oil palm and sugarcane). This compares to the standard corporate income tax rate of 30 per cent
- import duty on raw materials and agricultural inputs, compared with the standard 3 per cent.^{vii}

Some individual foreign land investors have been offered special tax deals that include additional concessions to these incentives.

The government has negotiated these special tax deals despite evidence showing that tax incentives are rarely needed to attract investment and that tax holidays are the least desirable form of such incentives. A recent IMF report outlines a long list of disadvantages with tax incentives, which could result in a loss of current and future tax revenue, encourage rent-seeking, attract footloose firms, be outside the budget and non-transparent, and in the case of tax holidays, constitute a particularly ineffective way of promoting investment.^{viii}

The United Nations Conference on Trade and Development (UNCTAD) has echoed this analysis, stating that, 'Tax incentives (accelerated depreciation and investment allowances/credits) used for the rapid recovery of investment costs can be more cost-effective than reducing corporate income tax rates... Tax holidays of total exemption of corporate income tax are the least desirable measures.'^{ix}

viiSLIEPA, 'Sierra Leone Investment Outreach Campaign: Opportunities for Investors in the Oil Palm Sector', April 2010, p.30, www.sliepa.org

ViiiIMF, Kenya, Uganda and United Republic of Tanzania: Selected Issues, 1 December 2006, p.10

^{ix}UNCTAD, Investment Policy Review: Sierra Leone, 2010, p.35

Table 8: Tax incentives for: all companies, agribusiness companies, and Addax Bioenergy, SAC and Goldtree

Standard rate for all companies	Incentives to all agribusinesses	Special deal for Addax Bioenergy	Special deal for SAC	Special deal for Goldtree
Corporate income tax: 30%	Exemption for 10 years	Special deal: Exemption up to 31 December 2022 (13 years)	Special deal: Exemption up to 2022; 50% exemp- tion in 2023; 25% exemption in 2024	Same as other agribusinesses
Import duty on raw materials/agricultural inputs: 3%	Exemption	Same	Same	Same
Import duty on plant/ machinery/ equipment: 0% for 5 years	Same	Same	Special deal: 0% until 2018 (8 years)	Same
Withholding tax on interest: 15%	Same	Special deal: 5%	Special deal: 5%	Special deal: 5%
Withholding tax on dividends: 50% exemption	Same	Same	Same	Same
Profit from leasing property: tax deduct- ible allowance of 20%	Same	Special deal: Lease rents are an allowable reduction not subject to withholding tax	Not mentioned	Special deal: Lease rents are an allowable reduction not subject to withholding tax
Other	-	Special deal: 'other bona fide business payments and expenses' are de- ductible against tax and not subject to withholding tax	-	-

According to our calculations, which are estimates based on projected company returns, the tax revenue foregone from the tax deals (see Table 8) negotiated with Addax Bioenergy, Socfin and Goldtree Ltd, three companies for which we could obtain sufficient information, amounts to an estimated **US\$188.1 million**, or **US\$18.8 million a year on average over a 10-year period**. Of this, on average **US\$11.35 million** a year will be foregone as a result of corporate income tax holidays. The average yearly total tax payments foregone can be broken down as follows: US\$14 million a year from Addax Bioenergy, US\$3.64 million a year from SAC and US\$2.1 million a year from Goldtree.[×]

In response to this report, SAC and Addax Bioenergy claim that the tax benefits are not as beneficial as they appear, given that the projects incur significant losses before the investments become economically viable assets (between six and nine years after planting).

The government of Sierra Leone has a legal obligation to protect its citizens' right to food. The constitution states that, 'The State shall within the context of the ideals and objectives for which provisions are made in this Constitution... place proper and adequate emphasis on agriculture in all its aspects so as to ensure self-sufficiency in food production' (Constitution Art 7 (1d)). However, despite this constitutional obligation, most of the 2012 agriculture budget, which amounted to Le 130.4 billion (US\$29.8 million), was financed by donors. The government contribution was just Le 30 billion (US\$6.9 million). If these three companies were required to pay standard tax rates, and if the government spent just half of this additional tax income - US\$9.4 million - on agriculture development, the government could significantly address the barriers to increasing food security. This additional income could be spent on improving production technologies available to farmers through research and extension services, reducing post-harvest crop losses, improving irrigation services and soil health and fertility, developing market infrastructure and rural feeder roads, and supporting producer groups. For example, the additional income would have allowed the government to more than triple the 2012 budget for food security. Alternatively, it could have increased the 2012 extension budget 13-fold or the agricultural research budget more than five-fold.

In response to this report, SAC and Addax Bioenergy claim that the tax benefits are not as beneficial as they appear.

*See Annex 6 for a full explanation of how these figures were calculated.

7. CONCLUSION

Land is the greatest asset of rural Sierra Leoneans, followed closely by their knowledge of the land's potential productivity and resources, and the resilience of their rural livelihoods and farming systems. There is an urgent need to reduce rural poverty and improve the wellbeing of the nation's smallholder farmers. They are the backbone of the economy and need support if they are to overcome the challenges posed by liberalised trade, cheap and subsidised imported foods, poor rural infrastructure and access to basic amenities such as clean water, education and health facilities, degraded lands and climate change. The solutions, however, are not to be found by leasing their fertile land to foreign investors for industrial plantations. Encouraging or allowing the land to be leased out from under them, especially with promises that this will bring development and solve their problems, is a risky and poorly thought-out policy.

In Sierra Leone, there is no 'unused' land available for massive industrial plantations. Local populations are highly dependent for their livelihoods and income on land resources of all kinds, including a wide range of food crops, tree crops, plant and animal resources that they harvest from bush areas, tree-crop plantations and forests. This biodiversity and agro-biodiversity are at risk from any policy that encourages monoculture and industrial agriculture. Yet the land leases are swallowing up large swathes of arable land in the absence of recent data or national surveys showing (a) actual land use in the country and (b) remaining plant and animal genetic resources (biodiversity and agro-biodiversity). Nor is there an official national compensation list showing the potential monetary value of different crops or trees, should they be removed by foreign investors for industrial plantations or mines. If investors were obliged to pay the real productive value of trees they fell and cropland they occupy with their plantations, some of the real costs of such land deals would be shifted from the local people to the investors and it is unlikely that this form of investment would appear so profitable.

The Addax Bioenergy project appears to have given most consideration to the importance of conserving biodiversity with its ecological corridors and because it intends to plant only about onequarter of its entire land lease with sugarcane. But it is not clear how local people can still access resources on these unplanted areas. The SAC and SLA projects will convert greater percentages of their leased land to oil palm.

There is no binding regulatory framework for the land deals and investors (many registered in tax havens) are being given generous tax exemptions and fiscal incentives at great expense to the government of Sierra Leone and the population of the country. Some land deals appear to be largely speculative, in the case where a foreign company that negotiated the lease is then purchased by another company that inherits the lease, bringing no benefit to Sierra Leone. Proponents of the land deals say that they can bring rural prosperity by providing paid employment, improving infrastructure, transferring technology and modernising agriculture, and that the benefits will be felt in the communities on and around the land leases. Far less attention is paid to the costs of such large agricultural projects. This study shows that the highest costs of the investments are being paid by the local people who once lived off the land that foreign investors have converted to plantations, which will require enormous quantities of water and agrochemicals to thrive. When the land is cleared of trees, there is no going back and it is more than just livelihoods that are lost. Rather, an entire way of life is abruptly and brutally changed without real alternatives available. There has been little consideration at official levels of the risks to food and nutritional security, and to social and cultural coherence, posed by large-scale investments in farmland, as this study has shown.

Corporate social responsibility is voluntary; there are no binding agreements on the social and economic benefits that companies should provide for local people. Nor is there a structure to ensure democratic decision making and strong involvement of affected communities, or to monitor financial transactions. While the land deals affect the economic survival capacity of the local communities, most CSR interventions are on social issues and not on strengthening the economic capacity and autonomy of affected communities. While Addax Bioenergy has its Farmer Development Programme and SAC has invested some funds in schools and health facilities, the CSR is not enough to compensate for people's loss of income, wellbeing, independence and informal jobs.

The differences in the degree of dissatisfaction among affected communities appear to relate not to the identity of the investor or to the way it operates. Rather, this study found that dissatisfaction appeared to be highest in areas where operations have progressed the furthest, where traditional crops and vegetation have been lost and among people whose farmland and fallows have been converted to industrial plantations, and where people are increasingly feeling the impact of their losses.

It is often difficult for communities and companies to foresee or fully appreciate outcomes of land use changes, suggesting a weakness in the impact assessment process, which is not examining and exposing all the possible outcomes and risks associated with land conversion to industrial plantations, and as a consequence these are not being communicated to local communities.

