

Education
Sub
Saharan
Africa

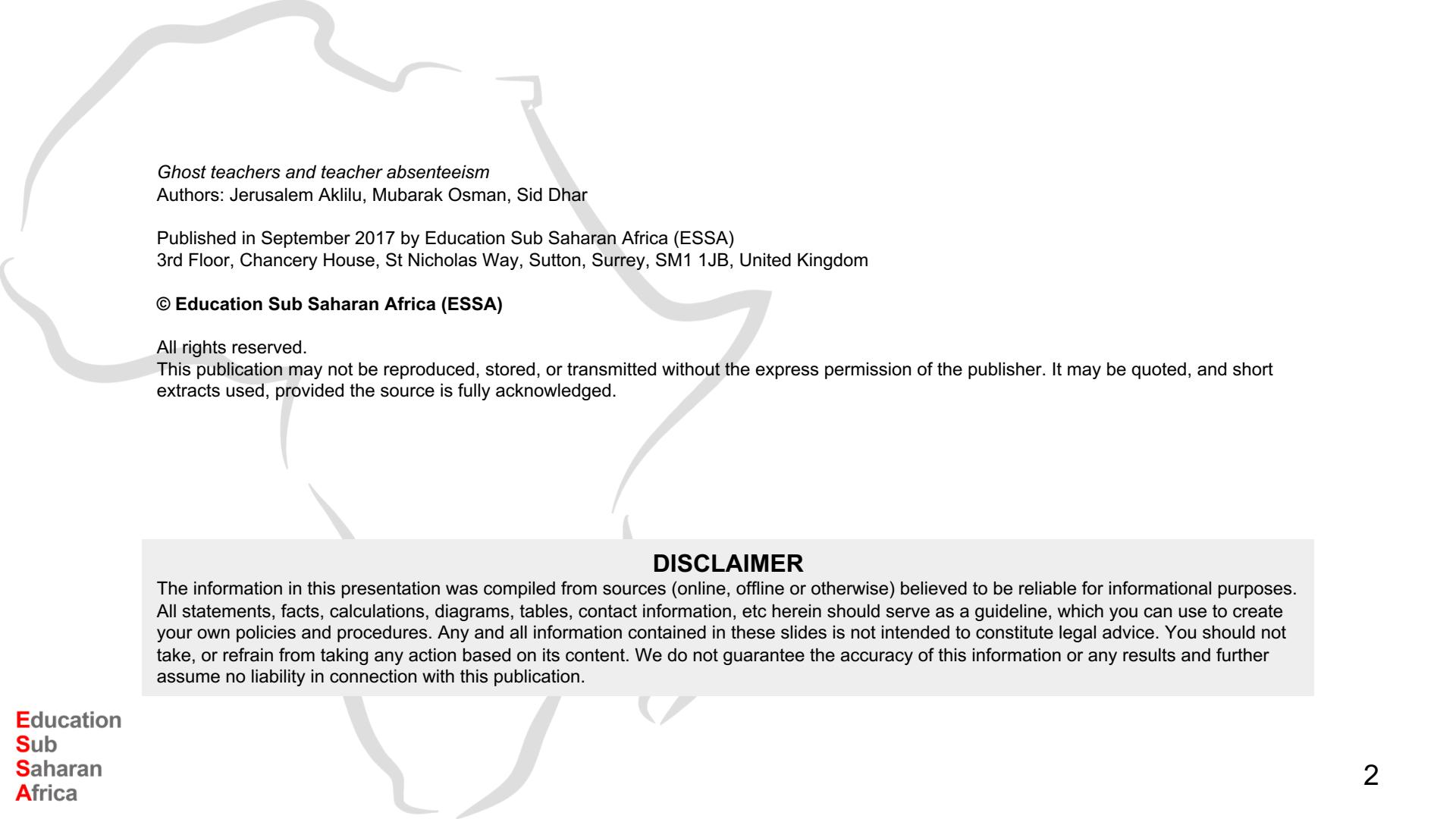
September 2017

Ghost teachers and teacher absenteeism

Cluster 2

Jerusalem Aklilu, Mubarak Osman, Sid Dhar





Ghost teachers and teacher absenteeism

Authors: Jerusalem Aklilu, Mubarak Osman, Sid Dhar

Published in September 2017 by Education Sub Saharan Africa (ESSA)

3rd Floor, Chancery House, St Nicholas Way, Sutton, Surrey, SM1 1JB, United Kingdom

© Education Sub Saharan Africa (ESSA)

All rights reserved.

This publication may not be reproduced, stored, or transmitted without the express permission of the publisher. It may be quoted, and short extracts used, provided the source is fully acknowledged.

DISCLAIMER

The information in this presentation was compiled from sources (online, offline or otherwise) believed to be reliable for informational purposes. All statements, facts, calculations, diagrams, tables, contact information, etc herein should serve as a guideline, which you can use to create your own policies and procedures. Any and all information contained in these slides is not intended to constitute legal advice. You should not take, or refrain from taking any action based on its content. We do not guarantee the accuracy of this information or any results and further assume no liability in connection with this publication.

Acronyms

SSA	Sub-Saharan Africa
ESSA	Education in Sub-Saharan Africa
PETS	Public Expenditure Tracking Surveys
TSC	Teachers Service Commission (Kenya)
AFPHRC	Africa Population and Health Research Center
IPPD	Integrated Payroll and Personnel Database (Kenya)
NNED	Northern Network for Education Development (Ghana)
SSNIT	Social Security and National Investment Trust (Ghana)
IIEP	International Institute for Educational Planning
UNESCO	United Nations Educational, Scientific and Cultural Organization

Introduction and Motivations

Ghost teachers are educators that appear on the payroll but fail to show up for work. This could be because of deliberate fraud, or a result of teachers moving away, or otherwise maintaining a sinecure employment in the field.

For sustainable development, SSA needs qualified and motivated teachers. Ghost teachers take away resources from the system and result in local teacher shortages.

The problem of Ghost teachers is exacerbating the already dire situation. For a resource-starved region, this is a huge issue, understanding which will be essential to rooting this problem out.

In Sub-Saharan Africa (SSA)

- more than 1 in 3 adults can't read
- 182 million adults are unable to read and write
- 48 million youths (ages 15-24) are illiterate
- 22% of the primary aged children are not in school.

Ghost teachers

Secondary research

How these frauds are committed?

Key contributing factors from
literature reviews

How these frauds are committed?

Case 1: Teachers don't attend their school duties and engage in other employment opportunities, paying school authorities a cut of their salaries to ignore their absence

Case 2: Headmasters create fake names on the payroll and draw salaries on behalf of these ghost teachers.

Case 3: A teacher registers with three different schools in one year and receive three salaries simultaneously.

Case 4: A school would forward a request to the Government Human Resources offices in the district for a teacher. The officials would then "create the teacher" in the system and begin paying them while the post was being advertised

Case 5: In the last year before retirement, a teacher's salary and banking details would be changed and the salary diverted into the new account. The teacher would not know and would receive no pay.

Case 6: The headmaster would defraud fired teacher by depositing money into their bank account and then phoning the teacher to say that the money had been deposited by mistake and had to be withdrawn and paid back. This money would then be paid back to a personal account maintained by the headmaster.

Case 7: Education ministry officials would collude with people seeking employment and register them as teachers with remote public schools. Every month salary would be deposited in their bank accounts and officials would take a portion of these salaries.

Key contributing factors from literature review

Socio-Economic factors	Lack of business processes	Corruption and Fraud
Very low wages and unreliable payment of salaries leads to faculty members moving to financially rewarding sectors, while in parallel, drawing their previous salaries.	Difficulty in integrating records between the finance and education ministries leads to loopholes in the accounting systems that can be exploited. Lack of banking services in remote areas results in manual payroll management	Deep-rooted corruption within officials involved in the education sector leads to fake accounts and exploitation of the system Lack of checks and balances leading to people with power exploiting the system to draw salaries on behalf of fake teachers

Lack of sophisticated technological solutions

Lack of an automated, advanced and updated payroll systems leaves the system vulnerable to exploits from people of power.

