

Final report



International
Growth Centre

Tracking concession activity

A census in Sierra
Leone



Darin Christensen
Bilal Siddiqi
Maarten Voors

December 2018

When citing this paper, please
use the title and the following
reference number:
S-39402-SLE-1

DIRECTED BY



FUNDED BY





**International
Growth Centre**

**Tracking Concessions:
A Census in Sierra Leone**

December 2018

Darin Christensen
University of California, Los Angeles

Bilal Siddiqi
The World Bank

Maarten Voors
Wageningen University

Tracking Concessions: A Census in Sierra Leone¹

Darin Christensen (UCLA),
Bilal Siddiqi (World Bank), and
Maarten Voors (Wageningen University)

December 14, 2018

Executive Summary

Data Collection

This report summarizes findings from a nation-wide census to catalog mining and agricultural investment activity across Sierra Leone. Fieldwork was conducted over the course of 2017 and involved four sequential activities:²

1. Compilation of Data from Central Government (GoSL)
2. Cross-Validation with Local Governments
3. Field Verification and Surveys
4. Phone Survey

We use this data to provide an overview of commercial mining and agriculture in Sierra Leone and highlight the need for better monitoring of these sectors.

Concession Activity

Official government concessions records are not current. Of 462 projects,³ enumerators could not locate almost half (218 sites) when they attempted site visits. Where sites could be located, 129 were *active* projects operated by 106 unique firms over 67 Chiefdoms.

For the 129 active projects/sites:

- 93 were agricultural businesses commonly growing crops such as rice, cassava, palm oil, and eggs;
- 36 were mining projects; 16.7% are considered large-scale and most began after 2010;
- 58% of agricultural businesses were owned by Sierra Leoneans compared to 16.7% in mining operations; and
- Roughly 33% of employees were drawn from nearby communities, with an even smaller proportion being employed in skilled positions.

Other projects were either closed (113 sites) or had been relocated (2 sites).

¹ Funding for this research provided by the International Growth Centre (IGC).



² Innovations for Poverty Action (IPA) Sierra Leone implemented these research activities.

³ 387 came from GoSL records and an additional 75 were discovered by further contacts with local government sources. We use the terms project, site, and concession interchangeably. The same firms can own multiple projects.

Lease Terms

Most lease agreements are between the project and a single community. Lease agreements averaged of 18–20 years for agriculture and 6–8 years for mining concessions. Firm representatives claim to have more formal leases (firms report 59 leases; community members, only 50) covering more land (firms report 126 acres on average; communities, 109 acres).

Disagreements between firms and communities involve claims of inadequate local employment and development expenditure and delayed surface rent payments. These disagreements are reported by both firms and communities, though communities report more such conflicts. Disagreements do not tend to end in violence, though it is not uncommon for road blocks or mass agitation to occur.

Recommendations

There are three main recommendations provided in this report:

1. **Better, More Regular Monitoring of Commercial Investment:** Official records should be regularly updated to avoid over-reporting commercial activity. GoSL needs to implement a more robust monitoring strategy to locate investments, track their production, and identify what areas are available for concessions.
2. **Improved Data Systems and Data Collection:** Future attempts at tracking concession activity should include: (i) cross-checking GoSL's records with information held by Chiefdom and District officials; (ii) storing information for concession sites in a cadaster; (iii) visiting each concession site to directly observe its status and activities; and (iv) creating a survey instrument that enables both the verification of existing data and the entry of new sites.
3. **Stronger Local Accountability and Dispute Resolution Systems:** Compared to claims by communities, firms claim to have signed more leases, granting them control over more land for longer times; hired more people and provided more skills; promised less and delivered more. The only thing firms and communities seem to agree on is that they disagree on these issues – particularly on employment, surface rent payments, and local development projects. There is clearly need for more local accountability for firms and communities to ensure that promises are clearly communicated, mutually agreed upon, and fulfilled. This will enable both both firms and communities to benefit from commercial investments.

Research & Policy Relevance

Over the past decade, foreign investments in developing countries' agriculture and mining sectors have increased dramatically. A recent report suggests that investors seek out relatively weak states which lack the capacity to regulate and monitor new agricultural and mining projects [Deininger and Byerlee, 2011].

Before we can assess the impacts of these investments on local welfare or government revenues, we first need a detailed record of where, when, and at what scale these investments have been made. In this report, we conduct a census of all agricultural and mining concessions in Sierra Leone and, in so doing, hope to enable a broader research agenda tracking the social and economic consequences of these commercial investments in natural resources.