While environmental, social and health impact assessments are required for all investments of this size, the analysis in this report shows that critical environmental impacts were overlooked in all assessments, ostensibly due to the lack of regulations that would present a detailed explanation of the Environmental Protection Act. Industrial-scale land clearing has immense environmental ramifications and therefore EIA investigations need to be undertaken with extreme care and closely scrutinised by regulatory bodies afterwards.

There are no binding agreements on the social and economic benefits that companies should provide for local people.

8. RECOMMENDATIONS

For the government of Sierra Leone

- 1 undertake a nationwide land-use survey, including assessment of actual output (of foods, materials, medicines) per hectare
- 2 undertake a nationwide inventory of plant genetic resources and their multiple uses, value to human populations, ecosystems
- 3 develop a binding regulatory framework (based on international guidelines for responsible agricultural investment) for foreign investment in farmland that emphasises protection of local people and the environment; consider limiting leases to 1,000-2,000 hectares
- 4 further build capacity of the Environmental Protection Agency (EPA) as an independent agency at arm's length from government, with a specific goal to identify gaps in EIAs and to regularly monitor environmental, social and health impacts
- 5 ensure that the EPA scrupulously assesses EIAs to meet the standards set in the Environmental Protection Act
- 6 ensure that the EPA establishes guidelines (as is already the case for the extractive industry) to assist companies to improve on their environmental standards
- 7 make the contents of all EIAs and MOUs binding, ensure that all the mitigation measures, pledges on CSR and the protection of local populations are binding and enforceable
- 8 strengthen the impact assessment process and research undertaken before such projects are approved or can begin, to ensure that all possible outcomes of such land conversion are examined and exposed, and that these are fully communicated to local communities
- 9 develop a binding national compensation list for all crops, trees and important resources based on the real value of each over its productive lifespan
- 10 establish an independent watchdog monitoring agency for investment on all land leases larger than 1,000 hectares and ensure that all land leases (and MOUs) for land deals greater than 1,000 hectares go to Parliament for approval

- 11 develop a cadastre system that is publicly available, showing details on all existing large agricultural land leases, which can be overlaid with mining leases
- 12 review all existing land leases and MOUs signed by large-scale foreign investors in agriculture and revoke all, or all clauses within them, that contravene the laws of Sierra Leone, or do not respect the free, prior and informed consent of affected communities, and that are not in the social, economic and environmental interests of the affected communities and the country as a whole
- 13 instruct senior district officers to fully perform their duty, as explicitly stated in the government's *Chiefdom and Traditional Administration Policy* of November 2011, to 'ensure chiefdom authorities do not abuse their powers and authority', including in the context of large land deals
- 14 until all of the above has been done, put an immediate moratorium on large-scale investment in farmland in Sierra Leone
- 15 urgently review its tax policy in the agriculture sector with a view to significantly reducing tax incentives
- 16 stop providing special tax deals signed with individual companies that go beyond general incentives provided to the agriculture sector - all companies must operate on a level playing field
- 17 devise a strategy for using increased tax revenues to invest in food security and smallholder agricultural development.

Development finance institutions

- support the 'Country by Country' reporting initiative of the Tax Justice Network and Publish What You Pay; consider financing only companies or corporations involved in large land acquisitions that have complied with the reporting, excluding any that are the subsidiaries of or part of corporate groups or conglomerates registered in a secrecy jurisdiction or tax haven²⁰⁰
- 2 before approving financing, send an independent assessment team to the area (including representatives of civil society and international smallholder farmer associations) to assess the situation on the land in question, collect baseline information and determine whether there is legal representation for the communities (not just landowners) and if there is prior consent, whether it is free and informed
- 3 seek expertise from scientists, biodiversity and agro-ecology specialists that can offer a broad, inclusive and holistic cost-benefit analysis framework for sustainable land use
- 4 demand full disclosure and transparency from the investor and from local and national authorities on what real benefits (revenue, taxes, development) will accrue from the project in the country
- 5 refuse to finance any large-scale agricultural investment in Sierra Leone (or any food-insecure context) that is not primarily for food production for domestic consumption
- 6 refuse to finance any investment that will convert more than 1,000 hectares of land into industrial monoculture.

Investors

- 1 ensure complete respect for all of the rights of rural communities to land, food and nutritional security
- 2 engage experts to educate management and staff about the value of biodiversity and agrobiodiversity (agro-ecological agriculture) and local resources, include social and ecological capital in any sustainability/profitability analyses
- 3 ensure that company agents or representatives do not exaggerate the likely benefits and promises, however well intentioned
- 4 as far as possible do not allow traditional or any other authorities to coerce or intimidate local communities on behalf of the company
- 5 fully respect the principle of free, prior and informed consent during negotiations
- 6 ensure that proper EIAs are conducted in line with the Environmental Protection Act and FAO guidelines, and that they include specific information on chemical and water use, impact on community access to water/water quality, and biodiversity.

NGOs / Donor agencies / Civil society

- 1 mobilise support to provide legal assistance for affected communities
- 2 support affected communities in developing their national network (ALLAT) for advocating land user rights and the right to food and nutritional security, and for defending their rights
- 3 support local groups (civil society, NGOs, communities, media) to undertake information gathering and dissemination activities on the issue to sensitise communities and the national population on the potential costs and benefits of such foreign investment
- 4 support ALLAT and other groups to make their advocacy campaign international, linking them with other international groups and providing legal support when required
- 5 demand more transparency and accountability from SLIEPA (and is financial supporters) and the government of Sierra Leone on all large-scale land deals in which they are involved
- 6 advocate for sustainable agricultural policies at international and national levels
- 7 support alternatives to large-scale investments in Sierra Leone.

9. ANNEXES

The young Socfin oil palm plantation, which was established by burning and clearing the lush existing vegetation, including indigenous oil palm trees. Photo: Joan Baxter
Date	Location	Name	Function
17 Oct 2012	Pujehun Town	John Lahai Swaray	Chief Administrator, Pujehun District Council
18 Oct 2012	Pujehun Town	Gerard A Sama	District Agricultural Officer, Pujehun
	Pujehun Town	ASP Alex Yanka	Operations Commander, Pujehun Police Division
	Pujehun Town	Francis Sao Kpaka	Central Chiefdom Administrative Clerk
18 Oct 2012	Pujehun Town	Tamba Seddu	Local Unit Commander, Pujehun Police Division
	Sahn Malen	Jean-Christophe Dienst	General Manager, SOCFIN Agricultural Company
	Sahn Malen	Robert Moigua	Chiefdom Speaker, Sahn Malen
19 Oct 2012	Basalleh	Questionnaires	One focus group, two individuals and one inventory
20 Oct 2012	Hongai	Questionnaires	One focus group, two individuals and one inventory
21 Oct 2012	Kortumahun	Questionnaires	One focus group, two individuals and one inventory
22 Oct 2012	Kassay	Questionnaires	One focus group, two individuals and one inventory
23 Oct 2012	Pujehun Town	Mohamed Kemoh Mansaray	Senior District Officer, Pujehun
26 Oct 2012	Makeni	John Brima Kargbo	Field officer, SiLNORF
27 Oct 2012	Wareh Yeama	Questionnaire	One focus group, two individuals and one inventory
28 Oct 2012	Roportor	Questionnaire	One focus group, two individuals and one inventory
29 Oct 2012	Mara	Questionnaire	One Focus Group and one inventory
	Mabalifu	Derek Higgo	Addax Health, Security, Social Affairs and Environment Manager
	Makeni	Pa Almamy Korombo Sesay	Regent Chief, Malal Mara Chiefdom
30 Oct 2012	Makeni	Dennis Paul	District Agricultural Officer, MAFFS, Bombali
	Makeni	Gibril Turay	Local Unit Commander, Makeni Police Division
2 Nov 2012	Freetown	Sharma Vinod	Country Manager: SLA/ Geoff Palm/ Biopalm Energy/ Siva Group
	Port Loko	Jinnah Bockarie	Crop Officer / Assistant to District Agricultural Officer, MAFFS, Port Loko
	Port Loko	ASP Larkoh	Local Unit Commander, Port Loko Police Division
3 Nov 2012	Mayorsor	Questionnaire	One focus group, two individuals and one inventory
	Mange Ferry	Nursery watchman	SLA nursery / vegetable seed multiplication project
	Mange	Augustine Noah Kamara	Landowner Committee, works for SLA
4 Nov 2012	Bantoro	Questionnaire	One focus group and two households
	Cimbeck	Kadiatu Kamara	Member of SLA women's vegetable plot
	Bantoro (Nursey)	CVN Rao & Mus- tapha Johnbull & Mohamed D Kamara	SLA Plantation Manager & SLA Nursery Manager & SLA Public Relations Officer
5 Nov 2012	Romeni	Questionnaire	One focus group, two individuals and one inventory (all interrupted)
	Port Loko	Pa Alimamy Kekurr Kamara	Regent Chief, Maforki Chiefdom, Port Loko District
6 Nov 2012	Port Loko	Magnus Bobson Mussah	Senior District Officer, Port Loko District Council
	Port Loko	Philip Conteh	District Agricultural Officer, MAFFS, Port Loko
	Port Loko	Hassan Sheriff	APC MP for constituency 53, Port Loko
9 Nov 2012	Freetown	Joseph Fofanah	Deputy Administrator General
13 Nov 2012	Freetown	James K Pessima & Peter A Kamara	Director of Crops, MAFFS & Head, Rice Unit, MAFFS
	Freetown	Leila Errahmouni	Project Officer, Economic, Trade and Regional Coop- eration Section, Delegation of the European Union in Sierra Leone