Difficulty in distinguishing existing faculty from absent or non-existent faculty due to lack of real-time service verification methods, lack of biometric identification, and lack of periodic headcount checks

Country Studies

Highlighting the problem in Africa through six of the most affected countries

Liberia, Kenya, Ghana, Uganda, South Africa, Malawi

- Current Situation
- Role of Government
- Organisations currently active

"We will ensure that these things (teacher absenteeism) are minimized to the level that others teachers that are not on payroll gets there so that they can receive their just salaries for the work done"

Madam Gorma Minnie, County Educational Officer, Liberia

"We have so far investigated the anomaly in Mitooma and Bundibugyo districts ... It's widespread and we have written to the Auditor General to help in the audit because it's complex."

Ms Grace Akullo, Director of Criminal Investigations and Intelligence, Uganda

"We have the highest rate of absenteeism in SADC [Southern African Development Community]. We're at 19 days [average per teacher] a year. It's huge. An average of 10% nationally,"

Angie Motshekga, Basic Education Minister in South Africa, 2013

The flag of Liberia is displayed as a large, textured background. It features a blue canton with a white five-pointed star in the upper left corner. The remaining area is divided into four horizontal bands of red, white, red, and white. The red bands are twice as wide as each white band.

Liberia

Capital

Official languages

Total Area

km²(103rd)

Population (2015)

(125th)

Total GDP (PPP) (2017)

Per capita GDP (PPP)

Gini (2007)

HDI (2015)

Currency

(LRD)

Monrovia

English

111,369 sq.

4,503,000

\$3.879 billion

\$881

38.2 medium

0.427 low

177th

Liberian dollar





Current Situation

Social impact of the situation

- There's a shortage of approximately 8,000 teacher.
- Due to low budget allocation, there has been difficulty in training teachers and purchasing school materials.
- 1,900 ghost teachers were found on the payroll, leading to countless teaching hours wasted.

Government's response towards the issue

- According to the government sources, the Liberian government is committed to resolving the issue.
- The phenomenon is acknowledged and steps are being taken gradually.
- 1,000 new teachers were hired to improve the teacher shortage in the country.

Estimated Financial Impact
annually

\$7.5mn
(20% of salary budget)

Fact:

The MoE was allotted \$44 million for the 2016/2017 budget year but received \$41 million from MoFD.

Approximately \$35 million was spent on employee salaries.

Teacher's salary constitutes 20% of the salary budget

Governmental policies

- The government has introduced a payroll cleanup exercise by vetting its employees
- So far, 9,000 teachers in six counties were vetted (approx. 65% of workforce)
- After passing vetting process, teachers are issued biometric IDs
- Teachers who don't pass vetting process are removed from government payroll

SOURCE: The Frontier Liberia (2017) , The Big Win (2017), Ministry of Education Annual report (2016)



Organisations active in the country



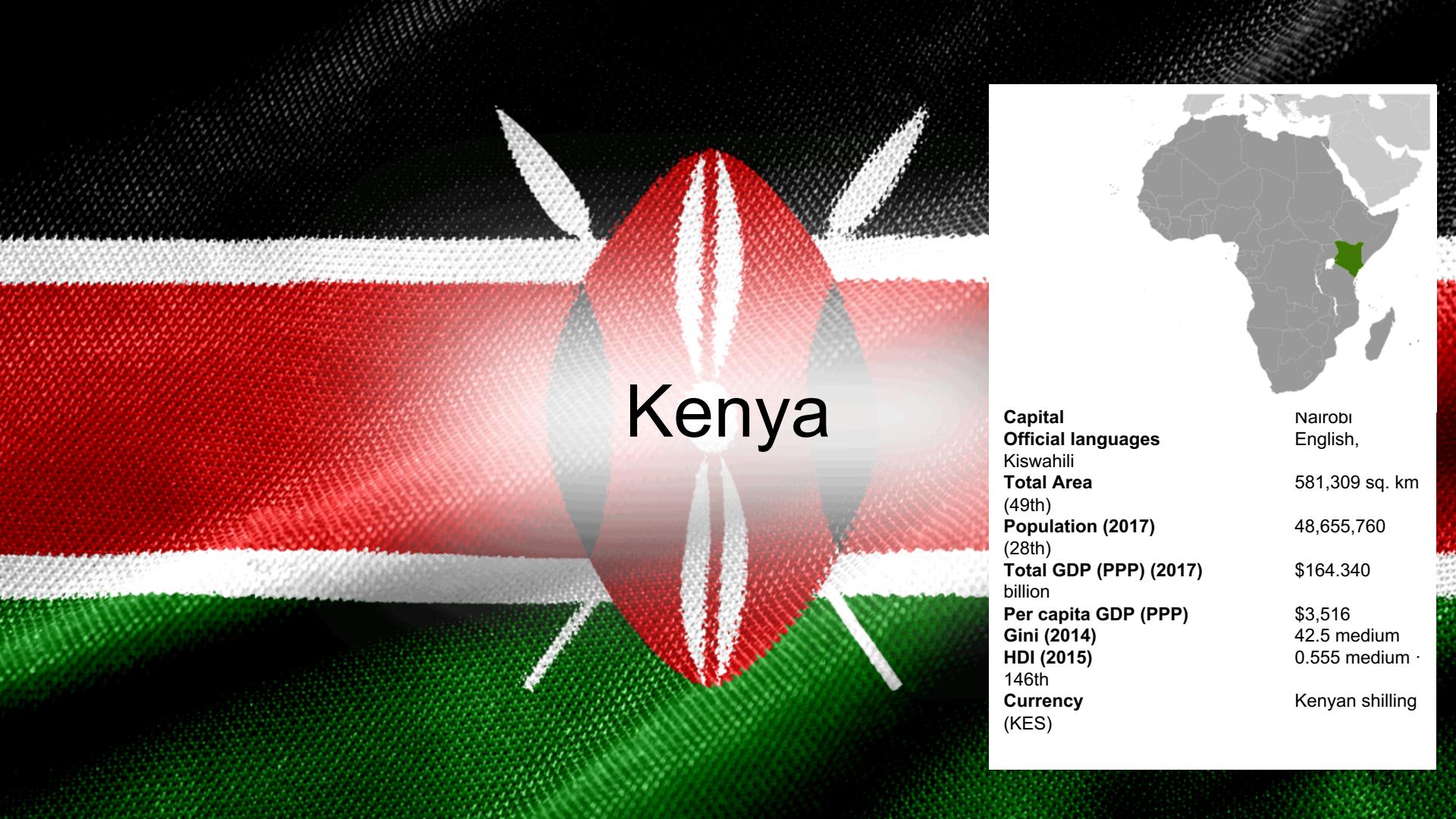
Partnership Schools for Liberia (PSL)

In 2016, the president of Liberia introduced the Partnership Schools for Liberia initiative, which is a system of charter schools through which capable private organizations take over failed public schools that suffer from teacher absenteeism and other similar issues. The following was one of the first companies to take part in the initiative.



Bridge International Academies

It is a company supported by Bill Gates and Mark Zuckerberg. The Liberian government has handed over some of its schools to the company in hopes that they can tackle teacher absenteeism and make the schools perform better. So far, the academies have brought about a positive outcome in more than 450 nursery and primary schools. However, the company's for profit model is causing controversy among the public as it charges \$6 per month in tuition.

A large, stylized representation of the Kenyan flag is positioned at the bottom of the slide. The flag features four horizontal stripes: black (top), white, red, and green. A central emblem is visible, consisting of a red shield with a white border. On the shield are five white five-pointed stars of decreasing size from left to right. Below the shield is a white ribbon banner with the word "HAKUUMI" written in Swahili script.

Kenya



Capital	Nairobi
Official languages	English, Kiswahili
Total Area	581,309 sq. km
(49th)	
Population (2017)	48,655,760
(28th)	
Total GDP (PPP) (2017)	\$164.340
billion	
Per capita GDP (PPP)	\$3,516
Gini (2014)	42.5 medium
HDI (2015)	0.555 medium
146th	
Currency	Kenyan shilling
(KES)	

Current Situation

Social impact of the situation

- A study by the APHRC, has shown that teacher absenteeism rates average 13%, and as high as 17% for teachers in public primary school [2]
- Despite this inefficiency in delivery, the current teaching force faces a deficit of 92,000 [3]
- A positive correlation was found between absenteeism and final national examination grades as students are unable to complete the syllabus on time [4]

Government's response towards the issue

- The TSC has ordered a national head count exercise in May 2017 to reconcile the number [1] of teachers on the payroll. The last headcount was done in 1998.
- Proposed headcount every 2 to 3 years is expected to flush out incidents of ghost teachers.
- Payroll reform is a major priority area in the Kenyan government's Public Financial Management Reform Programme.