The outcomes of the current study can also inform ongoing policy debates. Sierra Leone relies heavily on resource endowments: in 2012, the mineral sector accounted for 71% of total export revenues, while agriculture accounted for 70% of employment [Bermudez-Lugo, 2012]. The Government of Sierra Leone's "Agenda for Prosperity" (2013) and 2015 Land Policy both promote large-scale investments in natural resources. Accurately tracking concession activity enables GoSL and third-parties to evaluate whether the government is attracting new investments and whether those projects are delivering the intended fiscal benefits.

Research Design

Data collection involved four sequential activities:

1. Compilation of Data from Central Government
2. Cross-Validation with Local Governments
3. Field Verification and Surveys
4. Phone Survey

1. Compilation of Data from GoSL

In collaboration with various government agencies, we collected and harmonized a list of all recorded agribusiness and mining projects across Sierra Leone's 14 Districts. We consulted several agencies, including the National Minerals Agency (NMA), Ministry of Agriculture, Forestry, and Food Security (MAFFS), and the Sierra Leone Investment and Export Promotion Agency (SLIEPA).⁴

For mining, we relied on NMA, which tracks and maps all mining licenses and records data on a project's type, start date, and proximate location. There are two limitations: (1) data is not current and while NMA receives periodic reports from mining firms, only some firms regularly submit updates; (2) despite NMA's extensive listing of mining properties and related licenses, location information are often constrained to addresses based in Freetown and not actual sites.⁵

For agriculture, we relied on MAFFS and SLIEPA, both of which have engaged in irregular data collection over the past decade. As data collection is less central to these agencies' mandates, the information tends to be collected infrequently and is incomplete, often with little information on projects' locations below the district-level.

2. Cross-Validation with Local Governments

IPA enumerators validated the initial list through consultations with district-level officials, including Local Council representatives and local offices of the Ministry of Mines and Mineral Resources (MMR) and MAFFS. In each case, enumerators went through all projects listed in a district, inquiring as to whether the official had ever heard of a project and, if so, where the project is headquartered. They then also asked if the official knew of other unlisted projects that are or have been active in the district.

After district-level consultations, the enumerators proceeded to the chiefdom-level and administered a pre-programmed survey. Enumerators invited the Paramount Chief or another representative of the Chiefdom Council to participate in the survey that served both to validate the administrative data and discover unlisted projects.

⁴ We were unable to secure administrative data from the National Revenue Authority or the Registrar General's office.

⁵ Associated exploration licenses often cover large areas and are not helpful to indicating specific mine sites.

Consultation with local governments is especially valuable in Sierra Leone, where (outside of the Western Area) chiefs typically play a role in negotiating lease agreements with mining and agricultural firms that need to acquire land to set up farms, mines, or project headquarters. In fact, some agribusinesses operations have been established only through negotiation with chiefs, without contacting the central government.

During the study, enumerators searched for 462 projects: 387 listings came from GoSL data that were validated by local government sources; 75 listings were added by local government sources, provided by the District Agriculture Office and community/chiefdom representatives (see Table 1).

Status	N
Listed – local from initial GoSL list of projects	387
New – identified during data collection	75
District Council	3
District Agriculture Office	36
Community/Chiefdom representatives	36

Table 1: Cross Validation with Local Governments

3. Field Verification and Surveys

As a next step, enumerators then canvassed Sierra Leone, searching for the projects included in Table 1. For each successfully located project, enumerators implemented two types of surveys (see Addendum for additional information).⁶

1. **Firm:** Enumerators sought out the company site manager, community development/liaison officer, or an employee that was well-informed about company operations.
2. **Host Community:** Enumerators asked for the community members that were most knowledgeable about the mining or agribusiness firms' operations. Enumerators interviewed a primary respondent (most knowledgeable about the mining or agribusiness firm), accompanied by other community members. Where the project site covered several communities, more than one community survey was conducted.

Wave 1 with Pilot: A pilot was conducted 16-19 March 2017 in Moyamba District. Moyamba was selected as it was accessible from Freetown and had relatively few listed sites (had significant changes to the survey instrument been required, re-surveying would have been less costly). No major changes to the questionnaire were required. Data collection across all districts Leone began 24 March 2017 and was completed by May 2017.

