

Research Methodology for the Maintains Education Sector Study in Uganda

Research Plan

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About Maintains

This five-year (2018–2023) operational research programme is building a strong evidence base on how health, education, nutrition, and social protection systems can respond more quickly, reliably, and effectively to changing needs during and after shocks, whilst also maintaining existing services. Maintains is working in six focal countries—Bangladesh, Ethiopia, Kenya, Pakistan, Sierra Leone, and Uganda—undertaking research to build evidence and providing technical assistance to support practical implementation. Lessons from this work will be used to inform policy and practice at both national and global levels.

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List of abbreviations

CRRF Comprehensive Refugee Response Framework

DFID Department for International Development

ECW Education Cannot Wait

EDP Education Development Partner Working Group

EMIS Education Management Information System

ERP Uganda's Education Response Plan for Refugees and Host Communities

GESI Gender equity and social inclusion

IRB Institutional review board

M&E Monitoring and evaluation

MoES Ministry of Education and Sports

MRC Medical Research Council

NGO Non-governmental organisation

OPM Oxford Policy Management

PI Principal Investigator

ToC Theory of change

UNHCR United Nations High Commissioner for Refugees

UNICEF United Nations Children's Fund

WASH Water, sanitation, and hygiene

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1 Maintains programme overview

Maintains is a four-year research programme that aims to develop an improved evidence base on how education, health, social protection, nutrition, and water, sanitation, and hygiene (WASH) services can adapt and expand in response to shocks, such as floods, droughts, cyclones, and disease outbreaks. The project covers six countries (Ethiopia, Kenya, Uganda, Sierra Leone, Pakistan, and Bangladesh) and has three strategic components:

- **Component 1**: Research what works to deliver essential services that effectively respond to, and flex in response to, natural disasters in other words, research on shock-responsive essential service delivery.
- **Component 2:** Integrating learning from Component 1 into Department for International Development (DFID) focal countries through technical assistance.
- **Component 3:** Promoting the uptake of the research from Component 1 across DFID and the international community to ensure that the findings lead to maximum impact.

The programme runs over two phases:

Phase I (September 2018 – March 2019): A design phase, where the approach that had been set out in the bid was refined and tailored to account for changes in the focus country contexts.

Phase II (March 2019 – June 2023): A phase that is focused on the implementation of the agreed design. While Maintains as a whole will run until June 2023, the country research studies are due to be completed by December 2022.

According to the business case, 'The ultimate outcome of Maintains will be that countries are more able to effectively manage their risk, with essential services able to respond more quickly, more reliably and at lower cost, during and after a shock.' Maintains aims to find out why and how essential services may fail in times of shock or disaster, and how they could be prevented from doing so. In answering the following five research questions, evidence gathered from Maintains can be used to inform current programming and future programme design:

- How can programmes and systems be designed so that they are not only resilient to disasters but can also expand and adapt their provision of essential services in response to shocks?
- How should decisions be made about targeting shock-responsive essential services?
- What should be in place before a shock strikes so that a scaled response can be implemented efficiently?
- How should risk financing be designed to support a timely, reliable, and cost-effective response?
- How feasible is a shock-responsive approach in different contexts?

Maintains is funded by DFID and managed by Oxford Policy Management (OPM). This report sets out the methodology for a study under Component 1 to be conducted in Uganda, focusing on the education sector.

2 Overview of Maintains Uganda education research

During the kick-off country visit for Maintains in November 2018 the refugee influx was highlighted as a key priority for DFID, the Government of Uganda, and other donors and development partners. As a result, it was decided that the Maintains study in Uganda will focus on Uganda's Education Response Plan for Refugees and Host Communities (ERP), and how the existence of the ERP has impacted education service delivery for both refugee and host communities through new coordinating mechanisms, financing, and information flows.¹

2.1 Introduction to the ERP

2.1.1 Background context

Since violence first broke out in South Sudan in December 2013 there has been continued violence and a mass influx of refugees into Uganda. Uganda is the largest refugee-hosting country in Africa, with 1.19 million refugees in December 2018, most of whom have fled from the crises in Burundi, the Democratic Republic of the Congo, and South Sudan. Refugees are located in 12 districts. Roughly 66% of refugees are from South Sudan, 26% from the Democratic Republic of Congo, and 3% from Burundi (United Nations High Commissioner for Refugees (UNHCR), 2019).² The country has a long history of welcoming refugees within its borders, and is known for its pro-refugee policies, allowing refugees to settle among the local population and to share land and access basic services.

In northern Uganda, refugees make up roughly half of the population in some districts, placing significant stress on the delivery of basic services to both the Ugandan and refugee populations. In some districts – especially in the West Nile sub-region – the number of refugees even exceeds the host community population. This has contributed to increased tensions, many of them around land, resources, and livelihood opportunities for the youth. 62% of the refugee population are children under 18 years old, which includes unaccompanied and separated children and other vulnerable groups (UNHCR, 2019). The children in the host communities are equally affected by this influx.

2.1.2 The ERP

The Government of Uganda's support to refugees is premised on a number of international, regional, and national commitments that have led to the formulation of several policies, plans, and frameworks. The Comprehensive Refugee Response Framework (CRRF) for Uganda was launched at a high-level meeting in Kampala in March 2017, with a view to harnessing a whole-of-society approach in responding to, and finding solutions to, the refugee crisis in Uganda, building on existing initiatives and policies. The ultimate goal of the

¹ There is a separate Maintains study in Uganda, focusing on health and nutrition.

² The final 5% are refugees from Somalia, Rwanda, Eritrea, Sudan, and Ethiopia who have lived in protracted exile in Uganda for the past three decades.

CRRF is to enhance the capacities, funds, and skills of the different levels of government, especially in refugee-hosting districts, to address these challenges.

In 2018 the Ministry of Education and Sports (MoES) developed and launched the ERP. It was developed by a joint consortium managed by the MoES, with funding from Education Cannot Wait (ECW) and support from the Education Development Partner Working Group (EDP). The purpose of the ERP is to establish a realistic and implementable plan to ensure improved learning outcomes for increasing numbers of refugee and host community children and youth across Uganda. The plan aims to consolidate the efforts of all stakeholders engaged in refugee education response, and to shift the paradigm from immediate humanitarian response to integrated education service delivery. The ERP is attempting to reach 567,500 learners per year with improved education services, over 3.5 years (January 2018 to June 2021). The costs of the ERP have been estimated at US\$ 389 million. The ERP is attempting to achieve better learning outcomes through three groups of activities:

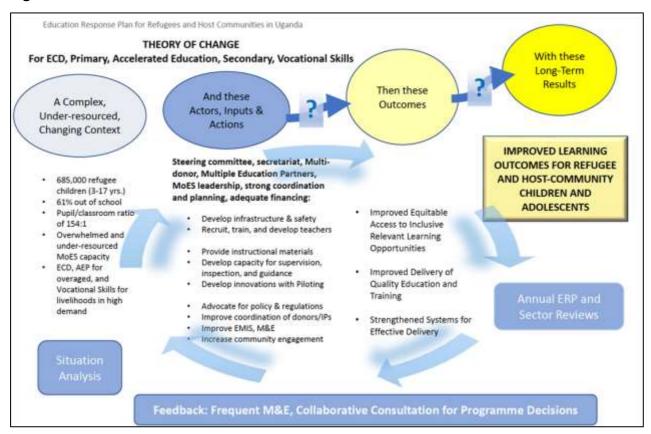
- improved equitable access to inclusive and relevant learning opportunities;
- improved delivery of quality education services and training; and
- strengthened systems for effective delivery.

The ERP Steering Committee and Secretariat is responsible for managing the ERP's funds and providing overall leadership for the ERP's implementation. It is envisaged that this Steering Committee will develop coordination mechanisms, building on current existing coordination structures, including under the Interagency Group, the Education in Emergencies Sector Working Group, and the structures under the Education Sector Consultative Committee – both at national and settlement/district levels. This will link to the CRRF Steering Committee.

The ERP began Year 1 of its implementation in July 2018, and this year concluded in June 2019. Year 2 of the ERP covers the period from July 2019 to June 2020.

Figure 1 below summarises the main elements, and the logic and processes of the theory of change (ToC) underlying the ERP.

Figure 1: ERP ToC



Source: ERP

The arrows pointing from the actors, inputs, and actions to the outcomes, and from the outcomes to the results, are marked with question marks to emphasise that these are essentially hypotheses, and subject to confirmation and change. The feedback loops within the ToC include frequent monitoring and evaluation (M&E) and collaborative consultation (though M&E and coordination are themselves activities within the ERP, to allow a feedback loop), and feed into stakeholder consultations which result in programme adaptations to modify, deepen, and strengthen the ToC. This cycle is represented by the light-blue arrows pointing from the situational analysis to the inputs and actions, and to the outputs and the results.

The ERP focuses on the provision of education to refugees and host communities in the 12 districts of Uganda that host refugees, which are shown in Figure 2 below.

Koboko Lamwo

Adjumani

Arua

Kiryandongo

Hoima

Kyegegwa

Kampala

Kamwenge

Figure 2: Map of refugee-hosting districts in Uganda

Source: ERP

The number of refugee children in the populations of the 12 refugee-hosting districts is given in Table 1 below. Table 2 shows the population of host community children (in other words, all Ugandan nationals) in the 34 sub-counties hosting refugees (Kampala is not considered to have a host community as refugees are integrated throughout the district).

Table 1: Refugee population (age 3 to 17) in refugee-hosting districts

District	0-1111	Refugee population (age 3–17)		
District	Settlement	Male	Female	Total
Adjumani	Adjumani	63,204	60,143	123,347
Arua	Rhino	30,483	29,566	60,049
Arua	Imvepi	30,124	28,909	59,033
Hoima	Kyangwali	11,028	10,938	21,966
Isingiro	Nakivale	24,696	24,188	48,884
Isingiro	Oruchinga	1,830	1,748	3,578
Kampala	N/A urban	17,518	16,420	33,938
Kamwenge	Rwamwanja	16,083	16,382	32,465
Kiryandongo	Kiryandongo	17,381	16,219	33,600
Koboko	Lobule	1,333	1,281	2,614

Kyegegwa	Kyaka II	6,999	9,314	16,313
Lamwo	Palabek	3,730	3,347	7,077
Моуо	Palorinya	32,998	32,205	65,203
Yumbe	Bidi Bidi	88,796	85,255	174,051
Total		188,939	346,203	335,915

Source: Refugee Information Management System, October 2017, shared by ERP Secretariat

Table 2: Host community population (age 3 to 18) in refugee-hosting sub-counties

D		Host community population (age 3–18)		
District	Sub-county	Male	Female	Total
	Adjumani T/C	10,511	10,302	20,813
	Ofua	3,510	3,441	6,951
	Dzaipi	10,572	10,361	20,933
A -11:	Pachara	4,252	4,167	8,420
Adjumani	Ukusijoni	2,829	2,773	5,602
	Itirikwa	4,213	4,129	8,341
	Pakelle	12,064	11,824	23,889
	Total	47,952	46,996	94,948
	Rigbo	7,189	7,377	14,566
	Omugo	9,974	10,237	20,211
Arua	Uriama	5,740	5,891	11,630
	Udupi	9,503	9,753	19,256
	Total	32,406	33,258	65,663
Haima	Kyangwali	16,068	15,779	31,847
Hoima	Total	16,068	15,779	31,847
	Kikagate	11,480	11,811	23,291
	Ngarama	7,896	8,124	16,021
	Isingiro T/C	6,359	6,543	12,901
Isingiro	Rugaaga	7,500	7,717	15,217
	Rushasha	2,968	3,054	6,022
	Kashumba	5,030	5,175	10,205
	Total	41,233	42,424	83,657
	Katalyeba T/C	2,855	2,864	5,719
Kamwenge	Nkoma	5,318	5,336	10,655
	Total	8,173	8,201	16,374
	Mutunda	15,169	14,776	29,945
Kiryandongo	Bweyale T/C	7,484	7,290	14,774
	Total	22,653	22,065	44,719
Koboko	Lobule	8,308	8,129	16,437
NODUKU	Total	8,308	8,129	16,437
Kyogogwa	Mpara	8,667	8,598	17,266
Kyegegwa	Kyegegwa Rural	5,806	5,760	11,566