Estimated Financial Impact
annually

\$2.5mn*

* Based on the fact below, but seems too low for Kenya

Fact:

A 2014 audit discovered at least \$1m (£600,000) a month was lost in payments to "ghost workers", as well as other financial irregularities [1] leading to a purge of 12,000 ghost public sector workers.

(Approximate figure, calculation steps included in the Appendix)

Governmental policies

- As part of the Public Financial Management Reform Programme, the TSC is digitizing its teacher-payroll using an IPPD, a move from manual and semi-manual system
- It is on course to completely digitize its payroll by the end of the 2017/2018 calendar year
- In 2017, the TSC came up with a Code of Regulations for Teachers that forces teachers and head teachers to seek written permission from their higher authorities whenever they intend to miss class.





Organisations active in the country



International Child Support Kenya - Run by the German NGO, Child Rights International Network, this organisation is providing performance-based in-kind incentives to teachers.

Africa Population and Health Research Center (AFPHRC) - is a think tank committed to generating an Africa-led and Africa-owned body of evidence to inform decision making for an effective and sustainable response to the most critical challenges facing the continent. Our mandate is to generate and support the use of evidence for meaningful action to improve the lives of all Africans through three integrated programmatic divisions: research, that emphasizes health and wellbeing; research capacity strengthening to deepen the skills of African scholars working on the continent; and policy engagement and communications to support greater influence of evidence in policy – and decision-making across sub-Saharan Africa.

British Council - The Teacher Performance and Integrity Programme in Kenya - Through the Teacher Performance and Integrity in Kenya Programme, the British Council supports the Teachers Service Commission to address concerns about teachers in Kenyan schools, particularly chronic absenteeism, discipline and performance appraisal.



Ghana

	
Capital	Accra
Official languages	English
Total Area (80th)	238,535 sq km
Population (2014) (45th)	27,043,093
Total GDP (PPP) (2017) billion (70th)	\$131.498
Per capita GDP (PPP)	\$4,650
Gini (2006)	42.8 medium
HDI (2015)	0.579 medium
139th	
Currency (GHS)	Ghana cedi



Current Situation

Social impact of the situation

- A study by NNED and Oxfam IBIS found a 30% teachers absenteeism rate with higher numbers in rural areas. [1]
- Health Issues, lack of accommodation, low levels of training and motivation and cultural and religious responsibilities are amongst the reasons behind such high absentee rates.
- Despite heavy investment in education with a teacher force of 260,000, an estimated 45,000 teachers are needed for the attainment of universal basic education.[3]

Government's response towards the issue

- The Ghana Education Service, Controller and Accountant General's Department, the Audit Service and the Fair Wages and Salaries Commission has embarked on a payroll verification process for teachers.

• In November 2016, this exercise led to the discovery of 426 teachers as ghost teachers

Estimated Financial Impact
annually

\$17.8mn

Fact:

A 2017 payroll audit conducted by the finance ministry, discovered that ghost workers were costing the government over USD 103 million a year. [2]

(Approximate figure, calculation steps included in the Appendix)

Governmental policies

- The government issued a directive for the electronic verification of all public sector workers.
- To ensure transparency, the SSNIT has issued a directive for biometric re-registration of all its members including public sector workers.
- The controller and accountant general department has implemented a policy that transitions the payment of salaries from paper to electronic. The system requires online verification before payment.



Organisations active in the country



SAVE-Ghana - Mobile Device solution for tracking teacher absenteeism. SAVE-Ghana works with rural and deprived communities in the Upper West Region with a focus on promoting the quality delivery of basic social services including education, health, women's empowerment, sustainable livelihoods for all as well as safeguarding the rights of women and children in deprived communities.

Uganda



Capital

Official languages

Swahili

Total Area

(81st)

Kampala
English,

241,038 sq. km

Population (2016)

(35th)

38,319,241

Total GDP (PPP) (2017)

\$91.212 billion
\$2,155

Per capita GDP (PPP)

41.01 medium
0.493 low ·

Gini (2012)

HDI (2015)

163rd

Currency
Ugandan
shilling (UGX)



Current Situation

Social impact of the situation

- Upon the elimination of the teacher names from the payroll during a ghost worker cleanup exercise, genuine teacher names were erased.
- Due to this, some teachers missed upto six months of salaries which indicates a failure in the headcount.
- The Uganda National Teachers Union (UNATU) has called for better methods for removing ghost teachers.

Estimated Financial Impact
annually

\$30.0mn

Fact:

The Ugandan government spent Sh26 trillion (\$7.2 billion) on education. Sh122 billion was added to the teachers salary budget for an increment of 15%..

Teacher absenteeism in Uganda ranges from 20% - 30% and costs the government about \$30 million annually.

(Approximate figure, calculation steps included in the Appendix)

Government's response towards the issue

- Explicit response acknowledging the problem has not been forthcoming from the government
- However, the government has arrested a few officials from the Ministry of Education for their involvement in ghost teacher fraud
- As a result of a 2005 audit stating that approximately Sh70 billion was lost annually, 30,000 names were removed from the payroll.

Governmental policies

- Regular payroll cleanups have been initiated by the government, to keep tab on the ghost teacher fraud
- However, compared to other countries, the response has been lukewarm



Organisation active in the country



Build Africa is a charity organization that is a part of the International Christian Relief. It was established in 1978 in efforts to eliminate poverty in Africa. While the organization is active in various livelihood projects, it has made great contributions to growth in education across Africa. As of 2012, it supports more than 50,000 pupils and 103 schools. Additionally, the organization works with local organizations to improve education. In 2012, it published a thorough study on teacher absenteeism in Uganda and is actively working to improve the situation.

South Africa



Capital	Pretoria (executive)
Bloemfontein (judicial); Cape Town (legislative)	
Official languages	Multiple
Total Area	1,221,037 sq. km (24th)
Population (2015)	54,956,900 (25th)
Total GDP (PPP) (2016)	\$742.461 billion
Per capita GDP (PPP)	\$13,321
Gini (2009)	63.1 very high
HDI (2014)	0.666 medium
Currency	South African Rand



Current Situation

Social impact of the situation

- Over 11,000 students were discovered to be registered in more than one school in the Kwa-Zulu province.
- The teacher absenteeism in the country is believed to be responsible for student underperformance in public school due to lack of curriculum coverages.

Government's response towards the issue

- The government has a dedicated stance towards eliminating ghost teachers and teacher absenteeism in general.
- Especially since the country has set the record for teacher absenteeism (10% absence annually), the government plans wishes to eradicate the problem.

Estimated Financial Impact
annually

\$209mn

Fact:

In 2016, the provincial Department of Education for KwaZulu Natal froze 4000 salaries of "ghost" teachers. The average teacher salary in South Africa is approximately ZAR 153,000.

(Approximate figure, calculation steps included in the Appendix)

Governmental policies

- The government plans to introduce a biometric log-in system to combat ghost workers and teacher absenteeism.
- The government conducts head counts for both students and teachers.
- The KZN province has implemented a system that provides pupils with identification numbers



Organisation active in the country



IIEP-UNESCO Although this institution is active across the world, it has played a role in the education sector in South Africa. IIEP has created an online portal known as ETICO which is a platform aimed at fighting corruption in education systems around the world. It is a database that provides information on various studies, surveys, articles, etc that contain information about corruption in the education sector. One of IIEP's publications has helped in the improvement of the appropriation of funds to educational institutions.

Malawi



Capital

Official languages

Chichewa

Total Area

118,484 sq. km
(99th)

Population (2013)

16,407,000
(64th)

Total GDP (PPP) (2016)

\$21.843 billion
\$1,172

Gini (2010)

43.9 medium
0.476 low

HDI (2015)

170th

Currency

Lilongwe
English,

,

118,484 sq. km

16,407,000

\$21.843 billion
\$1,172

43.9 medium
0.476 low

Kwacha (MWK)



Current Situation

Social impact of the situation

- 20% of time is lost to teacher absenteeism.
- High levels of teacher absenteeism can be attributed to challenging working conditions, irregular and low pay, overcrowding, budget shortages and very little institutional support.
- The country currently experiences a deficit of 40,000 - 45,000 and 12,000 - 15,000 teachers in primary and secondary school respectively.