Annex 1. Interview schedule

Annex 2. Methodology in detail

The fieldwork component of this study was undertaken in October and November 2012. The research team comprised the lead researcher, a human rights and peace-building expert from the Sierra Leonean non-governmental organisation Green Scenery and supported by the Association for Development Cooperation (AGEH, Germany), a Sierra Leonean research assistant and translator, as well as representatives of local partner organisations in each of the three lease areas:

- Rural Agency for Community Action Programme (RACAP) in the SAC lease area in Pujehun District
- Sierra Leone Network on the Right to Food (SiLNoRF) in the Addax Bioenergy lease area of Bombali and Tonkolili Districts
- United for the Protection of Human Rights (UPHR) in the SLA/Biopalm Energy/Siva Group lease area of Port Loko District.

The research team conducted focus group interviews in 10 communities affected by the largescale land leases, one of which (Bassaleh in Malen Chiefdom) is contesting and resisting the deal. Because the community's farmland had not been affected at the time of the study, it is not included in the before and after cost-benefit analysis but does provide good triangulation for data collected about the situation before the investor arrived in other affected communities.

Except for Bassaleh, other communities were selected based on information provided by local partners and investors on where investor operations were most advanced, and thus a cost-benefit analysis would be most feasible. Populations ranged between 250 and over 3,000, although population data for all the communities was not available, not even from district authorities.

Socfin Agricultural Company (Malen Chiefdom, Pujehun District, Southern Province)

- 1 Bassaleh / Banaleh (19 October 2012): exact population not known
- 2 Hongai (20 October 2012): 350 houses, exact population not known
- 3 Kortumahun (21 October 2012): approximate population 450
- 4 Kassay (22 October 2012): population 347

Addax Bioenergy, Northern Province

- 5 Wareh Yeama, Makari Gbani Chiefdom, Yenkassa Section, Bombali District (27 October 2012): population 500+
- 6 Ropotor, Bombali Sheborah Chiefdom, Massory Section, Bombali District (28 October 2012): population approximately 250
- 7 Mara, Malal Mara Chiefdom, Mara Section, Tonkolili District (29 October 2012): population 3,000+

Sierra Leone Agriculture (Biopalm Energy, SIVA Group), Northern Province

- 8 Mayorsor, Bureh Kasseh Maconteh (BKM) Chiefdom, Makanah Section, Port Loko District (3 November 2012): population 400+
- 9 Bantoro, BKM Chiefdom, Makanah Section, Port Loko District (4 November 2012): population 800+
- 10 Romene, BKM Chiefdom, Romene Section, Port Loko District (5 November 2012): population approximately 600

The focus groups consisted of between eight and ten individuals chosen jointly by the community itself with the assistance of local civil society partners that ensured gender balance and a representative sample of age groups, including elders, middle-aged adults and young people, married/single/widowed, as well as one or two landowners and people currently employed by the investor. It was not always possible to achieve exact gender balance in the groups, as women's chores (cooking, gardening) did not always allow their participation in the full focus group session.

The analysis was based on focus group discussions that involved 84 individuals, 38 women and 46 men, of whom 80 were married, three were single and one was widowed. They ranged in age from 17 to 90 years, with an average age of 46. However, ages given were often 'unofficial' (estimated when people do not have birth certificates) and especially among older participants appeared to be exaggerated, so it seems likely the average age could well have been considerably younger.

Focus group discussions and household interviews were held in local languages and translated into English. Throughout the interviews and discussions, the purpose was to assess the situation or status 'before' and 'after', but if there had been a change, respondents were asked for their explanation; it was not automatically assumed that any change related to the investor's presence. Every effort was made to limit the responses to the interview questions and the discussion they engendered in the communities to members of the focus group. Often this was not possible as there was no private location for the focus group meetings and interested community members frequently joined in. However, the research team did intervene and prevent such interruptions on occasions when men or elders appeared unwilling to allow women or young people to speak, thus ensuring that the views of women and young people were fully represented in the documented responses.

In one case (Mayorsor), a town chief who was a member of the focus group found himself at odds with other members of the group, but they did not appear to be intimidated by him and in the end agreed among themselves on responses while allowing him to disagree. He and a landowner in the community of Wareh Yeama, both of whom had consented to the takeover of land by investors, appeared defensive but unable to persuade their fellow community members that they had acted in their best interests.

In only one case did an individual (in this case a section chief who was not included in the focus group) intervene, interrupt and seize control of the discussion. Because of this and the subsequent departure of several female focus group members, that group session (in Romene, BKM Chiefdom in the SLA lease area) was eliminated from analysis that involved responses requiring the group to evaluate the seriousness or extent of a change. The two household interviews that were begun in the community were also stopped midway through when the paramount chief, passing through the community, insisted that the research team stop its work. Because Bassaleh was not included in the cost-benefit analysis and the interviews in Romene were interrupted, analysis was done using the focus group and individual interviews in eight communities.

The research team also undertook semi-structured interviews with men and women in each community where time permitted. In all, 16 individual interviews (seven men and nine women) were begun, but because two were curtailed in Romene, only 14 (seven men and seven women) were completed, and were used to triangulate the focus group findings. For the cost-benefit analysis, only 12 individual interviews (six men and six women) were used, excluding those from Bassaleh and the interrupted ones in Romene.

In addition, the research team identified a key informant in seven of the communities to fill out an inventory list of resources (food, medicinal, materials, animals, fish) that had been available on the land and its water bodies before the investors' arrival.

Where focus groups and individuals were asked to place a value on a particular response (None/ Not at all Important, Important, Very Important, No Loss, Manageable Loss, Very Serious Loss), the research team provided three piles of palm nuts or kernels, one very small, one medium sized and one large, and explained that these piles represented a value for a particular answer. In focus groups, the respondents (whether the entire group or male and female members separately) were asked to come to a common decision on their response. The only time this was not possible was when a town or section chief refused to agree with the group decision.

In addition, the research team undertook a literature review and interviews with key informants in the chiefdoms, in district headquarter towns close to the lease areas and in the capital, Freetown. These interviews were used to further triangulate findings from the communities. They included security agents, company representatives and workers, nongovernmental organisations, district authorities, and representatives of the national government in districts and in the capital. Annex 1 contains a complete list of interviewees. Details of lease agreements were obtained from registered copies of the land leases at the office of the Administrator and Registrar General, under the jurisdiction of the Attorney General, in Freetown.

The assessment of the EIAs was undertaken by Joseph Rahall, Director of the Sierra Leonean civil society organisation, Green Scenery.