	Ruyonza	6,406	6,355	12,762
	Total	20,880	20,714	41,594
	Palabek-Gem	5,835	5,935	11,770
Lamwo	Palabek-Kal	3,431	3,490	6,921
	Total	9,266	9,424	18,690
Mayra	Ituri	3,189	3,080	6,269
Моуо	Total	3,189	3,080	6,269
	Romogi	11,772	13,234	25,006
	Kochi	10,783	12,123	22,906
Yumbe	Kululu	10,017	11,262	21,279
Tullibe	Odravu	11,875	13,351	25,226
	Ariwa	6,550	7,363	13,913
	Total	50,996	57,332	108,329
Total		261,125	267,402	528,527

Source: Uganda Bureau of Statistics (2017), shared by ERP Secretariat

2.1.3 Uganda's history of shocks

Uganda is exposed to a number of natural hazards and there are significant regional variations in terms of vulnerability and exposure to the different types of shocks. The major natural hazards that occur in Uganda include drought, flooding, landslides, and epidemics. Human-induced shocks, such as wildfires, ethnic conflicts, and war, have further worsened the impact of natural hazards on the environment and the population.

The northern region – which includes the West Nile districts that have more recently had refugee influxes – has a history of conflict and ethnic violence, cattle rustling, drought, and floods. In 2007 this region experienced the heaviest rain in 35 years, leading to floods from July to November, with hundreds of thousands of people affected, crops destroyed, and an increase in water-borne diseases.

The Rwenzori regions in the west of the country face landslides and floods, in addition to the refugee influx. There are increased land pressures in the highlands due to loss of fertile soil, and the reduced rainy season has hit yields of basic food crops like beans. The southwest region more generally is the fastest-warming region, with frequent and severe drought, affecting coffee and cattle farming. Malaria is at epidemic proportions in this region.

2.2 Scope of the research

The idea of the Maintains education research is to assess whether having a plan such as the ERP in place actually makes a difference as regards the ability of the Government of Uganda to continue to provide quality education services to refugees and host communities in the event of a man-made shock – in this case the influx of over a million refugees from South Sudan, the Democratic Republic of Congo, Burundi, and Rwanda. In addition, the research will examine how the different parts of the delivery system have responded to the ERP, how they cooperate, and how information and financial flows are managed. The research will look at service delivery and outcomes to assess whether the

ERP has acted as a platform that has leveraged or catalysed additional inputs or results that would not have happened otherwise. As such, Maintains does not expect to provide an exhaustive assessment of all the intended elements in the ERP ToC – rather, it will use a process lens to focus on mechanisms and responses arising from the ERP. Uganda's national frameworks for refugee response – in particular, the ERP – and the permissive attitude of the government and citizens, have received significant plaudits in Uganda and beyond for their generosity, but much less is known about whether this has actually led to better delivery and outcomes for refugees and host communities. The Maintains research will contribute to filling these gaps in research and global evidence.

Regarding geographical scope, the research will cover all the districts targeted in the ERP that currently accommodate refugees, although with less attention given to Kampala, which does not have any refugee settlements. Following consultations with DFID and other key stakeholders, the research will focus on two levels of the system: the national institutional and policy 'system', and the district systems in the 11 refugee-hosting districts as outlined in the ERP (see map in Figure 2).

The overarching research question asks:

Does the ERP improve the effectiveness of education service delivery, and thereby education outcomes, for refugees and host communities?

To answer this question we unpack it into sub-themes around coordination, financing, information, delivery, and outcomes. In particular, the research will focus on three specific areas of inputs into the ERP:

- setting up and effectively using coordination systems;
- leveraging and channelling adequate financing; and
- collecting and using relevant information in feedback loops.

We will not attempt to directly review and/or monitor the performance of all the activities and inputs intended under the ERP. Rather, we will look at **delivery** and **outcomes** (of activities and actors) only from the perspective of whether the existence of the ERP, and the associated coordination, financing, and information mechanisms, have led to or catalysed additional results that otherwise would not have happened.

This is explained in the stylised version of the ERP ToC in Figure 3 below, onto which we have mapped coordination, financing, and information as necessary inputs (the blue solid line). Delivery and outcomes (blue and orange, respectively) are connected with dashed lines to show that they will be considered to the extent that coordination, financing, and information mechanisms under the ERP affect them, but we will not include within the scope of the research all the rest of the inputs that potentially can affect delivery. The outcomes that will be investigated will be those identified by the ERP (and its logframe) as achievable within the 3.5-year implementation period of the plan, not long-term results. Contextual factors, in terms of the institutional, policy, and external influences, are also relevant at each stage of the cycle, given the nature of Uganda's refugee situation. In this case, institutional settings refers to the combination of actors (organisations and individuals) and regulations in place. Furthermore, these aspects of context will differ in each of the different districts, along

with environmental and topographic variation. Feedback loops remain in place, as in the ERP ToC.

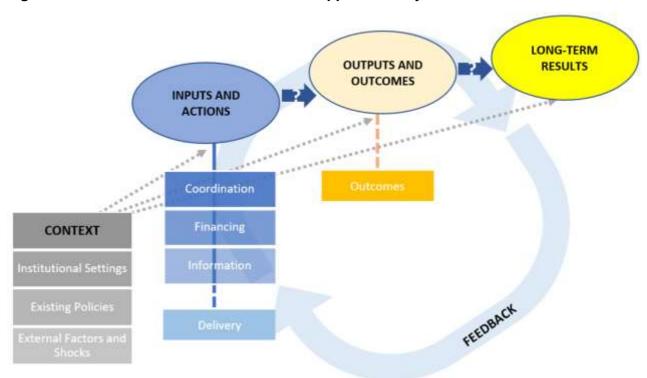


Figure 3: Maintains research focus areas mapped onto stylised ERP ToC

2.3 Relevance of the research

The proposed research programme is aligned with both the global Maintains research areas and current public policy debates in Uganda. The research approach was presented to the ERP Steering Committee on 31 May 2019, and again on 3 February 2020, and was subsequently refined. In addition, the proposed research agenda aligns with DFID's new global education policy (2018), which focuses on three priorities: investing in good teaching, backing systems reform that delivers results in the classroom, and setting up targeted support for the most marginalised. In Uganda, it elaborates research around key investments DFID has made in the education sector, including under the Strengthening Education Systems for Improved Learning programme and via its support to the Government of Uganda to formulate and execute the ERP.

While outlining the research scope and direction for Maintains Uganda in this document, we are conscious that some degree of flexibility will be required in the proposed agenda as it evolves over the period covered by the Maintains programme. This is for several reasons:

Firstly, it is now very probable that refugees will remain in Uganda over the entire research period, and that the number of refugees will continue to increase in different districts at various times as influx phases change due to crises in other countries. The research programme originally proposed focusing only on West Nile, given the high proportion of refugees there and synergies with current DFID programming. However, there are large and growing numbers of refugees in southwest Uganda from the

Democratic Republic of Congo, Burundi, and Rwanda. In February 2020 it was therefore agreed with the ERP Steering Committee to widen the scope to all regions, although sampling will be necessary. This demonstrates how the unpredictable and changing situation may require revision and refocusing of the research.

- Secondly, various parts of the ERP pertaining to our key questions will be affected by other education policy developments in Uganda over the research phase. For example:
 - o a new Education and Sports Sector Strategic Plan is currently in development, with implications for national coordination;
 - the national Education Management Information System (EMIS) and district EMISs are currently being re-designed, with significant implications for information management around refugees;
 - o both the amount and modality of financing committed to the refugee response remain unclear as at the start of the research in 2020; and
 - o major development partner projects that would contribute significantly to the ERP are still in development especially the World Bank's US\$ 75 million component of the Secondary Education Strengthening Project that is focused on refugees and host communities. DFID's £210 million Building Resilience and an Effective Emergency Refugee Response project is also projected to include some allocation to education.
- Thirdly, the research intends to be operational and thus to reflect the needs of the ERP Steering Committee in regard to informing changes and improvements in the implementation of the ERP. Feedback from the Steering Committee will feed into the design of each subsequent phase of the research. On the basis of this consultation for each phase, the exact angle of the research, and therefore methods, will be finalised. In essence, the Maintains research will provide a feedback loop for the Steering Committee by giving information on implementation, which in turn will inform priorities for the Steering Committee and for the next phase of research. This is aligned with the principles of the Maintains PRActiCle³ approach and its focus on adaptive programming.

While looking at the long-term results of the ERP will not be feasible within the timeframe of this research, we are interested in how the ERP contributes to long-term planning and policy change, and thus we will ensure we continue to be linked with, and relevant to, the discussions about adapting the refugee response.

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³ The Policy Research into Action Cycle (PRActiCle).

3 Research questions

We have broken down the primary and secondary⁴ research questions over the research period based on our estimation of when different parts of the ERP will be fully operational, and when its impact on the effectiveness and ability of the education system to respond can be reviewed. Given that the research agenda is designed to understand and review how the successful implementation of the ERP – in terms of coordination, financing, and information mechanisms – improves delivery and outcomes for refugees, we will repeat specific research questions each year (applying them to that year's ERP execution), as well as including secondary research questions that are relevant within that intervention period.

We expect to support the Steering Committee and Secretariat in the design of ERP2, which will happen in 2021. Part of the final year of the Maintains Uganda country study (June – December 2022) falls outside the current ERP's timeline, and we expect to use this time to focus primarily on evidence uptake and/or on exploring the roll-out of ERP2. This will ensure that the research is operationally relevant to the policies and programmes of MoES and DFID, as well as other stakeholders. It will also ensure that the evidence generated from the research is accessible and actionable, responding to demand and supply issues that emerge while implementing the ERP.

3.1 Primary research question

As indicated in Section 2, the primary research question for Maintains is as follows:

Does the ERP improve the effectiveness of education service delivery, and thereby education outcomes, for refugees and host communities?

This question will be explored with a particular focus on gender equity and social inclusion (GESI) as discussed in Section 4.2.

3.2 Secondary research questions

The primary research question is further unpacked into secondary research questions that cover five main areas critical to the success of the ERP: coordination, financing, information, delivery, and educational outcomes. The themes defined for these secondary questions were identified in consultation with government officials, DFID Uganda, and key development partners during the design of the country research plan. They were highlighted as critical aspects of the ERP's design and delivery that need to be explored in order to assess the plan's structure, implementation, management, delivery mechanisms, and associated outcomes for its intended beneficiaries within the education system.

These secondary research questions are *intended* to provide a framework for analysing the implementation of the ERP, which, if done successfully, should lead to improved education service delivery and outcomes for refugees and host communities. Given that Maintains intends to study the real-time execution of an existing, sanctioned education plan

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⁴ Note that primary and secondary refers here to the level of the research question, not the school level (e.g. primary school or secondary school).

at national and district levels, understanding which aspects of the ERP policy framework and design are functioning, and how these become effective (or ineffective) mechanisms for delivery, is important as regards evaluating the efficacy of the Government of Uganda's response to the refugee shock to the education system.