Government's response towards the issue

- The government acknowledges widespread malfeasance across the public sector including the military, police and teachers.
- Government sanctioned report by PWC showed that K577 billion in government bank statements could not be reconciled between 2008 and 2014.

Estimated Financial Impact
annually

\$2.25mn

Fact:

A 2014 PWC analysis report discovered a MWK 7B pilferage due to ghost workers.

(Approximate figure, calculation steps included in the Appendix)

Governmental policies

- A dedicated National Audit Office (NAO) periodically holds national headcount exercises for all public sector workers including teachers to strengthen the integrity of the payroll.
- Despite this, there isn't a targeted public policy that seeks to address the issue of absenteeism.



Organisations active in the country



Care International - Malawi GPSA Teacher Absenteeism Monitoring Project

The World Bank funded project GPSA Strengthening Social Accountability in the Education Sector in Malawi (SSAES) is being implemented by CARE Malawi, in partnership with the Civil Society Education Coalition (CSEC) and technical partner Souktel. The 3-year project (January 2015- December 2017) is covering a total of 90 schools in six education districts of Mzuzu City, Kasungu, Dedza, Balaka, Mwanza, and Mulanje.

Payroll Systems

Introduction and impact

How payroll systems work?

Evolution of payroll systems

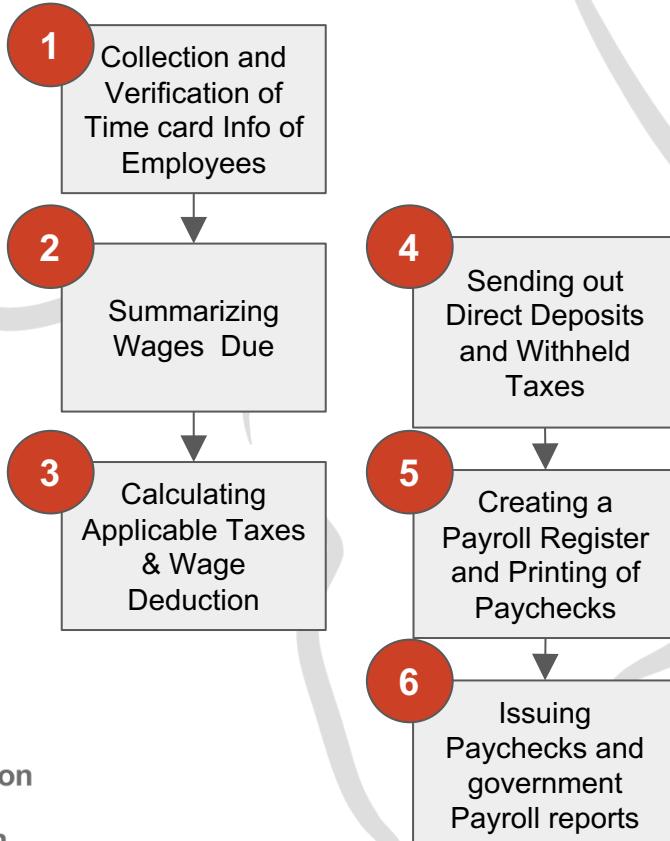
Key providers of payroll systems

Payment systems and delivery of teacher's salaries

**Review of payroll systems in Africa

*** To be completed in subsequent projects*

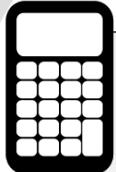
How payroll systems work?



1. Total hours worked by the employee is collated from collected work hour data.
2. A monthly wage is calculated as a product of a standard hourly wage rate and total number of hours worked.
3. Using local tax laws, appropriate tax deductions and medical or pension deductions are made.
4. With an arrangement with a local bank, payments are made directly into employee accounts and taxes due sent to the government.
5. A payroll register is created as a summary of the wage and deduction information for each employee on a payroll register.
6. Paychecks may then be issued directly to employees as well a government payroll report..

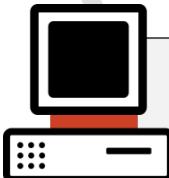
Although, in principle, this is how every payroll system works, different parts of the flow chart may vary due to the different organization-specific systems in place. (e.g. Most teachers are paid a flat salary rather than hourly hence there's no need for a timecard collection and verification)

Evolution of the payroll systems



Manual

- In the past, payroll was handled mostly manually.
- Payment and distribution was manual as well
- System vulnerable to fraud - from calculation of tax deductions to the counting of money.
- Inefficient and time consuming



Computer

- Currently, payrolls systems are handled using payroll softwares
- Finance depts employ software that process salaries, and make necessary adjustments.
- Payments systems are mostly electronic with major exceptions in rural areas.



Cloud

- Cloud based systems seem to be the future of payroll systems.
- Access to payroll information from anywhere with less reliance on the finance depts.
- Improvement in transparency

Key providers of payroll systems

Payroll Provider	Product	Description	Key Market Segments
 ORACLE	PeopleSoft	A single rules-based engine and scalable platform with an ever growing list of country extensions enable you produce multinational payrolls that fully comply with local requirements.	Large Multinational Companies
	Oracle Payroll	Based on a global Human Resource Management System (HMRS) engine with country-specific localization extensions to better manage your global HR operations.	Large Multinational Companies
 ADP	Global View	A simplified global payroll management system for your multinational organization	Large Multinational Companies
	WorkForce Now	Providing payroll administration, tax remittances, payroll data management and year end management for the small and mid-sized business.	Small-Middle Sized Businesses
 workday	Workday	Gain control, flexibility, and insight to manage payroll on your terms. Workday transforms your entire hire-to-pay process with a single HCM, time tracking, and payroll management system.	Large Enterprise and Mid Market Customers
Education Sub Saharan Africa	SAP HCM	Human Capital Management	Large and Middle sized business

Payment systems and delivery of teacher's salaries

- Payment systems differs between countries, between categories of teachers, between locations, etc.
- Large number of teachers and wide geographical distribution present logistical challenges in the delivery of teacher's salaries.
- Three distinct differences are readily apparent:

Mode of payment	Mode of Delivery	Responsiveness
<p>Salaries are handed over as</p> <ul style="list-style-type: none">• cash,• checks or• electronic transfers	<p>Mode of delivery can include</p> <ul style="list-style-type: none">• direct bank transfer,• delivery to school,• travel to collect money	<p>Payments could be linked to teacher's physical presence, or payment could continue for months after teacher's departure.</p>
<ul style="list-style-type: none">• In some cases, cash and check payments that force teachers to be present, keep check on missing teachers, if the head teachers is not involved.• However, cash payment can lead to significant issues if all the stakeholders are corrupt• Electronic payments are safer if the identity of the receiver can be verified in a bullet-proof manner	<ul style="list-style-type: none">• Where direct bank transfer have been initiated, a marked improvement of accountability has been observed.• Delivery to school is dangerous as either the headmaster or an official needs to carry large amount of cash• Potential issues are theft, fraud and embezzlement.• Travelling to collect money leads to more absenteeism, that results in loss of value that a teacher adds.	<ul style="list-style-type: none">• When linked to a teacher's physical presence, this increases the responsiveness of the system to potential fraud.• However, owing to limited checks and lack of technology infrastructure, often departures are not reported for an extended period of time.• The money continues to sieve through the system into the hands of the teacher.

Review of the government payroll systems in Africa

To be carried out as part of a subsequent project. Details in the future project section.

Case Studies

How Liberia and Ghana are
tackling the problem of Ghost
teachers

Situation and the extent of the
problem

What was done

Lessons learned



Situation and extent of the problem in Liberia

Financial Impact

20% of the Education budget could be freed through payroll auditing

Spread/Extent

20% of the teachers on the payroll are estimated to be fakes

Opportunity

\$7.5M thus lost could be used to improve education further

What was done

Charter Schools

- Liberia introduced a system of charter schools through which failed public schools would be transferred to private management.
- Regular head counts (spot verification exercises) were conducted to control the number of fraudulent teachers.