Wave 2: During data analysis for Wave 1, we encountered problems linking the firm and community surveys associated with the same project. Where

⁶ IRB protocol secured through University of California, Los Angeles: IRB# 17-000360.

firms had operated multiple projects in a small area, we were unable to reliably determine which community surveys corresponded to which of these nearby projects. We also identified a number of projects in our original data which were missing either a firm or a community survey.

In October 2017, we conducted another comprehensive enumeration to assign community and firm observations to project sites and to add missing surveys. During this wave, enumerators carried out three protocols based on re-assessments from Wave 1:

1. Linking existing community surveys to firm sites:
 - a. Enumerators visited the community and took a GPS reading;
 - b. Enumerators asked community members to guide them to nearest site for the firm in question;
 - c. Enumerators took a GPS reading at the firm site;
 - d. We then match these GPS readings to original data and assigned original observations to projects accordingly.
2. Surveying missing communities:
 - a. Enumerators visited the firm site and took a GPS reading;
 - b. Enumerators found the nearest community and conducted a community survey.
3. Surveying missing firms:
 - a. Enumerators visited the community and took a GPS reading;
 - b. Enumerators asked community members to guide them to nearest site for firm in question;
 - c. Enumerators conducted a firm survey at the firm site.

4. Phone Survey

During the first and second round of data collection, we collected phone numbers from all firm site representatives. After the second wave of data collection in late October 2017, we conducted a follow-up phone survey with these firm site representatives, in order to gather some more detailed information about project activities and community relations. In particular, the phone survey asked questions about informal agreements with communities, whereas the original data collection asked only about formal lease agreements.

Key Findings

Community Profiles

Around each concession, we interviewed one or more communities. In total, we interviewed 275 communities; 269 reported community characteristics. On average, communities tend to be relatively small – in our sample, the average village has 197 households.⁷ About 84% of communities were accessible by paved road. In 90% of interviewed communities, more than half of housing structures had a zinc/metal roof. Community representatives were also asked to report on the assets/facilities their community owned (see Figure 2). Nearly all communities had a religious center (mosques and/or churches), nearly two thirds had a school, and around a quarter had a health clinic. Very few communities reported having communal latrines.

⁷ This is highly variable: the standard deviation is 261.

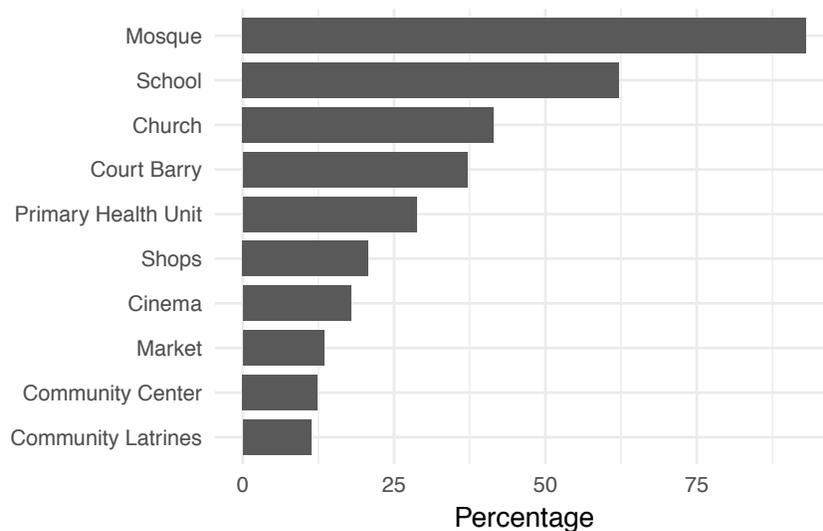


Figure 1: Reported Percentage of Community Assets (n = 275)

Firm Profiles

Enumerators aimed to verify 462 projects and succeeded in verifying and locating 244 projects. Of these, 129 were active projects (i.e. currently operating; see Table 2) with 93 in agriculture and 36 in mining. There are 106 unique firms spread across 67 Chiefdoms. Other projects were either closed (113 sites) or had relocated (2 sites). In total, 218 projects could not be located and, of those, 6 sites could not have their project type determined.

	Agriculture	Mining	Total
Located firm site	93	36	129
Located firm site - firm CLOSED	33	80	113
Located firm site - firm RELOCATED	0	2	2
Unable to locate firm site	30	182	212
Total	156	300	456

Table 2: Project Verification

Most projects were in Kambia, Kenema, and Kailahun and were predominantly agricultural. Kono is a core mining district. A breakdown of projects by district and sector is included in Table 3. Figure 2 maps verified projects by sector.