As discussed in the previous section, the secondary research questions on coordination, financing, and information systems will inform the primary thrust of the Maintains research, while those on delivery and outcomes will be explored to the extent that they result from the inputs and mechanisms in focus. The list of secondary research questions will be revisited and confirmed with DFID Uganda and the ERP Steering Committee at the beginning of each phase of research activities based on the methodology applied to the research programme (the methodology is outlined in Section 5 of this document, and the phases are set out in Section 6).

3.2.1 Secondary research questions on Coordination

- C.1. How have national mechanisms for coordinating the education response (including
 the Secretariat, Steering Committee, and informal links between MoES, the Office of the
 Prime Minister, the Education in Emergencies Sector Working Group, UNHCR, the
 United Nations Children's Fund (UNICEF), ECW, and other development partners) been
 set up and/or changed as a result of having the ERP in place? Are they functioning as
 planned?
- C.2. How have district mechanisms for coordinating the education response, (including the district steering committees and informal links between MoES, the Office of the Prime Minister, UNHCR, UNICEF, ECW, and other development partners) been set up and/or changed as a result of having the ERP in place? Are they functioning as planned?
- **C.3.** Do coordination mechanisms resulting from the ERP add something over and above what would have been delivered anyway? What is this value-add?
- **C.4.** How do individual and organisational coordination capacity at national and district levels affect delivery of the response? How empowered are the relevant institutions and what sort of linkages and decisions exist/are made under the ERP?
- **C.5.** What are the challenges and successes in coordination around the ERP at different levels (national and district) and across geographical locations (different districts)?

3.2.2 Secondary research questions on Financing

- **F.1.** To what extent have financing needs for the education of refugees under the ERP's overall budget been met? This includes exploring:
 - o refugee financing needs since 2013, including those that are shock-based and non-shock-based;
 - o who finances the responses and in what amount (e.g. government, education development partners, external donors through civil society organisations);
 - the funding instruments that are applied, and their effectiveness (budget lines, contingency funds, humanitarian shock contingencies of donors, wallet funding mechanisms, etc.);
 - o funding gaps and challenges;

- o financing by geographical locations (across settlements, and to host communities);
 and
- o efforts to secure additional funding.
- **F.2.** Has the ERP led to more financing and/or influenced allocations (overall totals and the distribution of funds) to support education for refugees? How, and why?
- **F.3.** How does funding for refugee education get distributed and utilised under the ERP at national, regional, and district levels? How are funding decisions made?
- **F.4.** Which standardised disaster risk financing instruments or innovative financing mechanisms for refugee crises could be employed, and how can funding for the ERP be improved going forward?

3.2.3 Secondary research questions on *Information*

- I.1. How has the collection, management, sharing, and utilisation of critical information on refugee and host community education needs, and information on populations and service delivery, changed/evolved as a result of the ERP?
- **I.2.** How adequate and responsive are the information systems and feedback loops under the ERP? To what extent do they capture issues relating to GESI? What areas need improvement?

3.2.4 Secondary research questions on *Delivery*

- **D.1.** Has the ERP and its associated coordination, financing, and information mechanisms led to or catalysed additional/new education services (schools, non-formal education, alternative teacher recruitment and training approaches, innovative instructional materials, psychosocial support and counselling, water and sanitation, etc.)? How can these be used/improved to overcome challenges and gaps in delivery?
- **D.2.** How does the context in which ERP interventions are delivered affect both what is implemented and how outputs and outcomes are achieved?
- **D.3.** How do these services address the needs of refugee populations and host communities, especially regarding GESI?
- **D.4.** Are there cases/examples of positive deviance in service delivery (at geographical and/or institutional level) for refugees and host communities as a result of the ERP? What are the lessons that can be learnt for others?

3.2.5 Secondary research questions on *Outcomes*

- **O.1.** In what way has the ERP and particularly coordination, financing, and information contributed to outcomes and perceptions related to educational access, learning, safety, and psychosocial well-being of host and refugee children and youth? Are these outcomes being achieved as planned? *This question will look at outcomes using a GESI lens*
- O.2. What are some of the unexpected and/or unintended outcomes (positive or negative) resulting from the ERP and its associated mechanisms?

4 GESI

4.1 DFID and girls' education

The overall objective of DFID's *Leave No Girl Behind* programming is to support out-of-school adolescent girls (aged between 10 and 19) into education or employment, or to gain skills relevant for improving the quality of their family lives. Under this programme, DFID implements the *Girls' Education Challenge fund*, which was originally launched in 2012. The fund supports initiatives that aim to find better ways of getting girls into school and ensuring they receive a good quality of education, to transform their future. In particular, interventions focus on highly marginalised adolescent girls who are out of school (either because they have never attended school or because they have dropped out without gaining a basic education). DFID is interested in understanding how education services are designed and implemented to address the acquisition of basic education and skills for girls, to tackle negative social and gender norms, and to test sustainable solutions that can bring about systemic change.

Out of the approximately 334,259 primary school-age refugee children in Uganda (in eight out of the 12 refugee-hosting districts), only 58.2% (194,532) are enrolled in any kind of education services, with 47.2% of these being girls. Overlapping supply- and demand-side education barriers are further exacerbated in the context of complex emergencies or fragile settings, and during periods of shock and disaster. In these settings, children and young people – and especially girls – are often exposed to even further risks. While over 50% of the refugee population are women and girls, evidence indicates that services are not reaching them in equal proportions.

In order to understand the compounding effects of shocks and disasters on the education system and delivery of appropriate education services to refugee and host communities, it is critical to generate a clear picture of the challenges the education system faces in delivering accessible, quality education services to refugee and host communities, and the complexity of service delivery needs for a large and diverse population – especially girls accessing early childhood development and primary school services. This Maintains research agenda focuses in part on understanding and tracing outcomes from the ERP, and assessing whether essential, quality services have been provided to refugees and host communities. Girls are at the centre of this agenda, and data will be collected and analysed with a GESI lens to better understand how delivery mechanisms under the ERP add value to the outcomes of the essential education services delivered to this population.

4.2 Study's approach to GESI

Research under Maintains integrates GESI considerations throughout programme design to ensure that Maintains research builds evidence to shape equitable shock-responsive service provision that has positive impacts for GESI. This research will seek to understand how the experiences of the refugee crisis in Uganda differ for refugees and host communities based on gender and social characteristics, including impacts from the shock itself, as well as the way the delivery of education services addresses ongoing shock-specific needs of different groups during the crisis. The adaptation, expansion, and flexing of services during the

refugee shock likely have different impacts for different groups, both in terms of the provision of regular services and of responses that are based on emerging needs.

In order to understand these mechanisms and their corresponding outcomes regarding the implementation of the ERP, the relevant research questions will be answered using data that are disaggregated by specific categories of beneficiaries, including refugees versus host communities, refugee ethnicity, gender, and service delivery to children experiencing vulnerabilities (such as orphan-hood, disability, HIV/Aids, etc.). Data collection tools will include specific questions related to GESI, and respondents will be probed for information on how the ERP and related services have been aligned to address specific categories of beneficiaries and to respond to their particular needs. Data will be analysed using a GESI lens, and the results will be used to do the following:

- Build evidence on inclusive and participatory approaches to designing and delivering education services, and on how coordination and delivery mechanisms, the use of information, and appropriate financing may relate to equitable outcomes for refugees in different locations, refugees versus host communities, refugees of different ethnicities, girls, and children experiencing particular vulnerabilities.
- 2. Build evidence on the effectiveness of education interventions in achieving equitable service provision across different social groups (such as refugees versus host communities, refugees of different ethnicities, girls versus boys, service delivery to children experiencing vulnerabilities (such as orphan-hood, disability, HIV/Aids, etc.)). This will include exploring specific interventions implemented by the government and by development partners, as well as complementary external interventions that affect access to, and the quality of, education services.
- 3. Build evidence on the challenges faced by girls in schools, and the need for specialised services (and existing barriers to delivering and accessing them), including identifying effective strategies being delivered by development partners to address this.
- 4. Build evidence regarding approaches to service provision that have the potential for more widespread, transformative impacts on gender equality, marginalisation, and social inclusion.

5 Methodology

5.1 Process evaluations of complex interventions

As outlined in the sections on the scope of the research and the research questions, the Maintains Uganda research study aims to understand the mechanisms and processes by which inputs into the ERP – particularly coordination, financing, and information – have changed or added value to education delivery and outcomes for refugee and host populations in Uganda. As such, process evaluation methods will be applied to study the ERP's implementation and mechanisms of impact in key thematic areas. The objective is to understand *how* and *why* (mechanisms), rather than to directly monitor and evaluate the ERP's outcomes.

Process evaluations aim to explain how complex interventions work. They are especially useful when applied to interventions (like the ERP) that include a number of interacting components that operate in different ways to address a complex problem and generate multiple outcomes. Key dimensions of complexity include:

- the number and difficulty (e.g. skill requirements) of behaviours required by those delivering the intervention;
- the number of groups or organisational levels targeted by the intervention;
- the number and variability of outcomes; and
- the degree of flexibility or tailoring of the intervention permitted (UK Medical Research Council (MRC), 2008).

As a basis for our methodology, we offer the following definition of process evaluation developed by the Federal Bureau of Justice Administration:

'Process evaluation focuses on how a programme was implemented and operates. It identifies the procedures undertaken and the decisions made in developing the programme. It describes how the programme operates, the services it delivers, and the functions it carries out. However, by additionally documenting the programme's development and operation, process evaluation assesses reasons for successful or unsuccessful performance, and provides information for potential replication.' (Cited in Bess et al., 2004)

Process evaluations examine the processes through which an intervention generates outcomes by exploring how the intervention works and how results were (or were not) achieved (Public Health England, 2018). In the case of the Maintains study, we will follow the processes of change arising from the ERP through better coordination, financing, and information, leading to programme delivery, and – ultimately – outcomes (see Figure 3). Process evaluations can be used to answer various questions about an intervention like the ERP, including the following:

1. Can the intervention (in this case the ERP) be successfully implemented, especially in a complex humanitarian setting across a network of organisations and where resources are scarce?

- 2. Are the underlying ideas or theories about how problems arise and may be alleviated accurate, or do they need to be revised in order to design a more effective intervention or policy in the future?
- 3. What specific interventions were put into place by the policy to address the problem being tackled? Did the interventions work or not and how and why?
- 4. What kinds of problems were encountered in delivering the policy were there enough resources from the beginning to do it well? Was it well managed?
- 5. Were key stakeholders (whether policymakers or practitioners) trained or educated to the right level to effectively implement the intervention design?
- 6. Was there skill in facilitating the policy's processes from beginning to end? Was adequate support provided to the policy's implementation to make it successful?

Process evaluations can also help explain why an intervention does not work: for example, the underlying ToC may be sound but the intervention may not have been delivered as planned – or, rather, the delivery may have had poor fidelity to the intended plan. Process evaluations can also aid understanding of why the intervention works for some population groups, in some contexts, but not others (Public Health England, 2018).

The UK MRC guidance maps the key functions of a process evaluation and the relationships among them, as shown in Figure 4 (MRC, 2008). The blue boxes represent components of a process evaluation, which are informed by the causal assumptions of the intervention and inform the interpretation of outcomes. They examine, for instance:

- **implementation** the structures, resources, and processes through which delivery is achieved, and the quantity and quality of what is delivered;⁵
- mechanisms of impact how intervention activities, and participants' interactions with them, trigger change; and
- context how external factors influence the delivery and functioning of interventions.