Big Win Philanthropy

- Checking the qualifications of every teacher in the country.
- Removing “ghosts” (people who do not exist) and people who are not actually teachers.
- Testing the abilities of every teacher in the country.
- Reclassifying those who are not up to standard onto lower pay grades, until they improve through retraining.
- Issuing biometric ID cards to all teachers who are qualified and competent.
- Moving teachers who are on low-paid temporary payrolls, onto the full rate on the main system (if teachers are underpaid they get second jobs and their attendance suffers).



Lessons learned from Liberia's experiences

1

The country's bureaucratic system of replacing teachers was responsible for various fraudulent teachers found on the payroll.

2

The new charter school system resolved the problem with failed public schools by improving it through better management. The country plans on expanding the system country wide.

3

The system is not popular with some parts of the country because it is a profit making business model and defeats the purpose of affordable public education.

4

Through a pilot study, the government was able to realize that upto \$7.5 million could be saved in the education sector and be re-invested.



Situation and extent of the problem in Ghana

Financial Impact

- 2017 Education budget Investment is over \$2 billion representing 3.6% of all grants received and national revenue generated.
- Despite this heavy investment in education, we estimate that every year, \$17 million in salaries paid is lost to ghost teachers.

Spread/Extent

- Teacher absenteeism rates are as high as 34% in northern Ghana and other rural areas whereas Continental Average is 20%.
- In 2017, the government discovered 26,000 ghost public sector workers on the payroll.
- In 2016, 4,000 ghost teachers were discovered in the payroll

What was done

Teacher Pop.

- In 2015, the Controller and Accountant General's Department(CAGD) embarked on national headcount for all public school teachers registered with the Ghana education service to root out ghost teacher from its payroll.
- An estimated 4,000 ghost teachers were discovered and expunged from the teacher payroll system.

Edu
Sub
Saha
Africa

Payroll Solutions

- The Social Security and National Investment Trust, the national social security for public sector workers, introduced mandatory biometric registration for all public sector workers. 26,000 ghost public sector workers were discovered.
- Biometric registration of old teachers has been undertaken whiles making biometric registration of new teachers a standard.
- Teacher payslips are expected to be validated online using the Electronic Salary Payslip Verification (ESPV) to ensure efficient pay delivery and to root out.
- As from August 2017, all workers not on ESPV will have to forfeit their salaries.



Lessons learned from Ghana's experience

1

The need for periodic and consistent auditing and review of the government payroll to identify ghost names and inactive workers.

2

There is a need for real-time accountability measures to track teacher attendance as well as teacher performance in schools.

3

As a way of ensuring high teacher retention rates, there is a need for improved working conditions and incentives for teachers especially in the rural areas. Rural areas are regions with the highest demand for teachers yet are the most difficult to track teacher attendance and performance due to infrastructural challenges.

4

Leveraging on technology and the proliferation of smartphones as means of tracking teacher attendance.

Key experts and Contacts

Brief introductions

Biographies, associations and backgrounds

Information on contacts obtained from ESSA project

Jacques Hallak

E-mail: jack_hallak@hotmail.com

International consultant and Professor at the Jules Verne University in Amiens (France).

- Mr Hallak worked at the French Ministry of Finance before being appointed as Director of IIEP and the International Bureau of Education (IBE).
- He is the author of numerous books and papers on the costs and financing of education, the informal sector, school mapping and the challenges of international cooperation, in particular to support poverty alleviation strategies.
- He is the coauthor of 'Corrupt schools, corrupt universities: what can be done?' and has studied the effects of corrupt practices such as ghost workers on the education sector.



Muriel Poisson

<http://linkedin.com/in/muriel-poisson-a85b11113>

Task manager of the IIEP project on 'Ethics and Corruption in Education' as of 2012

- Muriel is responsible for research and training activities in this area, on subjects such as academic fraud, teacher codes of conduct, and public expenditure tracking surveys.
- Prior to this, she conducted research on non-formal education in Asia.
- She has co-authored a number of articles and books, including: 'Corrupt schools, corrupt universities: What can be done' (UNESCO Publishing).



Michael Kremer

Littauer Center M-20 Email: mkremer@fas.harvard.edu Personal Email: <mailto:kremer.m@gmail.com> Tel: 617-495-9145

The Gates Professor of Developing Societies, Department of Economics at Harvard University

- In the fall of 2010, Michael became the founding Scientific Director of Development Innovation Ventures (DIV) at USAID.
- Dr. Kremer received his PhD in Economics from Harvard University. He is a member of the board of Precision Agriculture for Development.
- He co-authored “Missing in action: Teacher and health worker absence in developing countries as well as other publications on education and health economics in developing countries.



Nazmul Chaudhury

Email: n.chaudhury@worldbank.org

Lead economist at The World Bank, Washington D.C

- As an economist at the World Bank, Dr. Chaudhury has had a wide range of experiences in educational projects in developing countries such as Nepal and Bangladesh.
- He is an expert on public policy, policy analysis and program evaluation.
- He co-authored various publications including “Missing in Action: Teacher and health worker absence in developing countries.”



Jeffrey S. Hammer

Phone: 609-258-6153 Email: jhammer@princeton.edu

Charles & Marie Robertson Prof. of Economic Development, Princeton Woodrow Wilson School

- Previously, Jeffrey worked at the world bank for 25 years as an economist.
- His research interests include economic development, public economics and health in developing countries, particularly in Asia and Africa..
- He holds a Ph.D. from Massachusetts Institute of Technology.
- He co-authored various publications including “Missing in Action: Teacher and health worker absence in developing countries.”



Halsey Rogers

Tel : +1-202-473-6292 E-mail: Hrogers@worldbank.org

Co-Director of the World Development Report 2018

- Prior to joining the Bank, Halsey served with the Council of Economic Advisors at the White House, UC Berkeley, the Indonesian Ministry of Finance in Jakarta, and the Korea Development Institute in Seoul.
- He holds an BA from Princeton University, an MPP from the Harvard Kennedy School, and a PhD in Economics from UC Berkeley.
- He co-authored various publications including “Missing in Action: Teacher and health worker absence in developing countries.”



Muniru Kawa

<http://linkedin.com/in/muniru-kawa-12a25838>

Country Coordinator in Sierra Leone for Charlie Goldsmith Associates Limited

- Muniru Kawa holds a MA in Records Management from the University of London, Bachelor of Arts and Diploma in Education from Fourah Bay College, University of Sierra Leone.
- He served as Head of the National Archives of Sierra Leone and as a Lecturer in Records and Information Management at the University of Sierra Leone.
- He has played a key role in supporting the development of records management in Sierra Leone over a period of 20 years.
- He has made substantial contributions to the development and implementation of records management systems in West Africa.



Other Academic experts

Expert Name	Current Position	Contact Details
Karthik Muralidharan	Assistant Professor of economics at UCSD.	Office: +1 (858) 534-2425 Email: kamurali@ucsd.edu
Shoko Yamade	Associate professor of the Graduate School of International Development, Nagoya University, Japan.	EMAIL: shoma_y@hotmail.com
Bettina Meier	Advisor pro-poor economics at Brot für die welt.	http://linkedin.com/in/bettina-meier-06aba52b
Immaculate K. Namukas	Associate professor at the University of Western Ontario.	Available on ResearchGate.
Ronald Buye	Lecturer at Makerere University in Uganda.	Available on ResearchGate.
Andrew Griffin	UK deputy director of International Records Management Trust.	LinkedIn: http://linkedin.com/in/andrew-griffin-b218755
Lars Sondergaard	Program leader at World Bank in Bangkok.	World Bank blog: http://www.worldbank.org/en/about/people/lars-sondergaard LinkedIn: http://linkedin.com/in/lars-sondergaard-68148a2
Donald Winkler	Chief economist at DRW International	LinkedIn: http://linkedin.com/in/donwinkler