District	Agriculture	Mining	Total
Bo	0	3	3
Bombali	5	1	6
Bonthe	2	3	5
Kailahun	15	3	18
Kambia	23	0	23
Kenema	14	4	18
Koinadugu	4	5	9
Kono	4	8	12
Moyamba	4	2	6
Port Loko	8	3	11
Pujehun	2	0	2
Tonkolili	2	3	5
Western Area Urban	1	0	1
Western Area Rural	6	0	6
Missing	3	1	4
Total	93	36	129

Table 3: Active Projects Per District

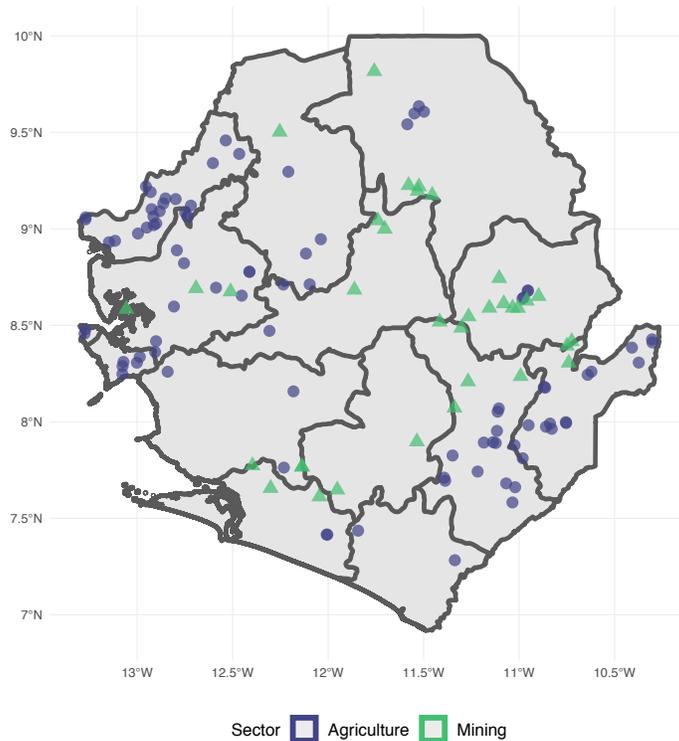


Figure 2: Verified Projects

Agricultural Projects

Most of the 93 agribusiness concessions are engaged in commercial farming activities. Table 4 provides an overview of these agricultural projects. Most projects have recently started land use activities, such as land clearing and planting. Under 40% have completed their first harvest. In over 50% of cases, land acquired by agribusiness and forestry projects was previously used for farming. Rarely was land previously used for residential purposes – in fact, less than five percent of projects across mining and agriculture reported displacement due to commercial activities. In most cases (58%), the primary owners of projects were Sierra Leoneans.

In many cases, cultivation lags behind land acquisition with most projects having only recently started production. In half of the cases, land was acquired over six years ago.

Figure 3 plots the main types of crops grown across projects. The most popular crop is rice (about 50% of projects report growing it) and, to a lesser extent, cassava and palm oil.

Table 4: Agribusiness Characteristics

	N	Percentage
Agricultural Status		
At least one harvest completed	36	39
Crops planted	25	27
Land cleared	17	18
Missing	11	12
Animals grazing	4	4
Previous Land Usage		
Farming	53	57
Undeveloped/bush	27	29
Missing	11	12
Residence	1	1
Other: Specify	1	1
Owners' Origin Country		
Sierra Leonean	54	58
European/American	11	12
Other	9	10
Lebanese	8	9
Mixed Nationalities	6	6
Missing	5	5
Total	93	100