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⁵ As part of implementation, the study will examine the structures, resources, processes, and quality of delivery associated with the coordination, financing, and information mechanisms of the ERP, but will not directly measure or quantify delivery.

Context Contextual factors which shape theories of how the intervention works Contextual factors which affect (and may be affected by) implementation, intervention mechanisms and outcomes Causal mechanisms present within the context which act to sustain the status quo, or enhance effects Implementation Mechanisms of impact How delivery is achieved (training, resources etc..) Participant responses to, and Description of Outcomes interactions with, the intervention What is delivered intervention Fidelity Mediators and its causal Unanticipated pathways and Dose assumptions consequences Adaptations Reach

Figure 4: Key functions of process evaluations

Source: MRC, 2008

Process evaluations typically examine aspects related to implementation and delivery processes, such as fidelity (was the intervention delivered as planned?), dose (did participants receive the right 'amount' of an intervention?), and reach (did the intervention reach its target population?) (Public Health England, 2018).

The relationships between various aspects of an intervention are also important: for example, the ways in which an intervention is delivered (fidelity) may have an effect on participant or community response, and on the acceptability of the intervention overall for practitioners and policymakers (Public Health England, 2018). Low acceptability may result in changes being made to delivery methods, which could in turn change the levels of uptake of an intervention. These processes need to be explored to understand the intervention's delivery mechanisms, and to generate any links with intervention outcomes.

However, in addition to *what* was delivered, process evaluation frameworks increasingly advocate for the examination of *how* delivery was achieved (MRC, 2008). Complex interventions, like the ERP, typically involve making changes to the behaviours of intervention providers, or to the dynamics of the systems in which they operate. Creating these changes may be as difficult as tackling the ultimate problems targeted by the intervention itself – in the case of the ERP, providing accessible, quality education to refugees and host communities, with strengthened systems for effective delivery. To apply evaluation findings in practice, policymakers and practitioners need information not only on *what* was delivered during the intervention, but also on *how* similar effects might be achieved in everyday practice.

In the sections below, the three core components explored in a process evaluation – implementation, causal mechanisms, and context – are described in more detail.

5.1.1 Implementation

Implementation can refer to putting an intervention into practice after a policy (such as the ERP) has been created, so that it becomes part of routine practice and is embedded within the system of delivery. Implementation can also refer to the way an intervention is delivered to its intended recipients. For the purpose of the Maintains study, the latter of the two meanings is more relevant, as we aim to study the operation of coordination, financing, and information mechanisms under the ERP. Each of these themes (i.e. coordination, financing, and information) forms a key part of the ERP's implementation and is defined in the plan in terms of execution, funding, management, delivery modalities, and assessment of outcomes and impacts for education system beneficiaries. Fidelity, reach, and dose of implementation are all of interest when examining implementation processes in this regard. As previously discussed, we will not be examining fidelity, dose, and reach for all inputs intended under the ERP.

Fidelity (was the intervention delivered as intended?) can refer to fidelity of 'form' or fidelity of 'function' (Public Health England, 2018). Fidelity of form refers to delivering an intervention in exactly the same way each time, whereas fidelity of function means there can be flexibility in how an intervention is delivered so long as it is achieving the same delivery goal each time. Studying fidelity also involves exploring whether intervention providers (in this case development partner non-governmental organisations (NGOs), as well as MoES) have added components to, or subtracted them from, the original intervention design. Such modifications may be influenced by providers' experiential backgrounds, or by their response to perceived needs, and can have critical positive or negative effects on the effectiveness of the intervention.

Examining whether the implementation of the ERP is done with *fidelity* to the plan's initial design – against the themes of coordination, finance, information, and delivery – will tell us if the policy framework (the intervention, in this case) was delivered as intended.

Looking at *reach* (did the intervention reach its target population?) involves looking at whether the design and implementation of the ERP allows for appropriate, quality education services to be provided to the intended target populations across all refugee-hosting districts. This is very much dictated by the success of the coordination, finance, information collection, and management and delivery mechanisms of the plan, which, if executed appropriately, should lead to the achievement of the intended outcomes.

Dose (did participants receive the right 'amount' of an intervention?) pertains to the intensity of inputs and to what extent the levels of coordination, financing, and information under the ERP influence service delivery and outcomes for stakeholders in the education system – most notably, learners.

5.1.2 Exploring causal mechanisms of impact

The MRC guidance for developing and evaluating complex interventions argues that close scrutiny of causal mechanisms is required to develop more effective interventions, and to understand how findings might be transferred across settings and populations (MRC, 2008). Understanding how participants interact with complex interventions is crucial to

understanding how they work – and therefore whether they are effective in achieving their goals.

Exploring causal mechanisms of impact allows us to answer the following questions:

- Did the intervention have its intended effects (in other words, were the outcomes achieved)?
- Can success or failure be attributed to the intended mechanism(s) of change?

It is useful to distinguish between a focus on 'mechanisms' (the way change occurs once an intervention has been initiated) and a focus on 'implementation' (the initial delivery of the intervention). Studying mechanisms includes studying participant and system responses to the intervention, understanding how change is happening, and capturing the unintended consequences and impact pathways that may result from the intervention.

Hypotheses regarding causal mechanisms under the ERP, as traced in the ToC in Section 2.1, should be generated with consideration as to how contextual factors might strengthen or weaken interventions, and thereby affect the outcomes of the ERP in different contexts and settings. The process evaluation will test and refine these causal assumptions for coordination-, financing-, and information-related inputs and mechanisms using the combination of a quantitative assessment of mediating variables and a qualitative investigation of participant and system response.

5.1.3 Context

Contextual factors shape an intervention's ToC, and affect the implementation, causal mechanisms, and outcomes of that intervention. Process evaluations capture how context is affected by an intervention, as well as how contextual factors can change an intervention itself (MRC, 2008).

'Context' may include anything external to the intervention that impedes or strengthens its effects. Understanding how implementers' readiness or ability to change is influenced by pre-existing circumstances, skills, and system and organisational norms, resources, and attitudes, is therefore central to the process evaluation approach (Berwick, 2008a; Glasgow et al., 2003; Pawson and Tilley, 1997). Implementing a new intervention is likely to involve processes of mutual adaptation, as context often changes in response to the intervention; this is anticipated to happen under the ERP (Jansen et al., 2010). The causal pathways underlying the problems that are targeted by interventions will differ from one context to another (Bonell et al., 2006), meaning that the same intervention may have different consequences when implemented in a different setting, or among different subgroups. This is an important consideration when evaluating the effectiveness of the ERP in Uganda, as it is implemented in a variety of regions, districts, and refugee settlements across the country, each with its own context and dynamics at a local level.

We can capture how contextual factors affect implementation of the ERP across the geographical scope of our study (covering districts in various regions), and by considering which components of coordination, financing, and information mechanisms under the ERP have had to be adapted, or modified, to fit the context, and how target audiences have received and reacted to interventions in different settings.

5.2 Maintains research framework

The secondary research questions developed under each of the core themes of the Maintains study are intended to provide an evidence base for exploring the execution of the ERP, and how and why it is, or is not, successful.

Table 3 maps the various research themes and list of secondary research questions under Maintains within the elements of a process evaluation as described in the previous section (outlined in Figure 4). Sources of information will be described in more detail in subsequent sections.

Table 3: Maintains research matrix for process evaluation

Maintains research theme	Secondary research questions	Process evaluation component/stage	Data type
	C.1. How have national mechanisms for coordinating the education response (including the Secretariat, Steering Committee, and informal links between MoES, the Office of the Prime Minister, the Education in Emergencies Sector Working Group, UNHCR, UNICEF, ECW, and other development partners) been set up and/or changed as a result of having the ERP in place? Are they functioning as planned?	Implementation fidelity and dose	Qualitative data Govt. planning documents
Coordination	C.2. How have district mechanisms for coordinating the education response, (including the district steering committees and informal links between MoES, the Office of the Prime Minister, UNHCR, UNICEF, ECW, and other development partners) been set up and/or changed as a result of having the ERP in place? Are they functioning as planned?	Implementation fidelity, reach, and dose	Qualitative data Govt. planning documents
	C.3. Do coordination mechanisms resulting from the ERP add something over and above what would have been delivered anyway? What is this value-add?	Causal mechanisms of impact	Qualitative data
	C.4. How do individual and organisational coordination capacity at national and district levels affect delivery of the response? How empowered are the relevant institutions, and what sort of linkages and decisions exist/are made under the ERP?	Implementation fidelity Context	Qualitative data Self-report assessments
	C.5. What are the challenges and successes in coordination around the ERP at different levels (national and district) and	Context	Qualitative data

	across geographical locations (different districts)?		
	F.1. To what extent have financing needs for the education of refugees under the ERP's overall budget been met? This includes exploring:		
	refugee financing needs since 2013, including those that are shock-based and non-shock-based;	Implementation reach, dose, and fidelity	Annual sector reports Govt. budgets and plans Qualitative data
	who finances the responses and in what amount (e.g. government, education development partners, external donors through civil society organisations);		
	the funding instruments applied, and their effectiveness (budget lines, contingency funds, humanitarian shock contingencies of donors, wallet funding mechanisms, etc.);	quantitativ	
Financing	funding gaps and challenges; financing by geographical locations (across settlements, and to host communities); and efforts to secure additional funding.		
	F.2. Has the ERP led to more financing and/or influenced allocations (overall totals and the distribution of funds) to support education for refugees? How, and why?	Causal mechanisms of impact	Annual sector reports Qualitative data
	F.3. How does funding for refugee education get distributed and utilised under the ERP at national, regional, and district levels? How are funding decisions made?	Implementation reach	Annual sector reports Govt. budgets and plans
	F.4. Which standardised disaster risk financing instruments or innovative financing mechanisms for refugee crises could be employed, and how can funding for the ERP be improved going forward?	Implementation fidelity	(Secondary) quantitative data Qualitative data
Information	I.1. How has the collection, management, sharing, and utilisation of critical information on refugee and host community education needs, and information on populations and service delivery, changed/evolved as a result of the ERP?	Implementation fidelity	Secretariat plans and documents Qualitative data District reports
	I.2. How adequate and responsive are the information systems and feedback loops under the ERP? To what extent do they capture GESI issues? What areas need improvement?	Causal mechanisms of impact	(Secondary) quantitative data

	D.1. Has the ERP and its associated coordination, financing, and information mechanisms led to or catalysed additional/new education services (schools, non-formal education, alternative teacher recruitment and training approaches, innovative instructional materials, psychosocial support and counselling, water and sanitation, etc.)? How can these be used/improved to overcome challenges and gaps in delivery?	Causal mechanisms of impact	Secretariat reports Qualitative data (Secondary) quantitative data
Delivery	D.2. How does the context in which ERP interventions are delivered affect both what is implemented and how outputs and outcomes are achieved?	Context	Qualitative data
	D.3. How do these services address the needs of refugee populations and host communities, especially regarding GESI?	Implementation reach and dose	ERP reports Qualitative data
	D.4. Are there cases/examples of positive deviance in service delivery (at geographical and/or institutional level) for refugees and host communities as a result of the ERP? What are the lessons that can be learnt for others?	Causal mechanisms of impact Context	Case studies (Secondary) quantitative data
Outcomes	O.1. In what way has the ERP – and particularly coordination, financing, and information – contributed to outcomes and perceptions related to the educational access, learning, safety, and psychosocial well-being of host and refugee children and youth? Are these outcomes being achieved as planned? This question will look at outcomes using a GESI lens.	Causal mechanisms of impact	(Secondary) quantitative data Qualitative data
	O.2. What are some of the unexpected and/or unintended outcomes (positive or negative) resulting from the ERP and its associated mechanisms?	Causal mechanisms of impact	ERP reports Qualitative data

5.3 ToC and logic models in process evaluations

In process evaluations, the underpinning theory of an intervention provides a structure for the process evaluation design, as well as data collection and analysis under the study (MRC, 2008). An intervention's 'theory of change' articulates how it is understood to generate change in its target population or group, specifying cause-and-effect pathways operating in the intervention.