Professional experts

Expert Name	Current Position	Reach out through	Contact Details
Pamela Wadi	Director, FTI Consulting	Dieter Schulze	+44 20 3727 1742 T +44 78701 60868 Mpamela.wadi@fticonsulting.com
Chikondi E Phiri	Executive, Transaction Advisory Services, Ernst & Young	Sian Browne	Office: +265 1 876 476 Chikondi.Phiri@mw.ey.com
Hennie G Human	Partner, Advisory Services, Ernst & Young Advisory Services (Pty) Ltd	Sian Browne	Office: +27 11 5020270 Cell: +27 832844699 Hennie.Human@za.ey.com
Hayford Amoh	Ministry of Finance and Economic Planning (MOFEP) of the Ghana	Mubarak Osman, Sid Dhar	HAmoh@mofep.gov.gh

NGOs working in Malawi

NGO Name	Description	Contact Details
Active Youth Initiative for Social Enhancement	AYISE works toward a world where quality education is accessible for all. While primary education in Malawi is free, there are still numerous barriers to children attending school. Even when children are in school, the quality of education still requires improvement: classrooms are often overcrowded and regularly lack proper supplies	Website: https://ayisemw.wordpress.com/about/our-people/ Email: ayisemain@ayisemw.org
Civil Society Coalition for Quality Basic Education (CSCQBE)	The Civil Society Education Coalition (CSEC), which was formerly the Civil Society Coalition for Quality Basic Education (CSCQBE) until 2011, is a growing Malawian coalition of 82 diverse independent and voluntary Non-Governmental Organizations (local and international organizations), faith based organizations, trade unions, media bodies, research institutions, community-based organisations, etc), which have come together in the pursuit of the right to quality education in Malawi.	Website: http://www.csecmw.org/about.html Email: secretariat@csecmw.org
Forum for African Women Educationalists – Malawi Chapter – (FAWEMA)	The Forum for African Women Educationalists – Malawi Chapter – (FAWEMA) is a registered non- governmental organization, which brings together women educationalists in order to support and promote girls' and women's education in Malawi.	Website: https://fawemalawi.wordpress.com/ Email: fawema@africa-online.net
Action Aid – Malawi		Email: admin@actionaid.org
World Vision Malawi		http://www.wvi.org/malawi/our-work-0

Conclusion

What we have learned and what
can be done further

Suggested remedial measures

Further research

Implementation plan for follow up
projects

Suggested remedial measures

Based on the limited secondary research that we were able to carry out, the following high level measures seem to go a long way in mitigating the situation.

Conducting additional **Public Expenditure Tracking Surveys (PETS)** and other similar analysis to fully identify the extent of the problem within the sector. This leads to increased transparency and results in establishment of accountability – two essential ingredients to understand the flow of public sector expenses.

Addressing the loopholes in the **payroll systems** that are exploited by fraudsters by transforming payroll system through:

- Establishing automated payroll systems in line with global standards,
- Restructuring outdated systems used in banking such that manual tinkering is not possible,
- Renewing records by introducing payroll clean-up exercises

Improving the **payment systems** and making sure that the mode of payment, delivery and responsiveness of the systems are in line with standards prevalent in other countries. **Consolidating and standardising national payment systems** can benefit.

Improving the the **cooperation between Education and Finance ministries** by integrating records to prevent financial discrepancies.

Introducing **advanced biometric identification** systems that can provide real-time information and ensure the monitoring of faculty availability. As an interim measures, regular spot checks can also be used to monitor attendance.

Instituting **legislative reforms** to prevent the misappropriation of public funds and closing loopholes in the legislations that allow convicts to go scot free. Major challenge will also be to make sure these legislations are enforceable and binding.

Further research

Based on the research carried out for this project, we suggest the following three follow-up projects:

- 1** Detailed primary research on the six countries to understand the role of payroll and payment systems, involving:
 - government officials that can comment on the payroll systems and the level of integration of these systems with the banking infrastructure.
 - Headmasters, teachers and people used to the last mile who see the issue on an ongoing and regular basis.
- 2** Following the trail of money to determine where misappropriation of funds take place the most, involving:
 - Banking officials that can comment on how funds are disbursed.
 - Finance department officials that have control over where the money heads after leaving their control.
 - If possible, teachers that have been defrauding the system to understand their perspective
- 3** Establishing contact with the experts listed here and engage their help in determining the root causes of the problem

Lessons learned from this project

- As far as possible, it is advisable to employ Africa based researchers for such projects. We found that establishing trust is vitally important while exploring such a sensitive topic, and people are more likely to reciprocate positively to their own countrymen than to someone from a Western country.
- Preparation is the key, so researchers working in such topics should familiarise themselves with the issues that results in the phenomenon. The root causes are extremely varied and it took our team the first couple of weeks to just get up to the speed.
- Longer term engagements are more suited for such research, primarily due to the following two reasons:
 1. It takes time to establish contact with the relevant official and then to leverage this relationship to gain valuable insights. Though we got substantial number of contacts, we were able to establish communication with just a few. Out of these, we were able to get any sort of concrete information from just one.
 2. Readily available and verifiable information is scarce but misinformation is plentiful. So, it takes time to get appropriate information and then verify it to make sure the data points are valid.

Appendix

Financial Impact Calculations

Financial Impact Calculation : Kenya

Total public sector workers purged	= 12,000
Money Saved monthly	= 1,000,000 USD
Per worker money saved monthly	= 83.33 USD
Teacher's salary as % of average public sector worker	= 41.84%
[1] Monthly Public Sector Worker Salary	= 52,000.00 Ksh
[2] Monthly Teacher Salary	= 21,756.00 Ksh
% of teachers in Public sector workers	= 42.35%
[3] Number of Teachers	= 296429
[4] Number of Public Sector Workers	= 700,000
Total saved for teachers (monthly)	= 177,173.33 USD
Total saved for teachers (annually)	= 2,126,080.00 USD

SOURCE: [1] Mutegi, M. (2016, May 03)

[2] How teachers will reap big from new pay deal. (2017, June 17).

[3] There is no shortage of teachers in Kenya - report. (2016, May 03)

[4] LO/FTF Council's Analytical Unit, Kenya Labour Market Profile 2016, Copenhagen, Denmark

Financial Impact Calculation : Ghana

Total public sector workers purged	= 26,000
Per worker money saved monthly	= 307.69 USD
Teacher's salary as % of average public sector worker	= 52.05%
[1] Monthly Public Sector Worker Salary	= 803 GHC
[2] Monthly Teacher Salary	= 418 Ksh
% of teachers in Public sector workers	= 35.71%
[3] Number of Teachers	= 250,000
[4] Number of Public Sector Workers	= 700,000
Total saved for teachers (monthly)	= 1,487,018.61 USD
Total saved for teachers (annually)	= 17,844,223.27 USD

SOURCE: [1] Ghanaweb, Public Sector workers better off than private sector works, <https://www.ghanaweb.com/GhanaHomePage/business/Public-sector-workers-better-off-than-private-sector-SSNIT-report-267913>

[2] Glassdoor, Teacher Salary, https://www.glassdoor.co.uk/Salaries/ghana-teacher-salary-SRCH_IL_0.5_IN91_KO6.13.htm.

[3] MOE, Education Sector Report, <http://www.moe.gov.gh/assets/media/docs/FinalEducationSectorReport-2013.pdf>, (2013)

[4] Graphic. Public Sector is Full. <https://www.graphic.com.gh/news/general-news/public-sector-is-full-and-govt-may-lay-off-workers-osafo-maafu.html> (August, 2017)

Financial Impact Calculation : Malawi

Total Public Sector Money Lost	= 7,000,000,000 MWK
Average Daily Wage per Worker	= 688 MWK
Average Annual wage per worker	= 39,161 MWK
Teacher's salary as % of average public sector worker	= 66.67%
[1] Monthly Public Sector Worker Salary	= 150,000 MWK
[2] Monthly Teacher Salary	= 100,000 MWK
% of teachers in Public sector workers	= 35.00%
Number of Teachers	= 70,000
Number of Public Sector Workers	= 200,000
Total saved for teachers (Annually)	= 1,633,333,333.33 MWK
Total saved for teachers (annually)	= 2,252,873.56 USD

SOURCE: [1] t LO/FTF Council's Analytical Unitulandssekretariatet, Malawi Labour Market Profile 2014, Copenhagen, Denmark
Malawi Labour Market Profile - Report (2014)
[2] Jobs In Malawi - Civil Servant Paygrades - 2014