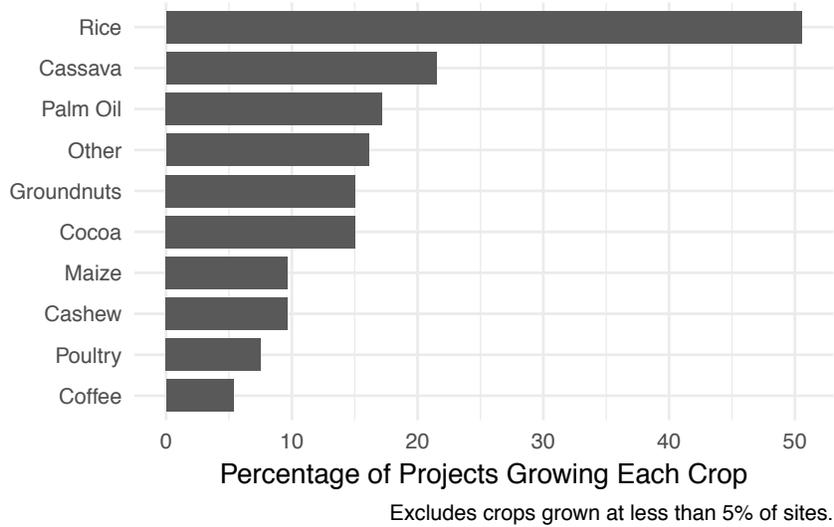


Figure 3: Crops Grown

Mining Projects

Table 5 provides an overview of key characteristics of the 36 mining projects in our data. A large majority (N = 18) are currently engaged in exploration and predominantly began production after year 2010. Most mining sites are owned by North American/Europeans (N = 14), followed by Chinese (N = 7) and Sierra Leoneans (N = 6). Gold and diamond are most commonly mined (Figure 4).

Table 5: Mining Characteristics

	N	Percentage
Mining Status		
Not active	4	11
Exploration	18	50
Small-scale mining	5	14
Large-scale mining	6	17
Missing	3	8
Owners' Origin Country		
Chinese	7	19
European/American	14	39
Indian	1	3
Sierra Leonean	6	17
South African	1	3
Mixed Nationalities	2	6
Other: Specify	1	3
Don't know	1	3
Missing	3	8
Total	36	100

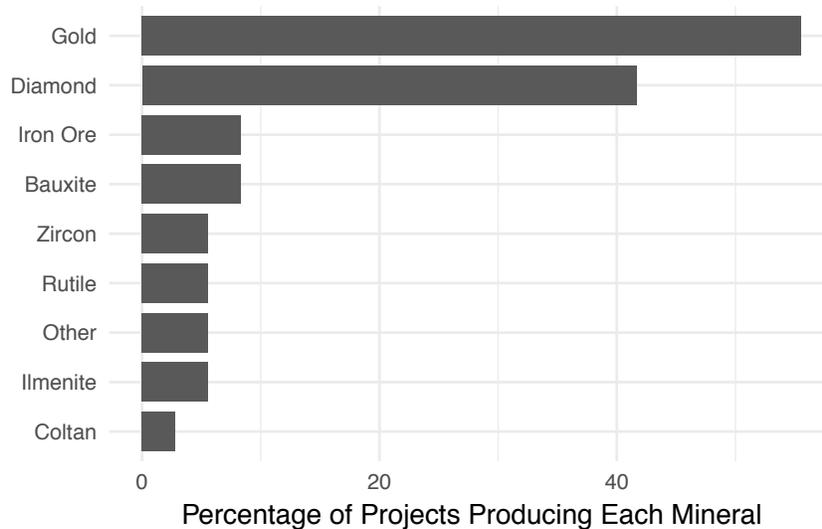


Figure 4: Reported Frequency of Minerals Mined (*Multiple responses possible)

Employment

In terms of employment, projects employ a total average of 198 people per site. About a third of these employees are from nearby communities and a small proportion of community employees are employed in skilled positions. We asked both company and community representatives to estimate how many individuals are employed from the host community (Table 9) and we found that there are large differences in perceptions between firms and communities. Across the board, firms report many more employees from host communities than those communities themselves. This difference could be explained by a large difference in perceptions or, alternatively, companies may simply use a broader definition of host communities.

Table 6: Reported Employment by Firm and Community Perspectives

Type	Perspective	Avg.	N	Agg. ^a
Total Employment	Community	-	0	-
	Firm	196.7	117	23,017
Employment from Host Community	Community	28.9	139	4,020
	Firm	59.3	115	6,821
Skilled Employment from Host Community	Community	4.1	132	536
	Firm	14	111	1,556

Note:

"-" value indicates communities were not asked for this information.

^a Projected aggregation of workers in circulation (Avg. multiplied by N).

Lease Characteristics

We asked a set of questions about a project's lease agreements. In most cases (about 86%), the community was informed before operations began. Only in about half the cases was a lease agreement signed between the company and the community (according to both perspectives). In one-fifth of cases (10 of 52), communities claim no agreement was made while companies claim that there was. This does not preclude the possibility that companies may have signed contracts with other communities, but it does suggest there a disconnect between both parties. In many cases, no agreement was signed.