In the case of the ERP, the intervention is defined as a set of structures and processes intended to improve education service delivery and outcomes for children in refugee and

host communities through facilitating changes in the dynamics of the system and its delivery mechanisms at national, district, and school levels to deliver an education in emergencies response. The process evaluation in our case is therefore interested in whether the structures and processes for facilitating these changes are put in place and followed with fidelity, and the degree to which they have been effective in delivering quality services, with a special focus on GESI. Key steps in understanding the causal chain include identifying whether the activities resulting from these structures and processes remain consistent with intended functions, accepting that their exact form may vary according to local needs and contexts.

For the Maintains research, the ERP ToC already exists, as a starting point (see Section 2.1), and the ECW proposal also includes a definition of the intervention and its ToC. The ERP and ECW documents do not provide a detailed description of the causal assumptions underpinning the intervention. Such a description would need to set out the specific resources (human, financial, and otherwise) needed to implement the intervention each year, how they will be applied, how the intervention is intended to work, and the intended short-, medium-, and long-term outcomes. In addition to the lack of detail in the initial documents, the intended activities and implicit ToC may have changed since the ERP was developed in late 2017, including under the guidance of the ERP Secretariat and the ECW Consortium's Steering Committee.

As such, at the start of our process evaluation the research team reviewed these existing documents to generate a more detailed description of the ERP intervention and the activities outlined for each year of its implementation. We also conducted interviews with key informants to inform this description. Note that this elaboration has a focus on how the coordination, implementation, and financing are meant to be implemented, and how they are meant to lead to the outcomes of the ERP.

From this ToC, we then mapped our research areas and questions (Section 2.2). We use this as the theoretical basis for developing research methods and conducting relevant analysis in line with the process evaluation framework (Table 3). In this case, contextual factors are important as regards explaining any variation in the changes that occur as a result of the ERP intervention in different refugee-hosting districts throughout the country.

5.4 Research methods

Data collection and analyses in the Maintains process evaluation will be structured around the logic models outlined above that represent the ERP ToC and that illustrate the causal pathways thought to be operating, and that may (or may not) lead to demonstrable change in education service delivery and outcomes for refugees and host communities in Uganda. These causal pathways are the 'processes' that this process evaluation will explore.

This process evaluation will involve the collection and compilation of multiple qualitative and quantitative datasets. We will collect primary qualitative data (principally through key informant interviews at central and district levels), conduct in-depth case studies, and devote resources to compiling and analysing existing data and evidence, both quantitative and qualitative. As such, while much of the primary data collection will be qualitative in nature, we will apply a mixed methods approach in the evaluation, where different types of data are integrated and used to supplement each other at the data collection and data analysis

stages. For example, qualitative data from interviews will be used to expand on findings from another type of data, say quantitative data on school attendance rates, and vice versa. Likewise, we propose to carry out in-depth case studies in the districts and/or institutions where preliminary findings (both qualitative reports and secondary quantitative data) suggest there may be interesting evidence or learnings regarding good (or bad) performance in terms of coordination, financing, and information flows.

By using mixed methods approaches that integrate different data we aim to produce robust and comprehensive findings about the multiple and interacting aspects, processes, and causal pathways involved in a complex intervention like the ERP. Qualitative methods will help us to identify causal processes and contextual factors in the implementation of the ERP, such as participant and stakeholder perceptions of the ERP and regional variations, which may then be checked or compared with available quantitative data to test the hypotheses generated. Likewise, review of secondary sources may point out current gaps in understanding that can be explored further through qualitative research and interviews.

A key challenge in this case will be that all data must be collected in a relatively short time over the scheduled Maintains research phases. Quantitative data may identify challenges for which it is not possible to provide a qualitative explanation within the required timescale, whereas qualitative data may generate new hypotheses requiring further research that will not be feasible given time constraints (MRC, 2008). In such instances, we will aim to offer important partial insights and highlight priorities for future research.

Data collection will also be planned and coordinated carefully so that the research process is efficient. For example, it will likely be possible to collect primary qualitative and secondary quantitative data from participants and stakeholders during the same research visits/encounters, and to make use of routinely collected data, reducing data collection costs under Maintains. Reducing costs is a key aim of this evaluation design: therefore, data collection activities will be planned and coordinated prudently.

We will ensure our research design is flexible and will use iterative approaches to data collection and analysis to pursue emerging themes. For example, if/when unexpected events or external shocks occur (such as COVID-19) that influence the ERP and education system operations in Uganda, we will conduct interviews with policymakers, implementers, and participants to investigate the consequences of, and reasons for, this influence.

5.4.1 Data collection tools and sources of information

Employing both qualitative and quantitative methods in the process evaluation will be important in order to collect the wide range of data needed to track ERP implementation modalities and processes around coordination, financing, and information flows that ultimately lead to programme outcomes. Figure 5 below links these methods to the aims of the process evaluation framework presented earlier in this document, and explains their relationship to the core function of the process evaluation we will conduct in regard to the ERP.

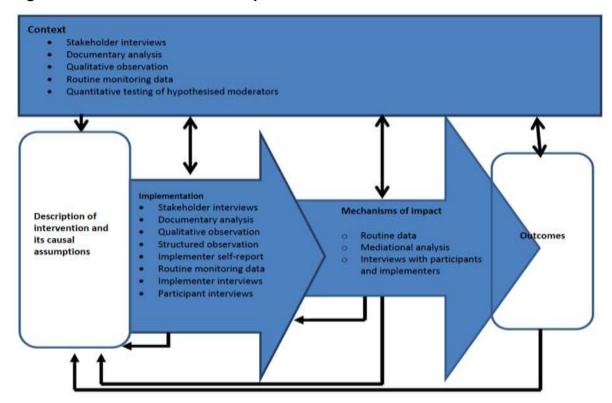


Figure 5: Data collection tools in process evaluations

Source: MRC, 2008

5.4.2 Qualitative methods

We will leverage several qualitative methods in the process evaluation to answer key research questions, including the use of focus group discussions, key informant interviews, in-depth case studies, field observations, and reviews of secondary documentation and available literature.

Focus group discussions will produce interactions among target groups for the evaluation that will provide deep insights into consensus and conflicts in the views and experiences of implementers, stakeholders, and participants. The group setting will also offer an opportunity to elicit a wider range of perspectives faster than would be the case with individual interviews. However, group dynamics may lead focus group participants to respond in a different way than they would in a one-to-one interview, particularly when there are power differentials among participants. Where groups are formed of colleagues or other individuals who are in regular contact, this may positively support rapport and openness, but it may also make participants more conscious of how they portray themselves to their colleagues. 'Lower-status' participants may be less likely to contribute to the discussion or to express disagreement, leading to false consensus and over-representation of the views of 'higher-status' participants (MRC, 2008). Group size may also compromise the depth in which a topic may be explored. We will mitigate this by supplementing focus group approaches with individual key informant interviews, and by comparing quantitative data with qualitative information to confirm the evidence gathered.

Key informant interviews will be used with key stakeholders to discuss more sensitive issues, and when there are concerns that a group dynamic may not produce a wide range of views on an important topic. While individual interviews will involve the collection of data from fewer individuals at a greater cost to the research team, they will also provide us with greater opportunities to explore individual experiences in depth (MRC, 2008). Key informant interviews will also be the primary method for seeking responses from national stakeholders, with respondents representing different organisations and constituencies (such as the government, development partners, or NGOs). Respondents may be likely to have different views and to speak more freely if no other colleagues are included in the conversation.

In-depth case studies will be used to focus on specific research questions and to understand interactions and dynamics. This could be done at the level of a district, or it could involve focusing on a specific implementing partner.

Review of government and ERP documentation and related literature. A number of planning documents, as well as records (such as meeting minutes) and M&E documents (such as annual reviews), will be used to assess implementation progress and delivery, as well as outcomes to some extent. There may also be documents from implementing partners, including donors and NGOs.

Field observations will be used by the research team to gather detailed field notes about the implementation of various aspects of the ERP and the experiences and responses of participants in relation to the plan. This will prove useful for independently capturing the finer details of implementation and will help us to examine interactions between participants and the ERP's implementers (including national policymakers, local government officials, and development partners). It will also help the research team to capture information about more nuanced aspects of the implementation that are directly observable, rather than just details relating to the mechanics of the ERP's delivery.

5.4.3 Quantitative methods

We will apply a limited number of quantitative methods and tools to collect data in the process evaluation, which may include self-report questionnaires and secondary analyses.

Self-report questionnaires may be applied in the evaluation as a simple, cheap, and convenient way to gather information on key process variables. This sort of questionnaire could be administered electronically (through online survey) or in paper copy, to reach out to ERP stakeholders (such as implementing partners or district officials). It would allow the collection of answers to a short survey made up of simple questions, such as perspectives on the success of elements of the ERP, using Likert scales.

Secondary analysis of routine M&E data, including other research studies, reports, and datasets, from implementers will be used in the evaluation. This means large amounts of important data for the entire intervention period can be used with low additional cost, and it will allow for critical data from multiple implementers to be compared. Secondary quantitative data will be particularly important for looking at the secondary research questions on information, delivery, and outcomes. The use of routine M&E data may also reduce response biases, and prevent duplication of efforts. Sources will include M&E data generated from government-commissioned annual reviews of the ERP, routine data

collection executed under the ERP Results Framework, as well data generated by development partners implementing education programmes that support the roll-out of the ERP in refugee-hosting districts.

5.4.4 Mapping of data sources against secondary research questions

Table 3 in Section 5.2 of this document maps the Maintains research questions to the key components of a process evaluation and indicates the type of data required to answer these. In Table 4 we delineate these data sources further into the primary (first tier) and secondary (second tier) categories of data we will employ and analyse as part of the process evaluation.

districts)?

Table 4: Detailed mapping of data sources to secondary research questions

Primary research question: Does the ERP improve the effectiveness of education service delivery, and thereby education outcomes, for refugees and host communities? Secondary research questions **Primary sources of information Secondary sources of information** Area of inquiry Coordination C.1. How have national mechanisms for coordinating the National and district education Key informant interviews and education response (including the Secretariat, Steering focus group discussions at plans (including the ERP and Committee, and informal links between MoES, the Office national and district levels district ERPs) of the Prime Minister, the Education in Emergencies · Self-report assessments of Secretariat and Steering Sector Working Group, UNHCR, UNICEF, ECW, and Committee reports and annual coordination structures at other development partners) been set up and/or **ERP** reviews national and district levels for changed as a result of having the ERP in place? Are the ERP they functioning as planned? C.2. How have district mechanisms for coordinating the education response, (including the district steering committees, and informal links between MoES, the Office of the Prime Minister, UNHCR, UNICEF, ECW, and other development partners) been set up and/or changed as a result of having the ERP in place? Are they functioning as planned? C.3. Do coordination mechanisms resulting from the ERP add something over and above what would have been delivered anyway? What is this value-add? C.4. How do individual and organisational coordination capacity at national and district levels affect delivery of the response? How empowered are the relevant institutions, and what sort of linkages and decisions exist/are made under the ERP? C.5. What are the challenges and successes in coordination around the ERP at different levels (national and district) and across geographical locations (different

Financing

F.1. To what extent have financing needs for the education of refugees under the ERP's overall budget been met? This includes exploring:

refugee financing needs since 2013, including those that are shock-based and non-shock-based;

who finances the responses and in what amount (e.g. government, education development partners, external donors through civil society organisations);

the funding instruments applied, and their effectiveness (budget lines, contingency funds, humanitarian shock contingencies of donors, wallet funding mechanisms, etc.);

funding gaps and challenges;

financing by geographical locations (across settlements, and to host communities); and

efforts to secure additional funding.