Financial Impact Calculation : South Africa

[1] Total number of teachers in South Africa (2013)	= 426,000
[1] Total number of teachers in South Africa (estimated 2025)	= 456,000
Calculated : CAGR for the period 2013 to 2025	= 0.57%
Calculated : number of teachers in South Africa (2016)	= 433,309
[2] Total number of teachers in Kwazulu Natal (2013)	= 96,057
CAGR for the period 2013 to 2025	= 0.57%
Calculated : number of teachers in Kwazulu Natal (2016)	= 97,705
[3] Number of Ghost teachers in Kwazulu Natal (2016)	= 4000
Calculated : % of Ghost teachers in the teacher population	= 4.09% (4,000 / 97,705)
Assumption : The % of ghost teachers in the total teaches population is constant throughout South Africa	
Calculated : number of ghost teachers in South Africa	= 17,739 (4.09% of 433,309)
[4] Average annual teacher's salary in South Africa	= ZAR 153,000
Money lost to ghost teachers annually (ZAR)	= 2,714,140,606 (153,000 times 17,739)
Money lost to ghost teachers annually (USD)	= 208,971,335.83 (exchange rate of 12.98)

References

Definition and Africa Data

- En.wikipedia.org. (2017). Ghost teachers in Sindh. [online] Available at: https://en.wikipedia.org/wiki/Ghost_teachers_in_Sindh [Accessed 25 Aug. 2017]
- The African Library Project. (2017). African Library Project - Africa Facts. [online] Available at: <https://www.africanlibraryproject.org/our-african-libraries/africa-facts> [Accessed 25 Aug. 2017].

How these frauds are committed?

- allAfrica.com. (2017). *Uganda: School Head Arrested Over Ghost Teacher.* [online] Available at: <http://allafrica.com/stories/201609261228.html> [Accessed 25 Aug. 2017].
- lol.co.za. (2017). Axed teachers used as pawns in salary scam | IOL News. [online] Available at: <https://www.iol.co.za/news/south-africa/axed-teachers-used-as-pawns-in-salary-scam-286989> [Accessed 25 Aug. 2017].
- News24. (2017). *Dept of Education to freeze salaries of 'ghost' teachers.* [online] Available at: <http://www.news24.com/SouthAfrica/News/dept-of-education-to-freeze-salaries-of-ghost-teachers-20160214> [Accessed 25 Aug. 2017].
- Sahara Reporters. (2017). *Delta State Education Boards And School Leaders Using Ghost Workers To Defraud Government | Sahara Reporters.* [online] Available at: <http://saharareporters.com/2016/03/16/delta-state-education-boards-and-school-leaders-using-ghost-workers-defraud-government> [Accessed 25 Aug. 2017].
- The Namibian. (2017). *'Ghost teacher' admits guilt to fraud, theft.* [online] Available at: <https://www.namibian.com.na/index.php?id=140885&page=archive-read> [Accessed 25 Aug. 2017].

Financial Impact : Kenya

- Mutegi, M. (2016, May 03). Average formal workers' pay crosses Sh50,000 mark. Retrieved August 27, 2017, from <http://www.businessdailyafrica.com/news/Average-formal-pay-crosses-Sh50-000-mark/539546-3187952-u3aoexz/index.html>
- How teachers will reap big from new pay deal. (2017, June 17). Retrieved August 27, 2017, from <http://www.nation.co.ke/news/education/Teacher-administrators-reap-big-from-new-salaries-deal-/2643604-3975000-n2rtcg/index.html>
- There is no shortage of teachers in Kenya - report. (2016, May 03). Retrieved August 27, 2017, from <http://www.nation.co.ke/news/There-is-no-shortage-of-teachers-in-Kenya/1056-3188010-u1qx6kz/index.html>
- LO/FTF Council's Analytical Unit, Kenya Labour Market Profile 2016, Copenhagen, Denmark
http://www.ulandssekretariatet.dk/sites/default/files/uploads/public/PDF/LMP/lmp_kenya_2016_final_version.pdf

Social Impact - Kenya

- Absenteeism Archives. (n.d.). Retrieved September 09, 2017, from <http://aphrc.org/post/tag/absenteeism>
- Buhere, K. (2016, January 03). Absentee teachers to blame for poor results. Retrieved September 09, 2017, from <https://www.standardmedia.co.ke/article/2000186983/absentee-teachers-to-blame-for-poor-results>
- Kenya orders probe into 12,000 'ghost workers' on payroll. (2014, November 20). Retrieved September 09, 2017, from <http://www.bbc.com/news/world-africa-30137326>
- Oduor, A. (2016, June 22). TSC plan shows teachers shortage in Kenya rose to 92,000. Retrieved September 09, 2017, from <https://www.standardmedia.co.ke/article/2000206141/tsc-plan-shows-teachers-shortage-in-kenya-rose-to-92-000>

Response of the Government - Kenya

- The strategy for Public Financial Management Reforms in Kenya, 2013 - 2018

Financial Impact - Ghana

- Bokpe, S. J. (2017, August 07). Ghana news: Public sector is full and govt may lay off workers - Osafo Maafo. Retrieved September 09, 2017, from <https://www.graphic.com.gh/news/general-news/public-sector-is-full-and-govt-may-lay-off-workers-osafo-maafo.html>
- Public sector workers better off than private sector – SSNIT report. (2013, March 16). Retrieved September 09, 2017, from <https://www.ghanaweb.com/GhanaHomePage/business/Public-sector-workers-better-off-than-private-sector-SSNIT-report-267913>
- Ministry of Education, Ghana. Final - Education Sector Report 2013. Retrieved 9th September, 2017 from <http://www.moe.gov.gh/assets/media/docs/FinalEducationSectorReport-2013.pdf>

Social Impact - Ghana

- Tornyi, E. (2015, April 30). Teachers deficit: 45,000 extra teachers needed to effect universal basic education. Retrieved September 09, 2017, from <http://www.pulse.com.gh/news/teachers-deficit-45-000-extra-teachers-needed-to-effect-universal-basic-education-id3713261.html>
- Teacher Absenteeism. (2014, February 20). Retrieved September 09, 2017, from <http://nnedghana.org/publications/teacher-absenteeism/>
- A. (2017, May 06). Ghana suspends 26,000 workers' salaries in bid to clear 'ghost workers'. Retrieved September 09, 2017, from <http://www.africanews.com/2017/05/06/ghana-suspends-26000-workers-salaries-in-bid-to-clear-ghost-workers/>
- Government of Ghana, 2017 Budget and Economic Policy Statement
- World Bank Blogs - The Hidden Cost of Corruption: Teacher Absenteeism and Loss in Schools. 2013 <http://blogs.worldbank.org/education/hidden-cost-corruption-teacher-absenteeism-and-loss-schools>
- The Herald, Nov, 2016. Gov't Catches 4,000 Ghost teachers.
- CitiNews, April 2017, Gov't to remove over 26,000 names from the payroll. <http://citetmonline.com/2017/04/18/govt-to-remove-over-26000-workers-from-payroll>
- Ghanaweb. CAGC begins headcount for teachers, January, 2015. <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/CAGC-begins-headcount-of-teachers-344017>
- The Ghanaian Observer, April, 2017. Salaries will be paid after biometric registration. <http://www.peacefmonline.com/pages/local/news/201704/313189.php>
- Education Ghana. July 2017. Workers not on ESPV will have to forfeit their salaries. <http://educationghana.net/workers-not-on-espv-validation-to-forfeit-salaries-from-august-cagd/>

Financial Impact - Malawi

- LO/FTF Council's Analytical Unit, Malawi Labour Market Profile 2016, Copenhagen, Denmark, http://www.ulandssekretariatet.dk/sites/default/files/uploads/public/PDF/LMP/lmp_kenya_2016_final_version.pdf
- Gwede, W. (2017, June 22). Malawi: Civil Servants Demand 20% Pay Rise. Retrieved September 09, 2017, from <http://allafrica.com/stories/201706220212.html>
- Malawi losing billions on ghost teachers, nationwide strike looming. (2015, March 19). Retrieved September 09, 2017, from <http://www.nyasatimes.com/malawi-losing-billions-on-ghost-teachers-nationwide-strike-looming/>

Financial Impact : South Africa

- News24. (2016). Dept of Education to freeze salaries of 'ghost' teachers. [online] Available at: <http://www.news24.com/SouthAfrica/News/dept-of-education-to-freeze-salaries-of-ghost-teachers-20160214> [Accessed 29 Aug. 2017].+
- Correspondent, O. (2015). Zim teachers among lowest paid in the region | The Financial Gazette. [online] Financialgazette.co.zw. Available at: <http://www.financialgazette.co.zw/zim-teachers-among-lowest-paid-in-the-region/> [Accessed 29 Aug. 2017].
- Education Statistics in South Africa 2013. (2013). 1st ed. [ebook] Pretoria: Department of Basic Education. Available at: <https://www.education.gov.za/Portals/0/Documents/Publications/Education%20Statistic%202013.pdf> [Accessed 29 Aug. 2017].
- Teachers in South Africa. (2015). 1st ed. [ebook] Johannesburg: The Centre for Development and Enterprise. Available at: <http://www.cde.org.za/wp-content/uploads/2015/03/Final-Revised-ES-TeacherSupplyandDemand2025.pdf> [Accessed 29 Aug. 2017].

