RISE

RESEARCH ON IMPROVING
SYSTEMS OF EDUCATION

RISE Tanzania Research Programme Overview
January 2017

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UNIVERSITY
of VIRGINIA

FRANK BATTEN SCHOOL
of **LEADERSHIP** *and* **PUBLIC POLICY**

Georgetown University Initiative

guide

on Innovation, Development and Evaluation

RISE Tanzania Research Programme

I. Introduction

The Research on Improving Systems of Education (RISE) Program is a multi-country research project, co-funded by the United Kingdom's Department for International Development (DFID) and Australia's Department for Foreign Affairs and Trade (DFAT). Through rigorous research, RISE seeks to answer the question, "What works to improve education systems to deliver learning at scale in developing countries?"

The RISE Program, which focuses on basic education, aims to expand the evidence base around education reform and drive systems-level change by:

1) Commissioning high-quality research on education systems and systems-level reforms that respond to locally-identified challenges
2) Engaging with researchers and practitioners to deliver an analytical framework to understand how education systems function
3) Ensuring that researchers, teachers, practitioners and policymakers have the latest up-to-date information on the impact of education programs on learning outcomes

Motivation for Research

RISE is motivated by the recognition that while many countries have been successful at increasing primary and secondary school enrollments, learning levels remain strikingly low. While stand-alone programs and interventions such as school feeding and remedial education can have positive impacts on learning outcomes, questions still exist around how to generate large positive impacts on learning at scale. Experts believe the solution lies in finding ways to re-orient education systems to be more learning-focused, with stronger accountability for learning outcomes among administrators and teachers. The RISE program aims to identify the characteristics of an effective education system that delivers learning for all.

Tanzania is one of four inaugural countries competitively selected for the RISE Program that also include India, Vietnam, and Pakistan. A total of six countries will be studied over the course of the program.

Introduction to the Country Research Team

The RISE Program's work in Tanzania is led by a team of researchers, called the RISE Tanzania Country Research Team (CRT). The CRT is led by Professor James Habyarimana of Georgetown University, Dr. Deon Filmer, Lead Economist at the World Bank and Professor Kitila Mkumbo at the University of Dar es Salaam. The Country Research Team brings together

expertise from the fields of development economics, psychology, education, political science, and public health. The full team is listed in Table 1 below.

Table 1: RISE Tanzania Country Research Team

Name	Institution	Area of Specialization
1. James Habyarimana	Georgetown University	Economics
2. Andrew Zeitlin	Georgetown University	Economics
3. Jacobus Cilliers	Georgetown University	Economics
4. Ken Opalo	Georgetown University	Political Science
5. Kitila Mkumbo	University of Dar es Salaam	Psychology
6. Aneth Komba	University of Dar es Salaam	Management of Education
7. Richard Shukia	University of Dar es Salaam	Early Childhood Education
8. Deon Filmer	World Bank	Economics
9. Shwetlena Sabarwal	World Bank	Economics
10. Isaac Mbiti	University of Virginia	Economics
11. Youdi Schipper	Amsterdam Inst. Of Int. Development	Economics
12. Varja Lipovsek	Twaweza	Public health

II. Tanzania Country Context

Tanzania was selected by RISE due to the long tradition of having a firm philosophical foundation on education, as well as the remarkable steps that the country has taken in transforming the education system. Particular reference is made to a recent large nationwide programme on education called the Big Results Now (BRN) initiative, which covers, apart from education, five other priority areas: water, energy and natural gas, agriculture, transport, and resource mobilization. The BRN initiative was designed as a strategy to reorient systems of service delivery to achieve specific and time bound results so as to fast track the realization of the Tanzania Vision 2025.

Tanzania embarked on a series of ambitious reforms to improve access and education quality at the beginning of this century. The Primary Education Development Program (PEDP) and subsequently the Secondary Education Development Program (SEDP) achieved a remarkable expansion in access to basic education. Despite being on track to achieve the Millennium Development Goal (MDG) of Universal Primary Education by 2015, Tanzania saw a dramatic decline in learning outcomes at both primary and secondary school levels. Pass rates for both the Primary School Leaving Examination (PSLE) and Certificate of Secondary Education

Examination (CSEE) declined precipitously following massive increases in enrollment. Independent assessments of early learning revealed extremely low competencies in reading, writing and numeracy (3Rs). Underlying these outcomes, the World Bank-led Service Delivery Indicators survey in 2011 found that up to a quarter of primary school teachers were absent on any given day and that fewer than half had command of the very 3Rs skills that lower primary students need in order to acquire basic reading and numeracy competencies.

Faced with a learning crisis, the Government of Tanzania implemented a series of system-wide education initiatives to reorient existing programs and focus policy and implementation on raising learning outcomes. Because of their system-wide scope, the shift from an emphasis on inputs to incentivizing learning, and the potential for impact, this set of initiatives, which began under the Big Results Now in Education (BRNED), was deemed to be uniquely suited to be studied under the RISE program. The RISE CRT's objective is to develop an analytical framework for systems diagnostics to frame the research - and identify opportunities for and impediments to reforms that promote learning at scale. In addition, the RISE Tanzania CRT is fully committed to engaging with and sharing findings of this research with policymakers to inform their strategies and programs.