- F.2. Has the ERP led to more financing and/or influenced allocations (overall totals and the distribution of funds) to support education for refugees? How, and why?
- F.3. How does funding for refugee education get distributed and utilised under the ERP at national, regional, and district levels? How are funding decisions made?
- F.4. Which standardised disaster risk financing instruments or innovative financing mechanisms for refugee crises could be employed and how can funding for the ERP be improved going forward?

- Key informant interviews and focus group discussions at national and district levels
- Finance tracking documents from the ERP Secretariat (supported by Maintains technical assistance)
- National ERP budgets from the Secretariat and Steering Committee
- District ERP budgets

- Secretariat and Steering Committee reports and annual ERP reviews
- Education sector annual reports

Information	I.1. How has the collection, management, sharing, and utilisation of critical information on refugee and host community education needs, and information on populations and service delivery, changed/evolved as a result of the ERP? I.2. How adequate and responsive are the information systems and feedback loops under the ERP? To what extent do they capture GESI issues? What areas need improvement?	 Key informant interviews at national and district levels Secretariat and Steering Committee M&E database 	 Meeting minutes, policy briefs, knowledge management systems Secretariat/Steering Committee/M&E tools, guidelines and other products Donor and implementing partner reports District ERP reports and monitoring frameworks EMIS/school census data from the Ugandan Bureau of Statistics and MoES
Delivery	D.1. Has the ERP and its associated coordination, financing, and information mechanisms led to or catalysed additional/new education services (schools, non-formal education, alternative teacher recruitment and training approaches, innovative instructional materials, psychosocial support and counselling, water and sanitation, etc.)? How can these be used/improved to overcome challenges and gaps in delivery? D.2. How does the context in which ERP interventions are delivered affect both what is implemented and how outputs and outcomes are achieved? D.3. How do these services address the needs of refugee populations and host communities, especially regarding GESI? D.4. Are there cases/examples of positive deviance in service delivery (at geographical and/or institutional level) for refugees and host communities as a result of	 Key informant interviews and focus group discussions at national and district levels Secretariat and Steering Committee M&E database District ERP M&E database 	ERP reports from Secretariat, Steering Committee, MoES, EDPs/donors, implementing partners in the Education in Emergencies Sector Working Group District reports and annual school census data

	the ERP? What are the lessons that can be learnt for others?		
Outcomes	O.1. In what way has the ERP, and particularly coordination, financing, and information, contributed to outcomes, and perceptions related to the educational access, learning, safety, and psychosocial well-being of host and refugee children and youth? Are these outcomes being achieved as planned? <i>This question will look at outcomes using a GESI lens.</i> O.2. What are some of the unexpected and/or unintended outcomes (positive or negative) resulting from the ERP and its associated mechanisms?	 Key informant interviews and focus group discussions at national and district levels Secretariat and Steering Committee M&E database District ERP M&E database 	 Uwezo studies Learning outcomes data from the government and implementing partners on the Education in Emergencies Sector Working Group Plan Uganda's out-of-school children database; Save the Children-/Norwegian Refugee Council-/etc. funded database/dashboard of accelerated learning centres and supply/demand needs of teachers/materials, etc.

5.5 Sampling strategy

Participants in the qualitative data collection will include informants such as government implementers, intervention participants, and key 'gatekeepers' (e.g. NGO and development partner organisation staff), allowing the research team to explore experiences related to the intervention and implementation of the policy from multiple perspectives. Intervention participants may be well positioned to provide insights into the perceived strengths and weaknesses of the ERP's execution, and how it helped them, or failed to help them, achieve change in education access and learning outcomes. Key stakeholders in the government and civil society who are implementing or supporting the implementation of the ERP will be able to provide insights into the emergence of patterns in these responses, including how and why their implementation practices changed over time, and to what effect. Those at higher levels of the ERP's implementation process (such as members of the Secretariat and ERP Steering Committee) will also likely be in a position to help the research team to identify a broader range of contextual barriers and enablers around the implementation of the policy.

Our research each year is spilt into two phases, differentiated by two levels of analysis. Phase 1 (and 3) focuses on stakeholders at the national level, while Phase 2 (and 4) focuses on stakeholders at the district level. For Phase 1, our sampling approach at the national level will be rooted in a stakeholder categorisation exercise conducted in early 2020 that maps out key stakeholders linked to the design, implementation, and execution of the ERP in the following categories:

- ERP Secretariat and Steering Committee;
- government stakeholders and policymakers at national and district levels (MoES, Ministry of Finance, National Planning Authority);
- education development partners (bi- and multi-lateral donors);
- UN agencies (UNICEF, UNHCR);
- implementing organisations/NGOs focusing on education service delivery in refugeehosting districts (these are members of the Education in Emergencies Sector Working Group); and
- implementing organisations/NGOs running projects seeking to improve teacher effectiveness and children's learning (not necessarily refugee-focused).

An indicative respondent mapping, which lists the departments, structures, and organisations we intend to speak to, and the number of respondents by Maintains research phase, can be found below in Table 5. For each year of the study, and between phases each year, we will refine our sampling strategy to ensure we seek out the most appropriate respondents.

Table 5: Maintains sample of respondents (by phase)

Boomandant was un	Estimated sample size									
Respondent group	Phase 1	Phase 2	Phase 3	Phase 4						
ERP Secretariat ¹	3	3	3	3						
ERP Steering Committee ²	8	3	8	3						
National government officials in MoES:										
Permanent Secretary (Chair of ERP Steering Committee)	1	0	1	0						
Assistant Commissioner Basic Education	1	0	1	0						
Director Basic and Secondary Education	1	0	1	0						
Commissioner Teacher and Instructor Education and Training	1	0	1	0						
Commissioner Education Policy and Planning	1	0	1	0						
Director Education Standards	1	0	1	0						
Director National Curriculum Development Centre	1	0	1	0						
Commissioner Special Needs Education	1	0	1	0						
Education in Emergencies Sector Working Group	*	2	*	2						
UN agencies (UNICEF, UNHCR, UNESCO)	3	0	3	0						
Education development partners (donors)	3	0	3	0						
Implementing organisations/NGOs focusing on humanitarian response and refugee education under the ERP	5	10	5	10						
District government officials and settlement managers – respondents per district ³	0	20	0	20						

Notes: 1. Only three members of the ERP Secretariat will be included in the sample, due to their technical roles, these being the Coordinator, M&E Specialist, and Information Management Officer. 2. All members of the ERP Steering Committee will be included, because they represent different organisations and specific interests. These roles overlap with other categories in Table 3. It is anticipated that up to six districts will be sampled in Phases 2 and 4. *These members are also members of categories listed below.

For Phase 1, we envisage all interviews will take place in and around Kampala, including with government stakeholders, the Secretariat and Steering Committee, education development partners/donors, and key members of the Education in Emergencies Sector Working Group. The selection of respondents will be based on the identification of the key players involved in the design, management, monitoring, financing, and implementation of the ERP at the national level.

Phase 2 will take our research to the district level in up to six of the 12 refugee-hosting districts, and will include refugee-hosting districts in different parts of the country, such as West Nile and southwest Uganda. A more specific sampling approach for Phase 2 will be adapted and finalised based on our findings from Phase 1, and will focus on district local government officials (administrative and political staff), district education officials, key implementing partners/NGOs supporting delivery of the ERP and refugee education

services, settlement management structures, and members of ERP coordinating bodies established under the district ERPs in early 2020.

Sampling strategies for Phase 3 and Phase 4 will be developed, finalised, and shared following the findings of the preceding phase and feedback from stakeholders on the key areas of enquiry.

5.6 Analytical approach

Analysis of the data collected will require a range of techniques given the different types of data, and this will vary by phase. In Phase 1, the focus will be on qualitative key informant interviews with national stakeholders. For this, an analytical framework will be developed which will set out how the research questions in focus map onto the ToC (the expected pathways of change) and the process evaluation framework. This will inform a coding structure for the interview transcripts, along with emerging themes that are known to have arisen in interviews. The transcripts will be coded against the coding structure in Nvivo qualitative software. Nvivo allows outputs to be extracted against each of the codes, and for an analytical process to take place to extract points of convergence (triangulation) and divergence, as well as weighing the strengths of the different answers based on stakeholder analysis and social desirability bias (i.e. the possibility of respondents giving answers they expect the interviewer will 'want' to hear).

Secondary qualitative data, such as programme documents and reports, will be used to contextualise and triangulate responses from the interviews. Content analysis of the documents will focus on the ideas being communicated in the materials. The evaluation team will assess the content of the written materials, generating codes and assigning them to ideas, words, and phrases in the documents and materials reviewed that capture salient elements of the programme. Since the process evaluation will have a longitudinal perspective (i.e. different issues, concerns, and strategies will characterise the policy's implementation at given points in time), it will also be necessary for us to note the temporal sequencing of events in each year of the study, and to be clear about the units of analysis within the documents we review.

In later phases, where district-level data collection is included, the qualitative analysis will follow a similar process but analysis may also take place at a case study level, such as based around specific settlements or districts (and the comparison of case studies).

The research questions around delivery and outcomes will require some quantitative analysis of secondary data. Depending on the questions, this will largely involve descriptive statistics. When looking at outcomes, the research will not be able to conduct an impact evaluation (in which an attributable impact can be quantified, such as the number of additional refugee children enrolled, or increases in learning outcomes, due to the ERP). This is ruled out, given the huge challenges with determining an identification strategy (specifically, a control group which would show us what would have happened in the absence of the ERP) and the extensive data which would be required. However, descriptive analysis of outcome trends can allow some inferences to be made regarding whether the ERP's intended outcomes have been achieved, which will be supported by qualitative methods.

Our analysis will also be based on (and report) our assumptions about how the intervention works (using the ToC), and how this logic model informed the selection of research questions and methods for the year.

5.7 Reporting of findings, and research uptake

After each phase of the research study we will produce key outputs that will focus on important findings and implications for the stakeholders (whether that be lessons learnt or recommendations), for future implementation. The outputs will be designed to be accessible and relevant to the target audiences – primarily the ERP Steering Committee, but also DFID Uganda and then an international audience interested in learning from Uganda's approach to providing education for refugees and host communities.

The findings will be presented to the target audience in Uganda. The phases have been planned to align with their annual cycles: the ERP has an annual review in June/July, and education stakeholders also tend to reflect on progress and changes at the end of the academic year, in December (the academic year follows the calendar year in Uganda).

We will also annually generate a series of practice and policy briefs to be used by the Steering Committee, Secretariat, DFID, and other implementing partners who are delivering the ERP, so that they can make use of the study's results to (potentially) inform decisions about the ERP's future implementation. This will include reporting in a timely fashion each study year to ensure stakeholders can leverage findings in the next phase of implementation, and, in early 2021, reporting findings that can provide inputs into the design of ERP2.