Social Impact and government Attitudes - Malawi

- Reducing Teacher Absenteeism and Increasing Transparency in the Delivery of Educational Materials. (1970, January 01). Retrieved September 09, 2017, from <http://wbi.worldbank.org/sa/project/reducing-teacher-absenteeism-and-increasing-transparency-delivery-educational-materials>

Quote Liberia

- Reporter, F. (2017). *FrontPageAfrica Newspaper - Ministry of Education to Test 1,500 Teachers in Marigibi County*. Frontpageafricaonline.com. Retrieved 5 September 2017, from <http://www.frontpageafricaonline.com/index.php/county-news/2541-ministry-of-education-to-test-1-500-teachers-in-marigibi-county>

Current Situation (Liberia)

- Reporter, F. (2017). *FrontPageAfrica Newspaper - Ministry of Education to Test 1,500 Teachers in Marigibi County*. Frontpageafricaonline.com. Retrieved 5 September 2017, from <http://www.frontpageafricaonline.com/index.php/county-news/2541-ministry-of-education-to-test-1-500-teachers-in-marigibi-county>

Response of the government (Liberia)

- Liberia, T. (2017). *1,900 Ghost Teachers Booked On MOE's Payroll | The Frontier Liberia News*. Thefrontierliberia.com. Retrieved 5 September 2017, from <http://www.thefrontierliberia.com/?p=1282>
- *Payroll cleaning to boost education in Liberia: Teacher Vetting Reform Project | Big Win Philanthropy*. (2017). Big Win Philanthropy. Retrieved 8 September 2017, from <https://www.bigwin.org/work/payroll-cleaning-to-boost-education-in-liberia-teacher-vetting-reform-project/>
- Liberia, T. (2017). *1,900 Ghost Teachers Booked On MOE's Payroll | The Frontier Liberia News*. Thefrontierliberia.com. Retrieved 5 September 2017, from <http://www.thefrontierliberia.com/?p=1282>

Organizations active in the country (Liberia)

- Partnership Schools for Liberia. (2017). *Bridge Partnership Schools for Liberia*. Retrieved 5 September 2017, from <http://www.bridgepartnershipschools.com/partnership-schools-for-liberia/>
- Rosenberg, T. (2017). *Opinion | Liberia, Desperate to Educate, Turns to Charter Schools*. Nytimes.com. Retrieved 5 September 2017, from <https://www.nytimes.com/2016/06/14/opinion/liberia-desperate-to-educate-turns-to-charter-schools.html?mcubz=1>
- Kristof, N. (2017). *Opinion | A Solution When a Nation's Schools Fail*. Nytimes.com. Retrieved 5 September 2017, from <https://www.nytimes.com/2017/07/15/opinion/sunday/bridge-schools-liberia.html?mcubz=1>

Quote Uganda

- *Ghost teachers earning Shs7m every month*. (2017). Daily Monitor. Retrieved 5 September 2017, from <http://www.monitor.co.ug/News/National/Ghost-teachers-earn-Shs7m-every-month/688334-2443530-f7cngdz/index.html>

Current situation (Uganda)

- Matovu, G. (2017). *UNATU: 30,000 Teachers Deleted From Govt Payroll*. Uganda Radio Network. Retrieved 5 September 2017, from <https://ugandaradiornetwork.com/story/unatu-30000-teachers-deleted-from-govt-payroll>
- App, D. (2017). *Parliament approves Shs26 trillion Budget*. Mobile.monitor.co.ug. Retrieved 5 September 2017, from <http://mobile.monitor.co.ug/News/Parliament-approves-Shs26-trillion-Budget/2466686-3189188-format-xhtml-12qcfde/index.html>
- Adeanet (2017). Retrieved 5 September 2017, from http://www.adeanet.org/adeapmp/sites/default/files/activities/policy_brief_reducing_teacher_absenteeism.pdf

Response of the government (Uganda)

- *School head arrested over ghost teacher*. (2017). Daily Monitor. Retrieved 5 September 2017, from <http://www.monitor.co.ug/News/National/School-head-arrested-over-ghost-teacher/688334-3393424-format-xhtml-wpgtt0/index.html>
- *District inspector, school head arrested over ghost teachers*. (2017). Daily Monitor. Retrieved 5 September 2017, from <http://www.monitor.co.ug/News/National/District-inspector-school-head-arrested-ghost-teachers/688334-3865592-s9m5tf/index.html>
- All Africa (2017). Retrieved 5 September 2017, from <http://allafrika.com/stories/201405300306.html>

Organizations active in the country (Uganda)

- *Who we are | Build Africa*. (2017). Build Africa. Retrieved 5 September 2017, from <http://www.build-africa.org/who-we-are>

Quote South Africa

- *SA teachers set absentee record*. (2017). News24. Retrieved 5 September 2017, from <http://www.news24.com/SouthAfrica/News/SA-teachers-set-absentee-record-20130226>

Current Situation (South Africa)

- *Education Dept shoots down ghost pupils claim*. (2017). News24. Retrieved 5 September 2017, from <http://www.news24.com/SouthAfrica/News/education-dept-shoots-down-ghost-pupils-claim-20160328>

Response of the government

- MLAMBO, S. (2017). KZN's 200 000 ghost pupils | IOL News. *iol.co.za*. Retrieved 8 September 2017, from <https://www.iol.co.za/news/south-africa/kwazulu-natal/kzns-200-000-ghost-pupils-1763494>
- Motshekga moots biometric system for teachers | SA News. (2017). *Sanews.gov.za*. Retrieved 8 September 2017, from <http://www.sanews.gov.za/south-africa/motshekga-moots-biometric-system-teachers>

Organizations active in the country (South Africa)

- ETICO - Fighting Corruption in Education. (2017). UNESCO. Retrieved 8 September 2017, from <http://en.unesco.org/news/etico-fighting-corruption-education>

Key Experts

- Jacques Hallak. (2017). *International Bureau of Education*. Retrieved 5 September 2017, from <http://www.ibe.unesco.org/en/ibe-staff/jacques-hallak38>
- Muriel Poisson. (2017). U4. Retrieved 5 September 2017, from <http://www.u4.no/info/about-u4/course-experts/muriel-poisson/39>
- Michael Kremer. (2017). *Scholar.harvard.edu*. Retrieved 5 September 2017, from <https://scholar.harvard.edu/kremer/home40>
- Nazmul Chaudhury - IGC. (2017). IGC. Retrieved 5 September 2017, from <https://www.theigc.org/person/nazmul-chaudhury/41>
- Jeffrey Hammer. (2017). *Woodrow Wilson School of Public and International Affairs*. Retrieved 5 September 2017, from <http://wws.princeton.edu/faculty-research/faculty/jhammer42>
- Halsey Rogers. (2017). *World Bank Blogs*. Retrieved 8 September 2017, from <http://blogs.worldbank.org/team/halsey-rogers43>
- Mr. Muniru Kawa | Public Sector Reform Unit. (2017). *Psru.gov.sl*. Retrieved 5 September 2017, from <http://psru.gov.sl/content/mr-muniru-kawa>