III. RISE CRT's Proposed Research & Engagement Approach in Tanzania

The framework for education systems research that we have adopted (Pritchett 2015) and endeavor to refine with respect to the Tanzania context is drawn from the World Development Report on Making Services Work for the Poor (World Bank 2004). A system is defined by a set of actors:

> – *Principals* including voters, parents, politicians, ministries and head teachers;
> – *Agents* including teachers and administrators who supervise the delivery of education services.

All actors are connected by accountability relationships that structure their behavior within the system. Each accountability relationship contains four key elements:

I. *Delegation* – What are the goals and objectives of the system that principals communicate to agents?

II. *Resources* – How adequate is the financing and provisioning of actors in the system to achieve those goals?

III. *Information* – What information do principals collect about agents' actions to track progress?

IV. *Motivation* – How do principals motivate agents to exert the requisite effort to achieve system goals?

As a starting point for our research, we are designing and implementing a System Diagnostic, documenting in detail the nature of the relationships of support and accountability between key actors (e.g. parents, teachers, head-teachers, administrators) in the education system.

The System Diagnostic informs a tentative research agenda that is divided into two phases: a first phase that examines recent reforms and a second phase that studies emerging or ongoing reforms. In Phase I, the CRT will apply the systems framework outlined above to examine recent education reforms in Tanzania with respect to promoting learning outcomes. To illustrate how we intend to apply the framework, we examine the impact, opportunities and limitations of the recent BRNed initiatives to support learning outcomes. The BRNed initiatives, in theory, align all elements of the accountability relationship to support raising learning outcomes:

(1) *Delegation* – a very public and transparent focus on national exam pass rates serves as a clarification or re-ordering of systems priorities towards **learning outcomes**.
(2) *Resources* – commitments to provide timely funding to schools and relevant training in pedagogical and management practice and focus the curriculum on the mastery of basic skills
(3) *Information* – a commitment to publish school rankings and to use the information to address emerging problems
(4) *Motivation* – a commitment to address **teacher morale and motivation**, such as the redress of salary arrears and the use of the ranking information to recognize high performers and incentivize gains.

We examine the extent to which these initiatives succeeded in practice (and how) as well as how key elements **help to build and sustain a coalition** to support effective and durable reforms.

In studying the impacts of these initiatives on learning outcomes in Tanzania's primary and secondary schools, we propose to employ multi- and mixed method research approaches -- combining qualitative and quantitative strategies to execute retrospective evaluations, case studies, and prospective experimental designs.

This approach leverages the full range of disciplinary expertise in the CRT, which represents a strong combination of the best research capacity in Tanzania together with a team of international researchers that have been engaged in generating evidence for education policy in Tanzania and the East African region. The research will use the full range of methodological approaches including econometric analyses of structured survey data, case studies, and process tracing to generate explanations for why specific education reform initiatives succeeded or failed.

The tables below outline a set of research questions that the CRT proposes to answer. The first table proposes *retrospective questions* – that is, those that can be answered by examining the implementation and results of the reforms to date. The second table is a tentative outline of

prospective questions – that is, questions which will be followed prospectively during the RISE project years. The second table is, by design, much shorter for now: we want to ensure that the research team, in collaboration with core country stakeholders, learn as much as possible from the retrospective questions, and that research insights inform the design of emerging programs and policies.

Table 2: Tentative Retrospective Research Questions

Key Area	Research Focus	Key Policy Questions
Documenting the Dynamics of Learning Outcomes with Respect to Education Reforms	A Comparative Review of Learning Outcomes in Tanzania	What are some key trends, patterns, and correlates of learning outcomes in Tanzania and in international perspective? What are the key components of other recent reforms in Tanzania and what was their impact on learning outcomes?
	Increasing Accountability and Incentives for Learning	How did the school rankings and school incentive schemes components impact school-level performance and what are the mechanisms through which these initiatives affected performance?
	Do Improved Pass Rates Indicate Improved Learning Outcomes? Analysis of Secondary Education in Tanzania	How do stakeholders respond to the incentives created by a reward system based on this metric? Does a high-stakes focus on achieving higher pass rates at the primary and secondary level lead to restricting exam eligibility to only high performers?
How have curriculum goals supported learning outcomes?	Review of Curriculum Reform in Tanzania	What is the nature and determinants of education curriculum reform in Tanzania? What are the learning-specific implications of the basic education curriculum?
	Designing Training Policy for Learning Outcomes	To what extent is Tanzania's new Education and Training Policy geared towards the promotion of learning outcomes?
Is teacher competence, morale and motivation adequate and how can it be	Teacher Supply and Allocation	How did teacher recruitment, allocation, and turnover change in response to recent reforms?
	Are teachers well supported to deliver high quality instruction?	How does the recruitment, deployment and retention of Quality Assurance officers impact continued improvement of instructional quality?