Annex 3. Resource inventory list (before/after investor) Plant and animal resources cultivated or available in seven communities in three lease areas before and after investor

	Crop / animal / fish / resource	Before investor	After in	vestor
		Yes	Yes	Gone
1	rice (Oryza spp)	7	5	2
2	maize (Zea mais)	5	3	2
	cassava (Manihot spp)	7	1	6
Ļ	sweet potato (Ipomoea spp)	3	0	3
	cocoyam	4	1	3
,	yams (white, Chinese, etc)	6	1	5
,	plantains	6	3	3
	sorghum (Sorghum magaritiferum)	4	2	2
•	millet (Pennisetum spp)	5	1	4
0	potato leaf	6	1	5
1	cassava leaf	7	2	5
2	sorrel leaves (sawa sawa)	6	3	3
3	Eat Broke Plate	2	1	1
4	pumpkin leaves	6	5	1
5	crain-crain	7	5	2
6	'grin' (leaves)	7	3	4
7	okra leaves	7	4	3
8	papaya leaves	2	1	1
9	kalami leaves	2	2	0
20	kaputh leaves	1	1	0
1	okra	7	3	4
2	pepper	7	4	3
3	jakato (bitter balls)	7	2	5
4	garden egg	7	4	3
5	eggplants	2	2	0
6	tomatoes	6	3	3
7	green beans	2	0	2
8	cucumber	6	3	3
9	sugar cane	4	2	2
0	onion	2	1	1
1	palm oil	7	1	6
2	palm kernel oil	7	1	6
3	groundnuts	7	3	4
4	sesame (benniseed)	4	1	3
5	egusi	3	1	2
6	pumpkin	7	4	3
7	black-eyed beans	3	0	3
8	broad beans	5	3	2
9	big bean	1	0	1
0	pigeon peas (Concho)	2	1	1
1	small bean	1	1	0

	Crop / animal / fish / resource	Before investor	After inve	stor
		Yes	Yes	Gone
42	ginger	5	3	2
43	lemon grass	7	5	2
44	guava	7	4	3
45	coconut	6	5	1
46	pineapple	5	2	3
47	рарауа / рамрам	3	2	1
48	mango	7	6	1
49	orange	5	2	3
50	grapefruit	4	2	2
51	lime / lemon	4	2	2
52	bananas	7	7	0
53	avocado (pear)	1	0	1
54	breadfruit	2	1	1
55	bread nuts	1	1	0
56	alligator pepper (medicine / spiritual)	1	1	0
57	shakpa	2	1	1
58	сосоа	1	0	1
59	coffee	1	0	1
60	cashew	3	2	1
61	tobacco	1	0	1
62	cotton	1	0	1
63	bush yam	7	1	6
64	ʻgbuhungʻ (Me), fern tops	1	1	0
65	palm wine	6	1	5
66	bamboo wine	3	1	2
67	bush groundnuts (Bombacopsis glabra)	1	0	1
68	black tombla (<i>Dialium guineense</i>)	5	1	4
69	kenda (locust bean or lokos) (Parkia biglobosa)	3	0	3
70	'hewei' (Me), spice tree, (Xylopia aethiopica/ parviflora)	2	0	2
71	'tombi', sour tumbler (<i>Tamarindus indica</i>)	3	1	2
72	tola (Beilschmiedia mannii)	5	0	5
73	'boboi' / '(Me) 'An-gbere' (Te) (<i>Irvingia gabonensis</i>)	3	0	3
74	sweet shap	2	0	2
75	sawa shap	1	1	0
76	malombo (Salacia senegalensis)	5	0	5
77	ruf-ting/ roffin plum (<i>Parinari exelsa</i>)	5	1	4
78	monkey apple (Anisophyllea laurinia)	4	0	4
79	moringa (<i>Moringa oleifera</i>)	2	2	0
80	'yubuyambai' (Me)	1	0	1
81	bush banana (Uvaria chamae)	1	0	1
82	'gbangba' (Cassia sieberiana)	2	0	2

	Crop / animal / fish / resource		After investor	
		Yes	Yes	Gone
83	'jasui' (Me), malaria medicine	1	0	1
84	'katik' (Te)	1	0	1
85	kola nuts (<i>Cola spp</i>)	5	0	5
86	bitter kola (Cola acuminata)	2	0	2
87	'gbessay' (Me), perfumed resin	1	0	1
88	firewood	7	3	4
89	wood for charcoal	5	1	4
90	fibre / rope	4	1	3
91	construction wood / poles	7	1	6
92	wood for musical instruments, etc	5	2	3
93	mangrove	1	1	0
94	chickens	7	4	3
95	goats	7	6	1
96	sheep	7	6	1
97	COWS	1	0	1
98	ducks	7	5	2
99	pigs	1	1	0
100	pigeons	1	0	1
101	cutting grass	7	1	6
102	monkey	7	3	4
103	bats	1	0	1
104	deer (fretambo)	6	1	5
105	snails	4	2	2
106	tilapia	3	2	1
107	'katai' (Me)	1	1	0
108	catfish	3	2	1
109	'makondoi' (Me)	1	1	0
110	'nbolai' (Me)	1	1	0
111	ʻnjelea' (Me)	1	1	0
112	swamp fish (looks like frog)	4	4	0
113	shrimp / crayfish	4	4	0
114	crabs (red)	5	4	1
115	bush fowl	1	1	0
116	bush pig	1	1	0
117	bush cow	1	0	1
Total i	ncidences of resource before and after investor	454	201	253

Annex 4. Ministry of Agriculture and Food Security Crop Assessment 2006-2007

Provided by the Director of Crops, Sierra Leone Ministry of Agriculture, Forestry and Food Security on 14 November 2012

	Type of crop	Unit cost/ Tree (LE)	
1	Plantain	20,000	1
2	Banana	20,000	2
3	Coconut	40,000	3
4	Pear (assorted)	60,000	4
5	Oil palm	25,000	5
6	Oil palm (improved)	40,000	6
7	Citrus	50,000	7
8	Coffee	35,000	8
9	Сосоа	50,000	9
10	Cashew	50,000	10
11	Mango (improved)	50,000	11
12	Mango (wild)	30,000	12
13	Kola nut	40,000	13
14	Cucumber (1/2 acre (AC))	30,000	14
15	Cucumber (1/2 AC)	35,000	15
16	Cabbage (1/2 AC)	35,000	16
17	Lettuce (1/2 AC)	35,000	17
18	Tomatoes (1/2 AC)	40,000	18
19	Watermelon (1/2 AC)	40,000	19
20	Okra (1/2 AC)	36,000	20
21	Sweet pepper (1/2 AC)	30,000	21
22	Hot pepper (1/2 AC)	50,000	22
23	Crain-Crain (1/2 AC)	30,000	23
24	Pumpkin (1/2 AC)	50,000	24
25	Mango	50,000	25
26	Orange (citrus)	200,000	26
27	Rice - upland (1/2 AC)	200,000	27
28	Millet	100,000	28
29	Maize	100,000	29
30	Cassava (1/2 AC)	150,000	30

Recommended rates of compensation for crops by SRL [Sierra Rutile Limited] based on government-approved rates and current market prices

	Type of crop	Unit cost/ Tree (LE)
1	Cassava (stand)	1,000
2	Benni (stand)	500
3	Sorghum/maize (stand)	500
4	Garden eggs (local)	400
5	Egusi	60
6	Water yam (stand)	600
7	Cocoa yam (stand)	5,000
8	Potato heap (stand)	800
9	Crain-Crain (per heap)	1,000
10	Bitter ball (stand)	1,000
11	Okra (stand)	600
12	Tomato bamboo cane	500
13	Pumpkin bamboo cane	800
14	Bamboo cane (per cluster)	25,000
15	Economic tree (Timber)	20,000
16	Fence (one year/3)	500
17	Тгар	500
18	Farm hut	60,000
19	Raffia (cluster)	
20	Pineapple (stand)	1,000
21	Pawpaw	10,000
22	Onion	1,000
23	Calabash	20,000
24	Bread fruit	40,000
25	Plum tree	50,000
26	Groundnut (1/2 AC)	150,000
27	Sourel (Sour Sour) stand	500
28	Sugar cane (cluster)	10,000
29	Pepper (stand)	800
30	Guava tree	15,000

Annex 5. Calculating the real value of oil palms

This calculation, based on information from several palm oil producers and owners of small plantations, is a conservative one; the productive capacity and value could be considerably higher.

'NATIVE' OIL PALMS (DURA VARIETY)

- 1 tree produces 20 'heads' of fruit per year
- @ 60 trees per acre; 1 acre produces 1,200 heads per year per acre
- 30 heads of fruit produce 1 'batta'* red palm oil and .5 batta 'nut' (kernel) oil
- 1 acre of 'native' trees = 40 battas red palm oil + 20 battas nut oil per year
- 1 batta red palm oil @ Le 100,000 (rural selling price December 2012)
- 1 batta nut oil @ Le 50,000 (rural selling price December 2012)
- annual value red palm per acre 'native' palm: 40 x 100,000 = Le 4,000,000
- annual value nut oil per acre 'native' palm:
 20 x 50,000 = Le 1,000,000
- annual value of oils per acre 'native' palms = Le 5,000,000 [US\$1,388]
- annual value of oils per 'native' palm tree = Le 83,300 [approx. US\$19]

Trees can produce for 50 years; but estimating 30 years of peak production:

- 30-year value oils per 60 'native' palms = Le 150,000,000) [US\$34,643]
- 30-year value oils per 1 'native' tree = Le 2,500,000 [US\$577]

'IMPROVED' OIL PALMS (IMPORTED HYBRID: TENERA VARIETY)

- 1 tree produces 30 heads of fruit per year
- assume 60 trees per acre = 1,800 heads of fruit per acre per year
- 15 heads of fruit produce approximately 1 batta 'masanke'** and 1 batta nut (kernel) oil
- 1 acre improved oil palm = 120 battas masanke
 + 120 battas nut oil per year
- 1 batta masanke oil @ Le 70,000 (rural selling price December 2012)
- 1 batta nut oil @ Le 50,000 (rural selling price December 2012)
- annual value masanke per acre improved palm: 120 x 70,000 = Le 8,400,000
- annual value nut oil per acre improved palm: 120 x 50,000 = Le 6,000,000

- annual value of oils per acre improved palms = Le 14,400,000 [US\$3,326]
- annual value of oils per improved palm tree = Le 240,000 [US\$55.43]
- 30-year value oils per acre improved palm = Le 432,000,000 [US\$99,772]
- 30-year value oils per 1 improved palm tree = Le 7,200,000 [US1,663]

Annex 6. Analysis of tax subsidies

To assess the domestic revenue impact of land deals, a separate research project was undertaken by Mark Curtis and Samual Jibao in January 2012. This involved an estimation of the tax revenue foregone as a result of fiscal incentives offered to three investors, namely Addax Bioenergy, SAC and Goldtree Limited, and to assess the investment that would have been possible if additional financial resources were available, particularly in the smallscale agricultural sector. The computation of tax subsidies offered to the three companies was undertaken by Samuel Jibao.