Most lease agreements are between a project and one community only. Table 10 reports median outcomes in regards to the amount of land leased and lease duration. There are some differences between firm and community responses. Firms (representatives) claimed to have leased significantly more land compared to community responses (162 acres versus 122 acres, respectively). Lease agreements averages about 20 years for agricultural concessions

and 4–8 for mining concessions.

Table 7: Lease Characteristics

Sector	Type	Perspective	Value	Unit ^c	N ^d	Agg. ^e
Both	Informed ^a	Community	86.0	Percentage	148	-
		Firm	92.0	Percentage	122	-
	Signed Lease ^b	Community	40.0	Percentage	148	-
		Firm	49.0	Percentage	122	-
Agriculture	Amount Leased	Community	122.4	Acres	42	5,139
		Firm	162.0	Acres	44	7,128
	Duration Leased	Community	20.0	Years	48	-
		Firm	20.0	Years	43	-
Mining	Amount Leased	Community	147.8	Acres	6	886
		Firm	4.9	Acres	7	34
	Duration Leased	Community	4.5	Years	8	-
		Firm	8.0	Years	9	-

^a Whether a community was informed before project began;

^b Whether a lease agreement was signed between community and project;

^c Acres and Years are median values;

^d N represents respective sample sizes;

^e Projected total amount of land leased in Sierra Leone (Acres multiplied by N).

Firm representatives and communities mostly agree on how lease payments were distributed. Firm representatives more often claim that money paid publicly or to a community account, rather than directly to landowners or through the chief.

Table 8: Distribution of Lease Payment

Distribution Method	Community (%)	Firm (%)
Through the Chief	18	15
Paid directly to landowners	42	35
In a public meeting	2	8
To a community account	1	3
Other: Specify	19	15
Don't know	18	23

Development Initiatives

Firms often provide development projects in host communities. We asked both firm representatives and communities what development initiatives were promised and which were delivered by firms (Figures 5 and 6). There are some differences between project and community responses. In short, communities claim that more was promised and less was delivered. Looking first at promises, communities and firms disagree about how frequently clinics, court barrays, electricity, and schools were promised. Turning to what both sides say was delivered, firms feel they have done a better job delivering roads, scholarships, schools, and water wells, than what communities report.