Key Area	Research Focus	Key Policy Questions
improved?	Review of Education Policy in Tanzania	How well aligned are primary-level teacher policies and reforms with scientific evidence on what works to improve learning outcomes?
	Building Support for Teacher Incentive Programs: Evidence from the KiuFunza Evaluation	Which conditions are necessary to generate broad support for teacher incentives programs, an often proposed policy aimed at improving learning outcomes?
	The role of parents and school management committees	How has the reform effort impacted parental involvement in schools? What is the appropriate role of parents and SMCs in ensuring that teachers are sufficiently motivated?
Reform Agenda Help to Build and Sustain a Coalition	Trends in Education Service Delivery in Tanzania Primary Schools	What is the state of education service delivery in Tanzania – and how did service delivery change over the last 5-10 years?
	The Political Economy of Systemic Reform in Tanzania	What are the stakeholder interests that have shaped the design of the BRNED reform – and which features either increased or decreased support for the reform among key constituencies?
	What Roles do Private Schools Play in Improving Education Service Delivery in Tanzania?	Is there potential for increased choice and competition within education markets - through the entry of low-cost private schools - to improve quality of education service delivery in Tanzania?
Improvement of School Administration	What capacities and resources do head teachers have to improve school performance, and what steps can be taken to improve their capacities?	What does the education reform set out and expect, vis-à-vis the real options head teachers in Tanzania have to manage their schools? Using qualitative research, we shall investigate and describe innovative school management practices that appear to be linked to improved learning outcomes.

Table 3: Tentative Prospective Research Questions

Proposed Output	Key Policy Questions
Strengthening School Incentives to Support Learning Outcomes	Which interventions or initiatives can enhance the impact of the GoT's school rankings and incentives schemes?
Improving the Design of GoTs focus on Improving the Instruction of Basic Skills	What design changes, either on the information or training side, could we implement in order to enhance the impact of programs?

A key advantage of Tanzania is a rich and growing body of data covering the education sector. We propose to leverage these data to bolster the systems diagnostics as well as inform the tentative research agenda outlined above. In addition to existing data sets, we propose to field surveys of regional, district and school administrators, teachers, students and parents aimed at: (i) measuring inputs and school attributes; (ii) measuring impacts on learning; and (iii) tracking intermediate outcomes based on our stated theories of change. The CRT plans to draw on future high-quality, high-frequency assessment data from NECTA, UWEZO, the World Bank's Service Delivery Initiative surveys in 2016 and 2018 with the potential to collaborate on survey design, and Twaweza's mobile phone-based polling platform Sauti Za Wananchi that provides ready access to citizen's perceptions and awareness of the reforms.

IV. RISE Engagement: Progress to Date and Next Steps

An integral part of RISE is engagement with key stakeholders to ensure that the questions associated with and the results generated from our research are policy relevant and can contribute to further improvements in education quality and delivery.

In 2016 we have had three major engagement activities related to our research programme. Firstly, in June 2016, we co-organised an education conference involving stakeholders in education drawn from both Government and Non-Government Organizations (NGOs). The conference was hosted by the Tanzania Commission for Science and Technology (COSTECH). During this conference, we made a presentation on the RISE Tanzania Programme, in which we highlighted the aims of the programme in Tanzania and outlined our proposed approach.

Secondly, in November 2016, we participated at the Joint Education Sector Review (JESR) meeting organized by the Ministry of Education, Science and Technology. This meeting was attended by key senior government officials and development partners, including deputy permanent secretaries and directors from the two ministries responsible for education. We had a ten-minute presentation during which we introduced our research agenda. The reaction from a

cross-section of the audience was positive with a clear expression that the research program we were embarking was of great importance in informing the country's education agenda.

Finally, on 15th December 2016, we organized a strategic meeting with key stakeholders from Government agencies to obtain critical feedback on our proposed research agenda. Invited participants included top officials from the two ministries responsible for education, Ministry of Education Science and Technology and President's Office - Regional Administration and Local Government, Tanzania Institute of Education (TIE), National Examinations Council of Tanzania (NECTA), and the Tanzania Commission for Science and Technology (COSTECH). We are planning a wider stakeholder consultation in the first quarter of 2017, to bring on board and gather feedback from a wider range of education actors and advocates, including development partners and civil society organizations.

Going forward, we envision two important steps in the engagement:

(1) An annual review of progress and the dissemination of findings to date, with the relevant parties from the Government of Tanzania and other key education stakeholders
(2) A planning and design exercise with key Tanzania education stakeholders to generate a policy relevant design of proposed prospective studies (starting at the end of Year 2, when we expect to have sufficient relevant findings from the retrospective research agenda)

V. Conclusion
Tanzania has undertaken and continues to undertake a series of broad system-level reforms both to increase access to education as well as address learning outcomes. In collaboration with key education stakeholders in Tanzania, the CRT hopes to generate a body of evidence that illuminates the promise of and impediments to successful reforms. In particular, the research program's main goal is to shed light on ways in which reform initiatives can be leveraged to address remaining barriers to progress in learning. This will add to both Tanzanian and global knowledge on how to improve learning outcomes at scale. The RISE Tanzania CRT is looking forward to a close and productive collaboration with Tanzanian policymakers and stewards of the Tanzanian education sector, so that the findings can be of utmost relevance to future reforms and their implementation.