For the computation of the corporate tax subsidy, the researcher used the alternative chargeable income regime as stated in Section 69 of the Consolidated Income Tax Act 2000. This regime is applicable to both individuals and corporate entities, although corporate entities should not be adversely affected if their books of account are audited by recognised accountants. It has been noted on a number of occasions in discussions, that even where accounting records have been audited and the company reflects a loss or chargeable income less than the minimum chargeable amount for entities without audited financial statements. the minimum amount (percentage of turnover) has been enforced by the National Revenue Authority (NRA).

The current legislative provisions (paraphrased) in terms of Section 69 are as follows:

- 1 Where a taxpayer does not maintain accounting records the chargeable income for the year is determined as the higher of the taxpayer's ordinary chargeable business income for the year of assessment or 20% of the turnover during the year of assessment. Thereafter, the applicable tax rate is applied to this determined amount.
- 2 Where a taxpayer does maintain accounting records the chargeable income for the year

*A 'batta' contains 20 litres and is a standard unit for buying and selling cooking oil.

** Masanke is the oil from the improved (tenera) varieties used for cooking but it is not as well liked as the red palm oil from indigenous wild (dura) trees and thus fetches lower prices. is determined as the higher of the taxpayer's ordinary chargeable business income for the year of assessment or 15% of the turnover during the year of assessment. Thereafter, the applicable tax rate is applied to this determined amount.

The researcher faced a number of constraints in trying to calculate the tax subsidies to the companies. First, the lease agreement and Memorandum of Understanding (MOU) of Siva Group signed with the government was nowhere to be found, and unfortunately even the entities that are responsible for enforcing whatever exemptions granted them (ie the Ministry of Finance and the NRA) did not have a copy and claimed not to have even seen these documents. The Ministry of Agriculture officials could not help either. Furthermore, locating the company was as difficult as locating their signed MOU. The MOU for Socfin is also not made public; however, the researcher was able to get a copy after several visits to the Ministry of Agriculture. Like Siva Group, the agencies responsible for enforcing the tax incentives granted to Socfin did not have a copy of their MOU, and therefore classify the exemptions granted this company as a discretionary action by some government officials.

Investment incentives

The government of Sierra Leone (GoSL) has developed some incentives available to investors across key Agenda for Change economic sectors. The non-fiscal investment incentive was enacted in 2004 (see the Investment Promotion Act 2004, Act No. 10), but the fiscal investment code, although it has received ministerial consent, is yet to be enacted. The said code is expected to define investment incentives to be offered in some specific sectors, including, among others:

General taxes and incentives:

- 3-year exemption on import duty for plant, machinery and equipment
- reduced duty rate of 3% on the import of raw materials
- corporate tax rate of 30%
- goods and services tax rate of 15%
- personal income tax of 15-30% depending on incomes
- social security contribution of 15% of gross salary
- 100% tax loss carry forward can be utilised in any year

- 125% tax deduction on R&D and training spending
- 125% tax deduction on expenses for export promotion activities
- 3-year income tax exemption for skilled expatriate staff, where bilateral treaties permit

Agribusiness:

- exemption on import duty for farm machinery and equipment, agrochemicals and other key inputs
- income tax exemption until 2020 for companies, individuals and partnerships
- 50% of dividends paid from companies engaged in agricultural activity are exempt from withholding taxes

Infrastructure:

- projects in excess of US\$1,000,000 will be exempt from income taxes for the earlier of 10 years from start-up or the year 2020
- additional incentives are available for investments in what government considers pioneer industries, such as pharmaceuticals and solar energy

Mining:

- tax rate reduced from 35% to 30% for all companies with audited accounts
- losses allowed to be carried forward for 10 years following the date of initial production
- capital allowance of 100% in the first year for prospecting and exploration expenses. For production rights and other expenditures, investors will be allowed an initial allowance of 40% in the year of expenditure followed by an annual allowance of 20% a year for the next three years following the date of initial production
- 100% of reclamation, rehabilitation and mine closure costs can be deducted in the year incurred

Tourism investments in hotels:

- income tax exemption that expires in five years, 2015, or when the amount qualifying under the tax holiday exceeds 150% of original invested capital
- 3-year exemption from import duties for key building materials and other inputs

Technology transfer:

 There are no requirements for technology transfer under certain terms. There are no requirements that major procurements are approved only if the foreign supplier invests in manufacturing, research and development, or service facilities in Sierra Leone (no technology offset requirements).

Tax subsidy to Socfin

The government of Sierra Leone acting by each of the Ministries of Agriculture, Forestry and Food Security, Finance and Economic Development and Trade and Industry, signed an MOU with Socfin in 2011. The MOU mandated Socfin to set up an oil palm plantation, and an oil extraction mill, in the Sahun region in Kailahun District. Enjoying highlevel government support, Socfin commenced work in April with a land lease period of 50 years and leasehold on about 7,000 hectares of prime farmland in Malen Chiefdom for oil palm and rubber plantation.^{xi} The revenue implications of the fiscal provisions in the MOU are discussed below.

Corporate tax subsidy

The following are assumptions underlying the computation of the corporate tax subsidy that will be granted Socfin:

- i Planting programme assumptions:^{xii}
- 2011: nursery establishment
- 2012: 4,000 ha planting and start of the oil mill construction

Year	Production of fresh fruit bunches (FFB) in tons	Crude palm oil in tons	Turnover in US\$	Taxable income in US\$	Tax payable in US\$	Projected sales price US\$/ton
	Α	B=0.2*A	C=B*sales price	D= 0.15*C	E= 0.30*D	F
2014	30,000	6,000	4,890,000	733,500	220,050	815
2015	90,000	18,000	14,670,00	2,200,500	660,150	815
2016	178,000	35,600	29,014,000	4,352,100	1,305,630	815
2017	202,000	40,400	32,926,000	4,938,900	1,481,670	815
2018	226,000	45,200	36,838,000	5,525,700	1,657,710	816
2019	259,200	51,840	51,840,000	7,776,000	2,332,800	1,000
2020	259,200	51,840	51,840,000	7,776,000	2,332,800	1,000
2021	259,200	51,840	57,024,000	8,553,600	2,566,080	1,100
2022	259,200	51,840	57,024,000	8,553,600	2,566,080	1,100
2023	259,200	51,840	57,024,000	8,553,600	1,283,040	1,100
2024	259,200	51,840	57,024,000	8,553,600	641,520	1,100
Total				67,517,100	17,047,530	

Table A6.1: Socfin projected taxable income

- 2013: 4,000 ha planting and finalisation of mill construction
- 2014: 4,000 ha planting
- ii Palm oil assumptions
- Oil extraction rate: 24%
- Sales price per ton: US\$815 from 2014 to 2018; US\$1,000 from 2019-2020; and US\$1,100 for the rest of the period/ton crude palm oil (CPO)
- Cost price per ton of oil: US\$450/ton
- iii Funding requirements
- Capital: US\$83million
- iv Expected internal rate of return:13%
- Estimated yield of industrial planting area ('N' being year of planting)
- N3: 5t/ha fresh fruit bunches (FFB)
- N4: 10t/ha FFB
- N5: 14t/ha FFB
- N6: 16t/ha FFB

N7: 18t/ha FFB

- Purchase of 10,000 tons of FFB from local farmers
- Peak production reaches 51,840 tons of oil (Rural Development Plan)
- The nursery period is 11-15 months for plants and first harvest is done after 32-38 months after planting. It takes 5-10 years for oil palm plant to reach peak yield. From 5.8 tons of FFB about 1 ton of CPO is produced^{xiii}
- 100% corporate tax exemption onto 2022, 50% exemption in 2023 and 25% exemption in 2024

^{xi}See Green Scenery press release, May 2011.