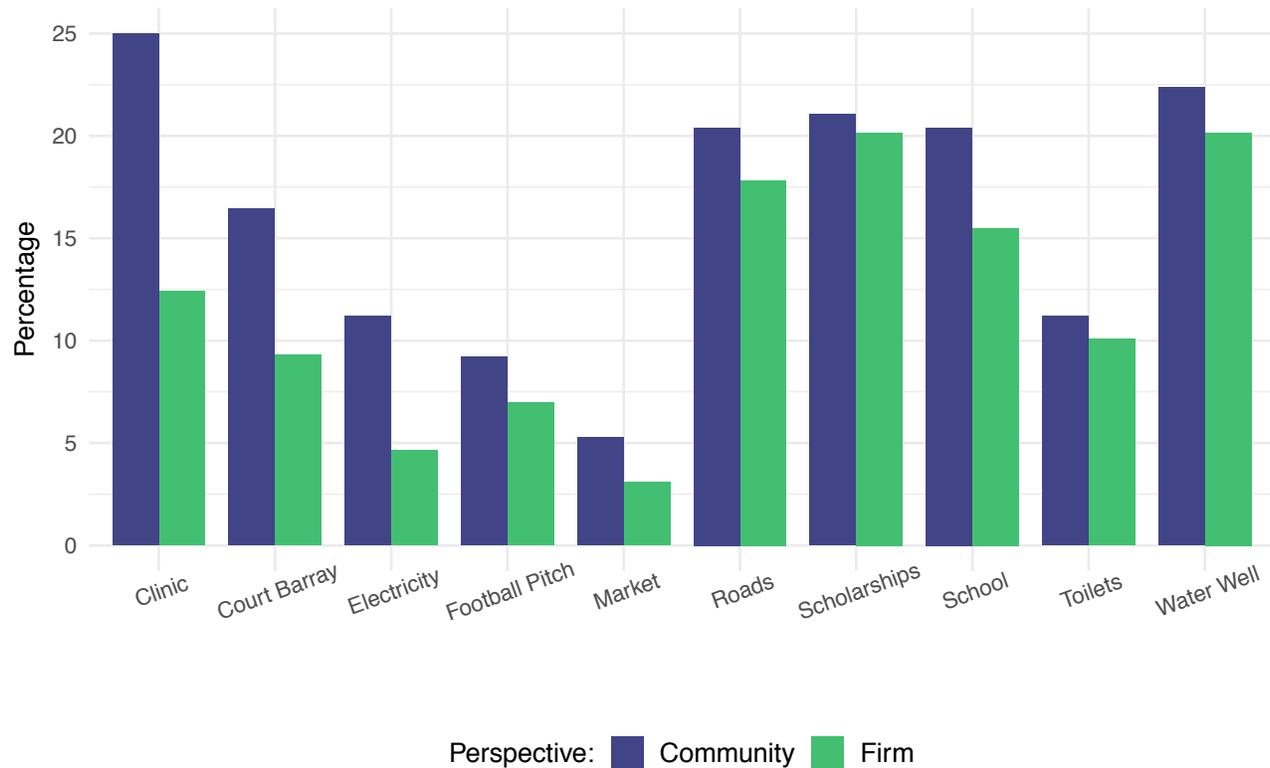


Figure 5: Stated Promises: Community vs. Firm Perspectives (*Multiple Responses Possible)

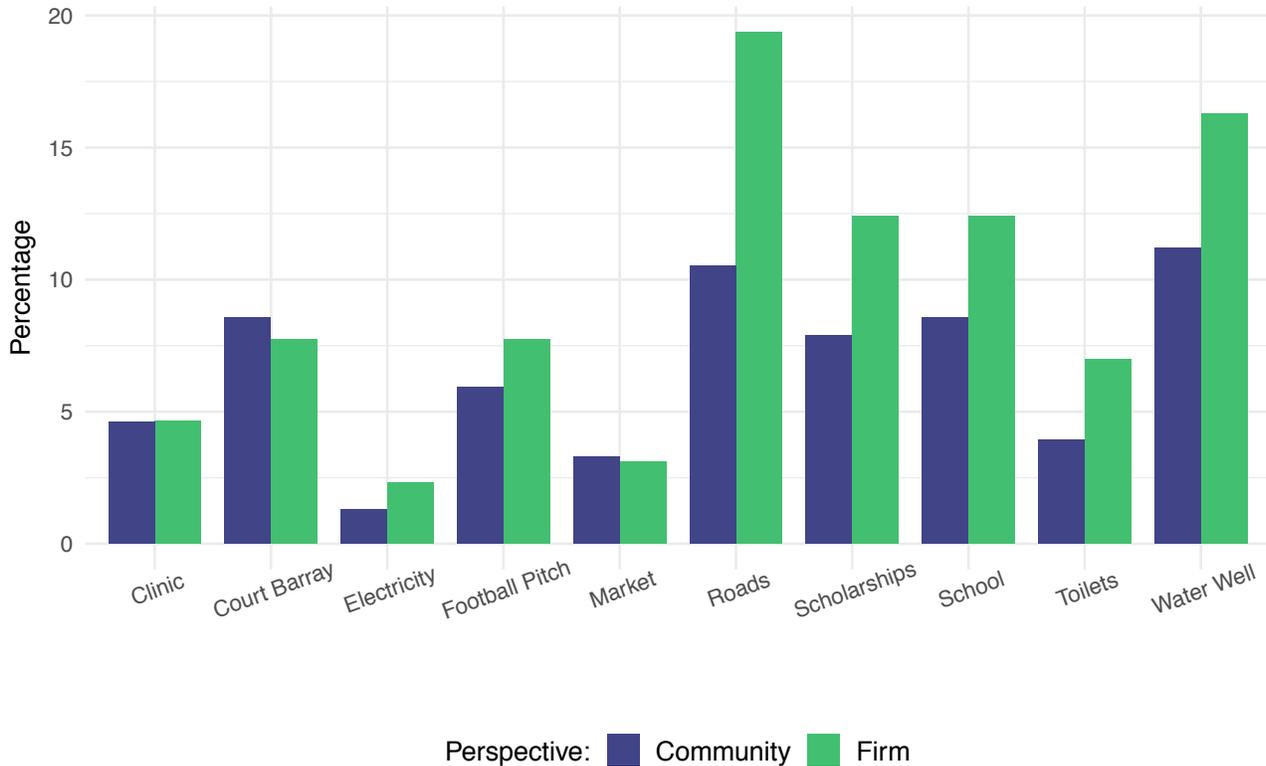


Figure 6: Delivered Promises: Community vs. Firm Perspectives (*Multiple Responses Possible)

Disagreements

Both company representatives and community members were asked about community-company disagreements (Figure 7). Communities report just under one disagreement (0.71) on average; responses from firms report roughly half as many disagreements.