The production of high-quality outputs is necessary but not sufficient to ensure successful research uptake, and for research findings to contribute to policy and practice. The research uptake agenda focuses on using the findings to inform course-correction of the ERP, and the design of ERP2, as well as learning for an international audience. Research uptake objectives that focus on external learning include:

- engaging the DFID Uganda country office and DFID UK in learning from the implementation of the ERP to better inform their support, engagement with, and financing of education service delivery policies in Uganda and globally;
- 2. engaging the ERP Secretariat and Steering Committee in regular learning and sharing events during each research phase, stimulating reflection on the ERP's implementation, and influencing improvements to the next intervention cycle and the design of ERP2;
- engaging national-level stakeholders implementing the ERP and delivering services to refugees and host communities under the plan in regular learning and sharing events during each research phase, stimulating reflection on the ERP's implementation and influencing improvements to the next intervention cycle; and
- 4. engaging humanitarian actors and platforms in Uganda and globally in learning from the ERP's design and implementation notably around coordination, financing, and delivery mechanisms to inform similar programming.

Successful research uptake involves engagement throughout the research process, not only during the dissemination of findings. For this reason, the research team has worked closely

with the ERP Secretariat and Steering Committee in confirming the design of the study and the implementation plans. The Secretariat has been invaluable in providing support in the form of sharing documents and contacts, and the team has been invited to attend each of the Steering Committee meetings.

A separate research uptake strategy has been developed, which includes a mapping of stakeholders.

6 Phases of the research

The Maintains Uganda education research will be organised into five phases. Phases 1 to 4 will each last six months and will fall into the periods January–June and July–December over 2020 and 2021. These four phases will constitute the bulk of the data collection (primary and secondary data), analysis, and reporting of findings. Phase 5, in 2022, will allow for final reflection, any smaller 'mop-up' analysis, and a focus on research uptake (see Section 5.7). The sequencing of the phases, and the focus research questions for each phase, are set out in Table 6.

Given the cyclical nature of the ERP's implementation design, it is essential that coordination, financing, and information flows are implemented and delivered to a sufficient degree year after year in order to achieve the objectives of the plan and to continue to expand education services to more learners. As such, the primary and secondary research questions for coordination, financing, and information will be repeated in Years 1 and 2 of the study, in order to assess the effectiveness and quality of that year's delivery of the ERP. The research in Year 1 will focus on these secondary research questions because these are necessary parts of implementation and the causal pathways that would be expected to lead to delivery and outcomes. In Year 1, Phase 1 will focus on the national level and Phase 2 will move down to the district level. At present, we expect to be able to dig deeper into decentralised coordination structures for the ERP in Phase 2, as well as to look at how the ERP is being rolled out to settlement coordination bodies, which should be done in partnership with national government stakeholders.

In Year 2, the research will repeat some of the secondary research questions around coordination, financing, and information, though likely in less detail. This will give a longitudinal perspective. We will also seek to evaluate the capacity of central and district coordination structures to effectively collect, manage, and apply data for evidence-based decision-making.

In Year 2, we will also answer the questions around delivery and outcomes. Delivery and outcomes are more appropriate for Year 2 because data from Year 1 can be used to identify case studies and areas of focus for delivery and outcomes, and also the ERP will have had a longer period of implementation (with it finishing in June 2021). While Phase 4 falls after the end of the ERP timeframe (ending in June 2021), the focus will still be on the ERP (not on ERP2).

The final year of Maintains (January to December 2022⁶) is beyond the current ERP timeframe, so this year (Phase 5) will largely focus on evidence uptake. We would like to explore whether learnings from the ERP are being reflected in other government strategies and policies, including ERP2, and whether lessons can be drawn as regards delivering essential services during other shock contexts or in other countries.

It is likely that there will be an ERP2 in Uganda. It is possible that a small phase of national-level data collection will be completed in late 2021 and early 2022 to collect data on the start of ERP2, and to determine how changes to the policy are being executed. This will also

⁶ Maintains as a whole will run until June 2023, but the country research studies are due to be completed by the end of 2022.

provide us with an opportunity to explore whether recommendations based on the findings from the Maintains research are being applied to the new phase of the policy.

Table 6: Sequencing of research phases and research questions

	Year 1	(2020)	Year 2	(2021)	Year 3	(2022)
	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec
Phase 1	National: Coordination Financing Information					
Phase 2		District: Coordination Financing Information				
Phase 3			National: Coordination Financing Information Delivery Outcomes			
Phase 4				District: Coordination Financing Information Delivery Outcomes		
Phase 5					Promote au research	

6.1 Research focus in Year 1 of Maintains

- The focus of the questions related to coordination in Year 1 will be on evaluating the work and establishment of the Steering Committee and Secretariat at central level, and the district-level ERP plans and coordination structures developed by UNICEF in partnership with District Education Officers and development partners in refugee-hosting districts in mid-2019. We will also focus on how these coordination structures are rolled out throughout 2020.
- The focus of the questions related to finance in Year 1 will be on evaluating the success to date as regards generating funds to implement the ERP, especially associated with the first and second rounds of funding from ECW in 2019 and 2020. We will also look at the willingness and buy-in of other funders and education development partners to earmark and provide resources to support implementation of the ERP and to fund the coordination structures identified under the plan for the Secretariat and Steering Committee in 2019, as well as exploring new financing mechanisms identified to support implementation of the ERP throughout 2020. Gaps in securing appropriate funds,

- financing allocations across refugee-hosting districts against the financial structures outlined in the ERP, and the flexibility of financing mechanisms will also be explored.
- The focus of the questions related to information in Year 1 will be on evaluating the design of the ERP results-based management framework and accountability systems for delivering results at both central and district/settlement levels. This will include assessing the development of the ERP's M&E framework and any associated activities related to the creation of final indicators and targets for Year 1 of the ERP (2018–2019) (which were initially outlined in the ERP document but not detailed explicitly for 2019), and the data that were collected against them throughout 2019. The research will also explore the uptake and further roll-out of the information strategies and data collection processes executed under the initial framework in 2020.

6.2 Steps for Phase 1 of Maintains

As the first phase of the research, Phase 1 requires initial work to develop the study's understanding of the intervention, and the relevant research questions for Phase 1, as well as consultation with key stakeholders on the above. The following steps have already been or are due to be carried out in the first half of 2020 under Phase 1:

- Confirming Phase 1 research questions. An earlier draft of the research questions
 was shared with the ERP Steering Committee for feedback. This led to revisions and
 confirmation that the focus in Phase 1 will be on the coordination, financing, and
 information questions.
- 2. **Design of tools.** Tool development will include the creation of semi-structured interview questionnaires for national key informant interviews, structured by three groups of participants: core ERP coordinators, education development partners, and education in emergencies implementers.
- 3. **National-level data collection.** This will involve the qualitative interviews discussed in Sections 5.4.2, as well as collecting documents and data on the set-up and implementation of the ERP. Data collection will take place in April and May.
- 4. **Analysis and writing.** The analysis and writing will be conducted in May and June, including quality assurance processes in July.
- 5. **Dissemination and discussion** will take place in July.

6.3 Steps for further phases of Maintain

Due to changes in the policy and funding environment for the ERP, we expect the research agenda to evolve after each phase. Reflection and sharing events with key stakeholders to feed back findings from each research cycle will help refine the focus of questions for the coming phase and ensure that the research remains operationally relevant. These events and related documentation will be carefully aligned to support the annual – and other – reviews of the ERP led by the Secretariat, and the revisions to the ERP expected during each year of implementation. The evolutionary approach to our research design means that we are clearer about the questions and approach we want to adopt in Phase 1 than those we will adopt in later phases.

The latter part of each phase will involve dissemination and discussion of results, which will also provide an opportunity to reflect and narrow the plan for the next phase. This process will involve the following activities:

- Testing and confirming the research questions of interest to stakeholders. These may stick to the secondary research questions set out in Section 5.2 and ordered at the start of this chapter; however, the findings, or emerging priorities, issues, or shocks, might lead to a new prioritisation of research questions.
- Based on the research questions, confirming the scope and level of the questions (for example, whether they are to be answered at national or district level, and what type of sampling would be appropriate to answer the questions).

From here, the research team will develop a short research plan for the forthcoming phase, which sets out:

- the research questions to be answered in the phase;
- the secondary data sources and analysis to be used;
- primary data collection, including
 - sampling in terms of cases/sites (which districts or settlements, and why) and respondents
 - o instrument types
- the timeline for the phase; and
- proposed products

Before the start of data collection activities the research team will create (and refine existing) data collection tools related to that phase's research questions. National and district-level data collection will then be executed accordingly, followed by analysis and reporting on findings. We expect that findings from the study in late 2020 (Phase 2) and early 2021 (Phase 3) will specifically be utilised to inform the development of ERP2.

As mentioned above, Phase 5 is not anticipated to involve substantial new data collection or analysis. Instead, it will be used to continue research uptake and promote the utilisation of findings, and to monitor and document the success of the research in feeding into practical changes. A small amount of the budget will be retained for any final mop-up analysis or synthesis of work from the first four phases.

6.4 Workplan

The proposed workplans for Years 1, 2, and 3 of the Maintains study are set out below.

Figure 6: Workplan for Year 1

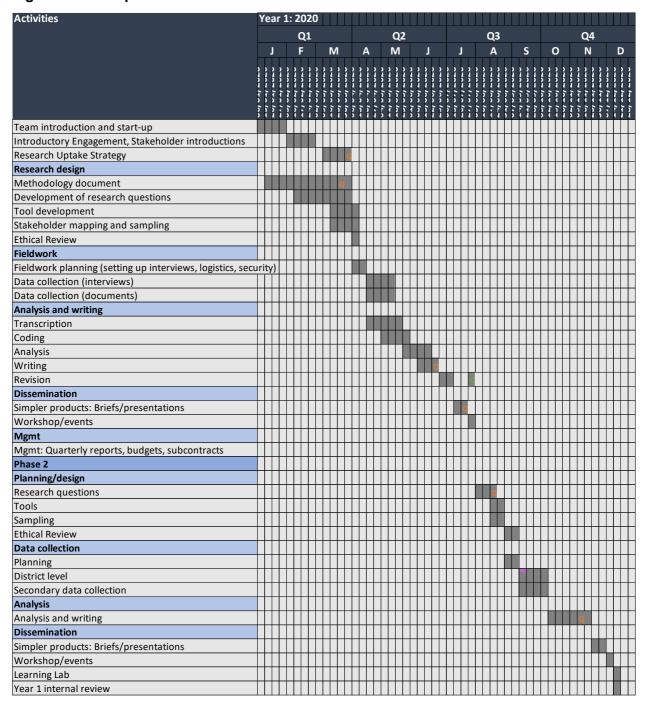


Figure 7: Workplan for Years 2 and 3

Activities	Year 2: 2021						Year 3: 2022																
	Г	Q1 Q2		Q3			Q4			Q1		Q2		Q3			Q4						
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	J	F	Ν	/ A	N	J.	J A	\ S	o	N	D	J	F	N A	4 I	۷J	J	A S	S O	N	D		
Phase 3																							
Planning/design		q																					
Data collection																							
Analysis and writing					q																		
Dissemination																							
Mgmt: Quarterly reports etc																							
Phase 4																							
Planning/design							q																
Data collection																							
Analysis and writing										q													
Dissemination																							
Mgmt: Quarterly reports etc																							
Phase 5																							
TBC													q					(

7 Ethical considerations, study approval, and informed consent

7.1 Principles of ethical research

As with all OPM research, the qualitative primary data collection will follow a set of ethical principles in conducting fieldwork, based on our own experience as well as best practice standards and DFID and European Union evaluation policy. We will review best practice to inform the design and protocols of fieldwork and data use, based on those used in OPM's other education evaluations, those used by other research organisations in Uganda, and guidance from organisations specialising in children's rights (e.g. Save the Children, see Boyden and Ennew, 1997), research (Open University, [no date]; US Department of Health and Human Services, 2009) and development (DFID, 2011).