^{xii}See SOCFINCO Rural Developmental Plan.

*ⁱⁱⁱSee Rupani, Singh, Ibrahim and Esa (2010): published in World Applied Sciences Journal 11 (1): 70-81, 2010.

Source: Author's computation. Note that in 2023 only 50% of corporate tax is exempt and in 2024 25% is exempt. Projected sale price is from Socfin development plan complemented by the projected world palm oil prices \$/tonne (FAPRI World Agricultural Outlook, 2008)

Table A6.1 shows the first production of CPO starting in 2014. Given that only 5t/h FFB is expected in the first production period, coupled with the purchase of 10,000 tons of FFB from local farmers, the total sales expected in this period is US\$4.9 million. Applying Section 69 of the Income Tax Act (as amendment) the taxable income will be: 15% of turnover = US\$733,500; tax payable is 30% of taxable income, which will be US\$220,050.

Going through the same exercise for the rest of the tax holiday period (ie until 2024), the total corporate tax subsidy expected to be granted to Socfin will be about US\$17.04 million, given an average of US\$1.6 million annually from 2014 to 2024.

Month	Type of goods imported	CIF value	Duty foregone
January	None		
February	None		
March	None		
April	Four Hilux vehicles	407	84
May			
June	Sprayer, protection screens and nursery plastic bags	283	78
July	colis diver packages; nursery plastic bags; assorted garage tools; second-hand IVECO truck; irrigation system reservoir; caterpillar machines, etc	10,719	864
August	packages palm kernel seeds; cirad germinated oil palm seed; tractor landini	19,850	876
September	cartons of germinated oil palm seeds; germinated palm kernel sowing seeds; mineral or chemical fertilisers; pump; sumicoat	41,030	950
October	None	0	
November	germinated palm kernel oil seeds	652	248
December	None	0	0
Total		72,941	3,100

Table A6.2: Socfin import duty subsidy in 2011 in millions of Leones

Source: National Revenue Authority

Table A6. 2b: Summary of projected import subsidy in millions

Year	Actual	Projected (Le)	Inflation projection	Exchange rate Le/ US\$	Projected (US\$)
2011	3,100	3,100	15.1	4,400	0.70
2012		3,677	18.6	4,500	0.82
2013		4,397	19.6	5,295	0.83
2014		5,378	22.3	5,500	0.98
2015		5,942	10.5	5,600	1.06
2016		6,507	9.5	5,650	1.15
2017		7,060	8.5	5,700	1.24
2018		7,660	8.5	5,750	1.33
2019		8,311	8.5	5,800	1.43
2020		9,018	8.5	5,850	1.54
Total		61,050			11.08

Source: Author's computation

Given the actual duty foregone in 2011 on imports of this company and taking inflation rate as projected by the Sierra Leone Integrated Macroeconomic Model, the expected import duty to be granted to Socfin within the ten years period will be US\$11.09 million.

Withholding contract

Assumption

- Construction of 30t/ha and further extension of 60t/ha of mill is estimated to cost US40 million
- Social investment, ie construction of schools, housing and hospitals is estimated at US\$19 million
- Contract for the construction of the above facilities are award to residents
- Computation
- a Construction of mill: 5% of US\$40 million = US\$2 million
- b Social Investment : 5% of US\$19 million =US\$950,000

In summary, given the above assumptions, the withholding tax subsidy within the tax holiday period is estimated at US\$2.950 million.

General Sales Tax subsidy

Assumption

- GST is charged on expenditure of company
- General overhead cost estimated at US\$110 per ton palm products

Table A6.3: Operating cost per ton of palm product

Year	Tonne of FFB	Cost/FFB in US\$	Withholding tax (5%)	GST (15%)
2014	30,000	3,300,000.00	165,000.00	495,000.00
2015	90,000	9,900,000.00	495,000.00	1,485,000.00
2016	178,000	19,580,000.00	979,000.00	2,937,000.00
2017	202,000	22,220,000.00	1,111,000.00	3,333,000.00
2018	226,000	24,860,000.00	1,243,000.00	3,729,000.00
2019	280,240	30,826,400.00	1,541,320.00	4,623,960.00
2020	347,497.6	38,224,736.00	1,911,236.80	5,733,710.40
Total			7,445,556.80	22,336,670.40

Source: Author's computation

Table 6.3 indicates that on average US\$3.19 million GST on the overhead cost of producing a tonne of palm product will be foregone annually. Given that these products are for export, they are zero rated and are therefore excluded from the overall tax subsidy summarised in table A6.4. A further withholding tax of US\$1.06 million annually, or US\$7.4 in total, on overhead cost will be also subsidised.

Table A6.4: Socfin tax subsidy summary 2011-2020

Tax handle	US\$m
Corporate	17.04
Import duty	11.09
WHT	10.30
Total	38.43

Source: Author's computation

Table A6.4 summarises the estimated tax subsidy granted Socfin within the 10 years' tax holiday. It shows that about US\$38.44 million or about US\$3.844 million annually for 10 years will be the government's contribution in terms of tax foregone to the said company.

Tax subsidy to Addax

The government of Sierra Leone acting by each of the Ministries of Agriculture, Forestry, Forestry and Food Security, Energy and Water Resources, Finance and Economic Development and Trade and Industry signed an MOU with Addax Bio-energy Sierra Leone Ltd^{xiv} on 9 February 2010 to set up sugarcane plantation, ethanol distillery and power plant at Makeni in Bombali district.

Addax received exemptions on three different taxes. The exemptions are laid out in the MOU. Below is the computation of the different tax exemptions granted Addax by GoSL.

Corporate tax subsidy

Assumptions

- 2010-213: initial sugarcane planting
- 2011: groundbreaking for sugarcane bioethanol refinery and biomass electricity plant
- 2012: completion of sugarcane bioethanol refinery and biomass electricity plant
- Late: first production of biofuel and green electricity for production and National Grid
- 2014: full production
- 1 million tons of cane per year
- Estimated ethanol output: 90,000m³ per year

Year	Estimated ethanol output/m ³	Estimated ethanol output/l	Projected biofuel price/l	Total sales (US\$)	Taxable income	Tax payable in US\$	Tax payable in Leones	Projected exchange Le/\$
	А	B = A *1000	С	D = B * C	E = 0.15* D	F= 0.30* E	G= F*H	Н
2013	45,000	45,000,000	2.48	111,561,354	16,734,203	5,020,261	25,101,304,650	5,000
2014	90,000	90,000,000	2.38	213,795,954	32,069,393	9,620,818	52,914,498,615	5,500
2015	90,000	90,000,000	2.41	216,596,277	32,489,442	9,746,832	54,582,261,804	5,600
2016	90,000	90,000,000	2.39	214,915,662	32,237,349	9,671,205	54,642,307,064	5,650
2017	90,000	90,000,000	2.42	217,597,590	32,639,639	9,791,892	55,813,781,835	5,700
2018	90,000	90,000,000	2.41	217,214,496	32,582,174	9,774,652	56,204,250,840	5,750
2019	90,000	90,000,000	2.41	217,108,422	32,566,263	9,769,879	56,665,298,142	5,800
2020	90,000	90,000,000	2.40	216,365,553	32,454,833	9,736,450	56,958,231,827	5,850
2021	90,000	90,000,000	2.40	216,000,000	32,400,000	9,720,000	56,862,000,000	5,850
2022	90,000	90,000,000	2.40	216,000,000	32,400,000	9,720,000	56,862,000,000	5,850
Total						92,571,989	526,605,934,777	

Table A6.5: Corporate tax subsidy for Addax based on company's financial projection

Source: Author's computation

Projected world biofuel \$/Litre from 2011-2020: OECD-FAO Agricultural Outlook 2011-2020

Table A6.5 shows that Addax gets an average subsidy of US\$9.7 million annually in respect of corporate tax, giving a total of US\$92.6 million from 2013-2022.

Addax received exemptions on three different taxes from the government of Sierra Leone.

xivAddax Sierra Leone Ltd is an affiliate of the Addax & Oryx Holdings BV Switzerland.