Firm representatives and communities do not always agree on the source of their disagreements. Communities most often report conflicts around forms of compensation – the delayed payment of surface rents, the quality of development projects, and the employment of locals. Firm representatives most often report complaints related to the treatment of workers and, to a lesser extent, around the amounts paid in crop compensation and surface rents.

Communities reported that a majority of disagreements did not result in violence. Of cases where violence was involved, the most commonly reported forms of unrest were mass agitation, road blocks, and fighting. Firm representatives were far less likely to indicate violence resulting from a disagreement; when they do report violence, firms are more likely to characterize it as property destruction or fighting.

While communities claim that many disagreements remain unresolved, they do report intervention by the Paramount Chief and, to a slightly lesser extent, government officials to resolve disagreements.



Figure 7: Cause of Disagreement: Community vs. Firm Perspectives (*Multiple Responses Possible)

Overall, about two thirds of firms claimed to employ a community liaison officer. This was about ten percentage points lower than what communities reported. Firms and communities were also asked how often a company representative consulted with the community over a two-month period. We find that firm representatives are twice as likely to report consultations than community respondents (62% vs. 31%). Similarly, we asked whether the Paramount Chief consulted with the community about the concession in the past two months. Communities again report lower rates of consultation than firm representatives.

Acknowledgements

We are grateful to the leadership and country economists at IGC Sierra Leone for shepherding this report. We thank Arthur Baker, Charlotte Capstick, Fatoma Momoh, Jim Polit, and Osman Siddiqi at Innovations for Poverty Action. Dewey Verhoeven helped with the cleaning and merging of survey data. Avery Do helped to design and format this report.

Addendum: Summary of Survey Components

We surveyed three types of respondents: (1) firm representatives, (2) community members, and Chiefdom leadership.

1. Firm Representatives

- Data collected:
 - a. Location (including GPS)
 - b. Project operations/status
 - c. Lease agreement
 - d. Company-community relations
 - e. Identification on new projects
 - f. Firm profile (production start dates, etc.)
- Results (see Table 1):
 - a. 462 projects, comprised of 387 from initial list and 75 new from District, Chiefdom, or project-level consultations;
 - b. 129 active projects found;
 - c. 113 projects closed down;
 - d. 2 projects relocated; and
 - e. 218 projects unable to be found.

2. Community Members

- Data collected:
 - a. Location (including GPS)
 - b. Project operations/status
 - c. Lease agreement
 - d. Company-community relations
 - e. Identification of new projects
 - f. Community profile (demographics, etc.)
- Results:
 - a. 275 community surveys were conducted;
 - b. Full surveys administered to communities currently hosting a project as well as projects that have closed down/relocated.

3. Chiefdom leadership

- Data collected:
 - a. Location of interview
 - b. Company-community relations
 - c. Identification of new projects
- Results:

- a. 115 interviews conducted with traditional leaders;
- b. 49.5% Paramount Chief;
- c. 23.4% Chiefdom Speaker;
- d. 17.3% Chiefdom Official; and
- e. 9.5% Deputy/Section Chief.

References

Omayra Bermudez-Lugo. 2012 minerals yearbook: Sierra leone. 2012.

Klaus Deininger and Derek Byerlee. *Rising Global Interest in Farmland*. The World Bank, 2011. ISBN 978-0-8213-8591-3. URL <https://siteresources.worldbank.org/DEC/Resources/Rising-Global-Interest-in-Farmland.pdf>.

The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research.

Find out more about our work on our website
www.theigc.org

For media or communications enquiries, please contact
mail@theigc.org

Subscribe to our newsletter and topic updates
www.theigc.org/newsletter

Follow us on Twitter
[@the_igc](https://twitter.com/the_igc)

Contact us
International Growth Centre,
London School of Economic and Political Science,
Houghton Street,
London WC2A 2AE

IGC

**International
Growth Centre**

DIRECTED BY



FUNDED BY



Designed by soapbox.co.uk