Import duty subsidy

Assumption

- Based on actual import duty foregone from 2009-2011
- Value increased by the rate of inflation projected by the Ministry of Finance SLIM model

Table A6.6.Summary	of proje	ected import	subsidy in	millions
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Year	Actual (Le, m)	Projected (Le, m)	Inflation project	Exchange rate Le/\$	Projected (US\$m)
2009	308			3,801	0.08
2010	9,363			3,961	2.36
2011	10,898		15.1	4,400	2.48
2012		12,925	18.6	4,500	2.87
2013		15,458	19.6	5,295	2.92
2014		18,906	22.3	5,500	3.44
2015		20,891	10.5	5,600	3.73
2016		22,875	9.5	5,650	4.05
2017		24,820	8.5	5,700	4.35
2018		26,929	8.5	5,750	4.68
2019		29,218	8.5	5,800	5.04
2020		31,702	8.5	5,850	5.42
2021		34,079	7.5	5,850	5.83
2022		36,635	7.5	5,850	6.26
Total					53.51

Source: NRA and author's calculation

Table A6.6 shows that on average US\$4.1 million annually will be foregone as import duty from Addax's importation from 2009-2022 and a total of US\$53 million will be the import duty subsidy to the said company within the same period.

Withholding tax subsidy

Assumption

- Value of locally awarded contract from April 2010 - November 2011(20 months) is US\$8.85 million,^{xv} given an average annual contract value of US\$5.31 million
- Annual WHT on locally awarded contract is therefore: 5% of US\$5.31m = US\$265,500

For 13 years, therefore, we expect about US\$3.45 million to be foregone as WHT from local contracts awarded by Addax.

General Sales Tax subsidy

Assumption (static analysis)

- Value of cash or cash equivalent injected in the economy from April 2010 -November 2011 (20 months) is US\$13.1 million, given an annual cash injection of US\$7.86 million
- All cash injected spent on GST supplies

Annual GST subsidy will therefore be 15% of US\$7.86 million = US\$1.2 million; for 13 years we expect a GST subsidy of US\$15.3 million

• Note: Addax is an export-oriented industry and is therefore zero rated. The GST is also excluded from the overall impact analysis of the exemptions.

Table A6.7: Summary 2009-2022

US\$m
92.60
39.00
3.45
135.05

Source: Author's computation

Table A6.7 summarises the expected tax subsidy granted Addax for 13 years. It shows that about US\$135.05 million will be foregone by GoSL through tax exemptions granted Addax for 13 years, given an annual average of about US\$11.6 million.

^{xv}See A New Model for Sustainable Biofuels Addax-http://www. addax-org.com

Tax subsidy to Goldtree Sierra Leone Limited

The government of Sierra Leone signed an MOU with Goldtree in 2010 mandating the latter to set up oil palm plantation, oil extraction mill, refinery and packaging plant in and around Daru in Kailahun District.

Like the other agri-businesses, Goldtree received exemptions on three different taxes from GoSL. The tax exemptions are laid out in the MOU. Below is the computation of the different tax exemptions granted to Addax by GoSL. The revenue implications of these exemptions are discussed below.

Corporate tax subsidy

Assumption

- Cultivated plantation size in phase one (2010-2015): 5,000 acres
- Cultivated plantation size in phase 2 (2016-2020)- 12,500 acres
- Estimated new investment, phase one : US\$25 million
- Estimated investment, phase 2: US\$40 million
- Oil mill capacity: 21 tons fruit per ha
- Estimated yield: 12.9t/ha FFB (over 19 years)^{xvi}
- Sales price per ton: US\$815- US\$1,100/t CPO

Table A6.8: Goldtree income estimates

Like the other agribusinesses, Goldtree received exemptions on three different taxes from GoSL.

Year	Production of fresh fruit bunches (FFB) in tons	Crude palm oil in tons	Turnover in US\$m	Taxable income in US\$m	Tax payable in US\$m
2014	64,500	12,900	10,513,500	1,577,025	473,108
2015	64,500	12,900	10,965,000	1,644,750	493,425
2016	64,500	12,900	11,610,000	1,741,500	522,450
2017	64,500	12,900	12,225,000	1,838,250	551,475
2018	64,500	12,900	12,642,000	1,896,300	568,890
2019	161,250	32,250	35,475,000	5,321,250	1,596,375
2020	161,250	32,250	35,475,000	5,321,250	1,596,375
Total				19,340,325	5,802,098

Source: Author's computation

Available data shows that, on average, Goldtree will receive US\$1.029 million annually as corporate tax subsidy from GoSL starting from 2014 when production and sale of oil palm is expected to commence. For the entire tax holiday, therefore, we expect a corporate tax subsidy of US\$5.8 million.

Import duty subsidy

Assumption

- In 2011 Goldtree imported only vehicles with a duty foregone of Le 84 million
- In 2012, planting materials and equipment will be imported
- Investment capital of Goldtree is about 48% of Socfin's investment

Table A6.9: Summary of projected import subsidy in millions

Year	Actual (Le, m)	Projected (Le, m)	Inflation project	Exchange rate Le/\$	Projected (US\$m)
2011	84	84	15.1	4,400	0.02
2012		1,488	18.6	4,500	0.33
2013		1,780	19.6	5,295	0.34
2014		2,177	22.3	5,500	0.40
2015		2,405	10.5	5,600	0.43
2016		2,634	9.5	5,650	0.47
2017		2,857	8.5	5,700	0.50
2018		3,100	8.5	5,750	0.54
2019		3,364	8.5	5,800	0.58
2020		3,650	8.5	5,850	0.62
Total		23,539			4.23

Source: Author's computation

Table A6.9 shows that about US\$4.23 million import duty will be foregone from Goldtree's importation during the tax break period.

Withholding tax subsidy

Assumption

- Oil mill capacity to be constructed is about 35% of what is proposed by Socfin
- WHT on mill construction will be: 5% of (35% of US\$40m) = US\$700,000

Table A6.10: Summary foregone tax 2011-2020

Tax handle	US\$m
Corporate	5.8
Import duty	4.2
WHT	0.7
Total	10.7

Source: Author's computation

Given the limited information on this company, the author has made a very conservative estimate of the relevant taxes that will be foregone from the exemptions granted Goldtree. On average US\$1.07 million will be foregone annually for the 10-year exemption period.

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³ At present, Socfin is paying lease and compensation for 6,500 ha, but only using 3.125 ha. The remaining land under lease has been given to the community for its use. Comment on report received from SOCFIN country director by e-mail, 12 March 2013.

 ⁴ See Annex 3 for a list of resources found on and around rural farms.
 ⁵ Full country-by-country reporting would provide a global picture of a company's activities. It would give tax inspectors much more to go on when investigating companies, would also help illustrate the distribution of profits and tax revenues that result from the current transfer pricing system. This is important information that would help stake holders - including CSOs- to evaluate the impact of the current transfer pricing rules on developing countries. At present nobody is able to study this. Full country-by-country reporting should require a company to disclose all of the following information: 1. The name of each country in which it operates; 2. The names of all its companies trading in each country in which it operates; 3. Its financial performance in every country in which it operates; 4. The tax charge included in its accounts for the country in question split as noted in more detail below; 5. Details of the cost and net book value of its physical fixed assets located in each country; 6. Details of its gross and net assets in total for each country in which it operates. Tax information would need to be analysed by country in more depth requiring disclosure of the following for each country in which the corporation operates: 1. The tax charge for the year split between current and deferred tax; 2. The actual tax payments made to the government of the country in the period; 3. The liabilities (and assets, if relevant) owing for tax and equivalent charges at the beginning and end of each accounting period; 4. Deferred taxation liabilities for the country at the start and close of each accounting period. For more information on the campaign of the International Tax Justice Network on country-by-country reporting see www.eurodad.org and www.christian-aid.org ⁶ Klaus Deininger and Derek Byerlee, *Rising global interest in farmland: can it yield* sustainable and equitable benefits?, Washington, DC: The World Bank, 2011. http://siterand esources.worldbank.org/DEC/ Resources/Rising-Global-Interest-in-Farmland.pdf (accessed 7 November 2011).

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According to Honourable Hassan Sheriff, MP (APC) for Constituency 53, Port Loko (direct communication, 6 November 2012), the Caparo Group sold SLA to Siva, which paid US\$5 million for the company. It is not clear whether this includes only the SLA lease in Port Loko or the company's entire investment in the country, which Hon. Sheriff says included the BKM lease as well as other investments in the south, in 'Bo, Zimmi, Pujehun'. ¹⁰⁰ Land lease between: The Chiefdom Council of Bureh Kasseh Maconteh Chiefdom

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Landowners of Kpaka Chiefdom Pujehun District and Biopalm Energy Limited, registered 31 January 2011, signed 19 January 2011. ¹⁰⁶ Lease between: The Paramount Chief, Chiefdom Speaker, Councillor and

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¹²⁴ The company is currently looking for more land in neighbouring districts, in Bum Chiefdom in Bonthe District and in Bagbo Chiefdom in Bo District (Jean-Christophe Dienst, 2012, see note 113.), but local informants say that chiefs in those areas are so office in Freetown, expansion in Pujehun District is limited as other investors have taken out large leases in neighbouring chiefdoms, such as Biopalm Energy/Siva in Gallines Peri and Kpaka Chiefdoms (20,000 plantable hectares in each), African Oil Palm Limited in Panga Kabondeh Chiefdom (39,320.98ha); West African Agriculture Number 2 Limited in Makpele Chiefdom (30,700ha).

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Bioenergy Project in Sierra Leone: a summary report prepared for Swedfund International AB, 3 September 2012, UK: Nippon Koei UK, p9-10. 58 Ibid.

 ¹⁵⁹ SiLNoRF and Bread For All, 2012, see note 81, p9.
 ¹⁶⁰ Sub-lease of land situate and being in Malen Chiefdom, Pujehun District, Southern Province of the Republic of Sierra Leone, between Dr Joseph Sam Sesay, Minister of Agriculture, Forestry and Food Security for and on behalf of the Government of the Republic of Sierra Leone and Socfin Agricultural Company (SL) Ltd, 5 March 2011, p2. ¹⁶¹ Gearoid Millar, Addax on the ground: local experiences of FDI in transitional Sierra Leone, Powerpoint presentation given in Freetown, Sierra Leone, 26 September 2012, Slide 9.

¹⁶² SiLNoRF, Annual monitoring report on the operations of Addax Bioenergy by Sierra Leone Network on the Right to Food (SiLNoRF) for the Period June 2011 - June 2012, August 2012.

¹⁶³ In its response to this report, Addax Bioenergy stressed that since 2010 it has had 'a detailed and comprehensive E&S Monitoring programme covering a whole range of social and environmental areas'. In 2011, Gearoid Millar, a European scholar and expert on Sierra Leone and peacebuilding, signed an MOU with Addax Bioenergy Senior Management in Switzerland to work alongside Addax Bioenergy staff on this Moni-toring and Evaluation programme in Sierra Leone. After six weeks, this independent evaluator was asked to leave by the General Manager of Addax Bioenergy in Sierra Leone. Mr Millar's findings, presented before he left Sierra Leone, were critical of the company's operations.

¹⁶⁴ MOU and agreement between the Government of the Republic of Sierra Leone, Addax Bioenergy Sierra Leone Ltd and Addax & Oryx Holdings BV, 9 February 2010, p2.

¹⁶⁵ Addax Bioenergy, Addax Bioenergy: A new model for sustainable development,
 September 2012.
 ¹⁶⁶ Addax Bioenergy, A new model for sustainable bioenergy, February 2013, see note 90.

¹⁶⁷ Ibid. 168 Ibid.

¹⁶⁹ Derek Higgo, Health, Security, Social Affairs, Environment Manager, Addax Bioenergy, direct communication, 29 October 2012.

 ¹⁷⁰ See note 162.
 ¹⁷¹ Jean-Christophe Dienst, General Manager, SAC, direct communication, 18 October 2012

¹⁷² Socfin Agricultural Company, *Completed & ongoing social projects 2011-2012;* document provided by Jean-Christophe Dienst, General Manager, SAC,

18 October 2012.

¹⁷³ See note 134. ¹⁷⁴ See note 171.

¹⁷⁵ Ibid.

 ¹⁷⁶ Interviews with Mohamed Kernoh Mansary, see note 134. Tamba R. Seddu, see note 132.
 ¹⁷⁷ Joseph Rahall and Elke Schäfter, 2011, see note 10. Deutsche Welthungerhilfe, 2012, see note 10.

¹⁷⁸ The following statement comes from the erstwhile Crad-I website, last accessed 15 December 2010 [http://www.crad-I.com/index.php?id=42]: 'Crad-I currently has two existing businesses - Namibia Agriculture & Renewables Ltd (with 150,000 hectares of development ground in the Caprivi Strip, Northern Namibia) and Sierra Leone Agriculture Ltd (with 46,000 hectares in Western Sierra Leone under license for multi commodity development with a focus on Palm oil).

¹⁷⁹ Vinod Sharma, representative of SLA/Geoff Palm Limited/Biopalm Energy/Siva Group in Sierra Leone, direct communication, 2 November 2012. ¹⁸⁰ Augustine Noah Kamara, member, Landowners Committee Executive, Direct

communication, 3 November 2012. ¹⁸¹ 4 November 2012, Landowner Committee Meeting with SLA Managers, Bantoro,

SLA lease area, Port Loko District.

¹⁸² SLA, Environmental and social impact assessment of an oil palm development project in Port Loko District, Sierra Leone, prepared for Sierra Leone Agriculture Limited, Freetown: CEMMATS, March 2012.

¹⁸³ Augustine Samba, 'In Sierra Leone, Siva Group/Bio Palm donates \$30,000 to 3 chiefdoms in Pujehun', Freetown: Awareness Times, 13 July 2011.
 ¹⁸⁴ CEMMATS Group Limited, Community Development Action Plan for the agriculture

oil palm project in the BKM Chiefdom in Port Loko District, Northern Province, Freetown: CEMMATS Group, March 2012.

¹⁸⁵ Vinod Sharma, 2 November 2012, see note 179.

¹⁸⁶ Ibid. ¹⁸⁷ Ibid.

¹⁸⁸ Vinod Sharma, see note 179 and CVN Rao, see note 154.

¹⁸⁹ WHH, IFPRI, Concern Worldwide, 2012 Global Hunger Index. The challenge of hunger: ensuring sustainable food security under land, water, and energy stresses, Bonn, Washington, DC and Dublin, October 201, p38.

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containers on the SAC lease in October and November 2012. ¹⁹² Coastal & Environmental Services, *Sugar cane to ethanol project, Sierra Leone,* Draft ESHIA, Grahamstown: CES, March 2009, p80.

¹⁹³ WaterLex, Addax Bioenergy - Sugarcane-to-Ethanol Project compliance with the Human Right to Water, Geneva, 2011. Available at: http://www.waterlex.org/resources/ documents/2011- HRIA_AddaxBioenergy.pdf [accessed 28 November 2012].

¹⁹⁴ This was verified by the research team in the community of Ropotor (Addax lease), which could not be reached by 4-wheel drive vehicle on 18 October 2012. ¹⁹⁵ According to a SiLNoRF monitoring report, Woreh Yeama was the village most affected by hunger in the Addax area in 2011. This is due to a land dispute between

Worch Yeam and a neighbouring village, which meant that Addax was only able to plough less than a third of FDP fields for Worch Yeama. Because of the insufficient area and poor harvest, the Woreh Yeama community said they 'go to bed hungry'. In a re sponse to this report the company claimed that it has increased the resources available to the villagers. Those we spoke to were not aware of these changes.

¹⁹⁶ GoSL, September 2008, Environmental Protection Agency Act 2008, supplement to the Sierra Leone Gazette volume CXXXIX, no 44.
 ¹⁹⁷ FAO, Environmental Impact Assessment; Guidelines for FAO Field Projects, 2012.

198 See EPA Act, 2008 Section 26.

¹¹⁷ These include the Rotterdam Convention on the Prior Informed Consent Procedure for Certain, Hazardous Chemicals and Pesticides; the Stockholm Convention on Persistent Organic Pollutants; ILO Convention 184 on Safety and Health in Agriculture; the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal; the International Maritime Dangerous Goods Code for cases of pesticide disposal; and other regional or national conventions and regulations which may apply such as the Bamako Convention (FAO guidelines, p23). ²⁰⁰ Tax Justice Network: Country by country reporting. http://www.taxjustice.net/cms/ front_content.php?idcat=144 [accessed 30 November 2012].

Action for Large-scale Acquisition Transparency (ALLAT)

- Green Scenery, Freetown
- Sierra Leone Network on the Right to Food (SiLNoRF), Northern Region
- Malen Affected Landowners' Association (MALOA), Pujehun District
- Affected Land Users' Associations (AFLUAs), Tonkolili and Bombali Districts
- Partners Initiative for Conflict Transformation (PICOT), Bo and Bonthe Districts
- Search for Common Ground (SFCG), Freetown
- Centre for Democracy and Human Rights (CDHR), Bombali District
- Campaign for Good Governance (CGG), Freetown
- Rural Agency for Community Action Programme (RACAP-SL), Pujehun District
- BIOSALONE, Freetown
- Centre for Coalition of Human Rights Activists (CCHRA), Tonkolili District
- Community Empowerment for Poverty Alleviation (CEPA-SL), Kailahun District
- Sierra Leone Adult Education Association (SLADEA), Freetown
- United for the Protection of Human Rights (UPHR), Port Loko District



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