There are three basic ethical principles of research with human subjects, as set out in the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1979):

- 1. Respect for persons: This means the prospective participants should be given the information they need to decide whether or not they want to participate, and they should be given the freedom to decide not to participate or to stop at any point.
- 1. Beneficence: This principle requires that no harm is caused by the research.
- 2. Justice: Justice requires that individuals and groups are treated fairly and equitably.

7.2 Protocols for ethical research

The principles set out above will be translated into protocols for working with interview and focus group respondents.

- Informed consent: This means that potential respondents will be given enough information about the research, and that the researchers will ensure that there is no explicit or implicit coercion, so that potential respondents can make an informed and free decision on their possible involvement in the fieldwork. Respondents will be informed that their participation is fully voluntary, and that they can withdraw from the survey at any time. Specific consent will also be sought from all participants before recording focus group discussions or key informant interviews.
- Adult participants will be given an informed consent form to read and sign. If minors are
 included in the study (e.g. children in selected schools) their parents will be asked to sign
 a consent form giving their consent for their children to participate in the study. Parents
 who are illiterate will have the form read and explained to them. The consent form will be
 written in English and translated into the local language before use; the consent
 statement will be read in either English or the local language. Completed consent forms
 will be stored at an office in Kampala.
- Clarifying purpose: The researchers will always clearly introduce themselves to all participants and explain, in a way that is easily understood by all, the purposes of the research and what will be done with the information provided by participants, to moderate expectations regarding what participants 'gain' from joining the research. No

- financial compensation is expected to be provided to individual participants, but refreshments may be offered during group sessions.
- Anonymity: Given that the research respondents will share their personal opinions with us, it will be our responsibility to ensure that their confidentiality is maintained, and their personal information is protected. This will be operationalised by ensuring that all datasets are anonymised, in the sense that all names of people are removed before the data are shared publicly. Furthermore, participants will be interviewed in a quiet place where others cannot hear their responses. These principles are intended to avoid any social risk from views being overheard by others in their community or those above them in the reporting line, and should allow respondents to speak more honestly.
- **Ensuring the safety of participants:** This means that the environment in which the research is conducted will be physically safe.
- Particular care will be taken in our engagement with children. At present we do not foresee conducting any primary research with children in refugee or host communities as the research questions relate more to the coordination and policy levels. However, if this changes, it is important that children are treated with care and respect, and given full opportunity to decide to opt out of the work. The fieldworkers carrying out the interviews will be trained on the ethics of working with children ensuring a safe and private space for their participation, letting them ask questions, making it clear it is fine for them to leave a question or leave the interview entirely, and keeping responses confidential and anonymous verbally but also by carefully handling the data collected. No responses will be coerced participants will be free to not respond. We will also follow OPM's Safeguarding Policy.
- Minimising burden or reward: There will be no notable benefit or burden (except time)
 of taking part in the research, and all participants will be subject to the same benefits and
 burden.
- All fieldworker training will cover the principles of research ethics and respecting
 cultural sensitivities. OPM's evaluations respect any differences regarding culture,
 local behaviours and norms, religious beliefs and practices, sexual orientation, gender
 roles, disability, age, ethnicity, and other social differences, such as class, when planning
 studies and communicating findings. We will endeavour to include research participants
 who may be vulnerable, or marginalised participants, in the research.

7.3 Ethical oversight

Ethics oversight for this study will come from the ERP Secretariat and MoES. Given that the study respondents will largely be government, donor, and implementing partner stakeholders, we do not expect any ethical issues to arise in our study that would pose a need to seek study approval from an institutional review board (IRB). Currently, we only intend to interview officials (from the government, education development partners, and implementing partners). If we decide to collect data from school and community respondents, including children, we will obtain approval from a Uganda-based IRB within the study year when that data collection takes place. Additional approval can also be sought from a review board at OPM, though this would not replace approval from a Ugandan IRB, in accordance with local laws and requirements.

Results and study updates will be shared with the Secretariat, as well as DFID, on a regular basis.

7.4 Risks to subjects

We expect no physical, psychological, social, or legal risks to respondents. The main risk is of a breach of confidentiality. This risk will be mitigated by storing all identifiable data securely using encrypted, password-protected files, and by anonymising data (removing participant names) prior to analysis. If at any point monitoring shows any potential harm to participants as a result of participation in the study, we will consult DFID immediately on further measures, including potentially halting the study. As noted above, we have no reason to believe that there will be any risks to our participants. At all stages of our research agenda, we will comply with OPM's safeguarding policy and procedures.

7.5 Data management

We will protect subject privacy by storing all identifiable data in encrypted form with password controls. Other than names and contact information, no sensitive information will be gathered. Hard copy data will be stored at an office in Kampala in a locked room. Soft copy data will be stored on an online server that is encrypted and password protected. This office has security, including guards and a gate. The Country Lead will be responsible for data security and only the researchers and research assistants will have access to respondent information. The paper forms containing the data will be destroyed three years after the completion of the study, while the electronic records will be anonymised and stored in a research data repository.

8 Limitations of the study

A number of limitations and potential risks have been identified; where possible, they will be mitigated. This section sets out the most prominent limitations.

8.1 Use of secondary data and sources

The study will make substantial use of secondary data sources, and thus the availability of these may impose a limitation on the study, given that these documents must be sourced from primary respondents. We will work closely with the ERP Secretariat, Steering Committee, and MoES officials to secure authorisation to gather these materials, and we will request their support with accessing sensitive documents.

8.2 Qualitative data collection methods

Some standard limitations of qualitative research are the following:

- Social desirability bias: Any research risks response bias, in particular with regard to questions that respondents may interpret as having a 'correct answer'. This is because the research itself may influence the way in which respondents answer questions or speak about the programme, due to power imbalances and the perceived need to say what is expected, rather than what may be the case. The research will mitigate this through triangulating the data using responses from multiple respondents and different instruments. Our researchers will also be trained on the need for the unbiased delivery of instruments. In addition, the researchers will try to put respondents at ease and emphasise that the purpose of the study is not to penalise or directly benefit either them or the programme but to understand perspectives and changes.
- Recall bias: Some of our questions will relate to aspects of implementation which
 happened in 2018 and 2019. This creates space for recall bias, particularly when
 reflecting on programme activities and colleagues' behaviour. Again, a triangulation
 approach attempts to mitigate this, by cross-referencing responses and with sufficient
 coverage to reach a saturation point. In addition, the researchers will conduct detailed
 and clear probing on programme phases and activities.
- Language: For data collection at district level or lower, instruments will need to be
 translated into local languages. For the fieldwork, we may need to train and use
 enumerators with fluency in these local languages, rather than using our core research
 team. This will require more substantial training, with discussions around terminology,
 phrasing, and translation to ensure they have an understanding of the research themes
 if direct translation does not lead to clear understanding on the part of participants.
- Sampling: Qualitative research does not seek to be representative of a population and
 to provide statistical validity in the same sense as quantitative findings but rather
 represents a specific type of experience and provides evidence on different experiences,
 pathways, and contexts. If a small and random sample of case sites (e.g. settlements) is
 chosen, this method's strength is to understand each case (in this case a settlement) in a
 complete and holistic way. The risk of visiting atypical settlements and gaining an
 incorrect or incomplete understanding of the relevant processes remains, but will be

mitigated by visiting different types of settlements in different districts, and by paying close attention to ways in which the context of each settlement may be atypical. Alternatively, purposive sampling could be used to select a settlement where the coordination of partners is said to have been successful, and another where coordination has not been successful, in order to present 'atypical cases'. In this case, the information used to make the selection will be critical to then making valid inferences and conclusions.

• Target respondent availability: A large number of respondents at national level will be staff of international organisations or on secondments/fixed-term contracts. Taken together, this means that there is likely to be high turnover of key respondents during the period of the ERP and of the Maintains research. Indeed, the ERP Secretariat was not fully staffed until late 2019 and thus these respondents were not part of the initial ERP design and set-up process. As the ERP will finish in mid-2021, some of these respondents may not be available to participate in Phases 4 or 5.

8.3 Research interfering with the ERP's implementation

The research specifically aims to feed into the implementation of the ERP and to help to improve its structures and processes. Furthermore, the process of collecting data through interviews may itself cause stakeholders to reflect on their actions and change their behaviours. In this regard, the research may inadvertently become part of the intervention itself. The study must balance such factors throughout its duration.

8.4 Complexity of the intervention

Given the complexity of the intervention, it may be very difficult to trace the mechanisms which lead from information, coordination, and financing to delivery and outcomes. This is due to the various confounding factors (exogenous events and factors that lead to changes in the way key partners work or in the refugee and host communities), and the challenge of securing high-quality information on the processes taking place.

8.5 External shocks or changes in priority

The global crisis caused by COVID-19 has been a reminder for all of the fragility of our work and the importance of the Maintains programme, which seeks to understand response and resilience to this sort of shock. Nonetheless, it could cause severe challenges for the implementation of the study in its current design. Uganda's schools have been closed since March and a relatively heavy set of restrictions are in place on movement. Phase 1, which lasts to July 2020, is intended to focus on interviews with national-level stakeholders, and thus this can largely go ahead through remote calls. However, it is likely that it will be harder to get hold of all the respondents that were initially intended. Nevertheless, a quorum should be possible, with support from the ERP Secretariat. In addition, we will use this opportunity to add a small number of questions about the COVID-19 response in the context of the ERP and refugee and host communities. However, if restrictions continue into August 2020 and beyond, the research at district level will likely not be able to go ahead in its current plan. In this case, it may make sense to re-order the phases and put more weight on secondary data analysis and the questions around delivery and outcomes.

9 Research team

The research will be conducted by OPM in collaboration with Ichuli Consulting, based in Uganda. There will be five core team members:

Victoria Brown - Country Lead

Victoria is Managing Director and Lead Technical Adviser for Ichuli Consulting and Ichuli Institute, two firms dedicated to educational research and programme development in partnership with governments and civil society organisations in southern Africa. She has experience in education programming and systems strengthening, research, M&E, and learning systems development.

Victoria will be responsible for ensuring the delivery of the research, technical assistance, and research uptake activities of the Maintains Uganda Education programme is on time, within budget, and within scope. She will be responsible for the quality assurance of activities, and ensuring compliance with ethical requirements. Tori will also be the operational focal point for DFID Uganda and other stakeholders in Uganda. Through Ichuli, Tori will be responsible for managing fieldwork logistics, resourcing transcription of qualitative interviews, and the production of communications products.

Dr Robinah Kyeyune - Principal Investigator (PI)

Robinah is a senior education professional with over 30 years' experience in education policy and development work, as well as M&E of education practices and projects. She has worked with MoES, donors, and research and consultancy institutes, with a focus on improving the quality of teaching and learning in Uganda. She previously served as the Head of the Department for Humanities and Language Education at Makerere's School of Education.

As PI, Robinah will be responsible for the overall delivery of the research and the uptake of research findings in Uganda, including liaison with the ERP Steering Committee, Secretariat, Government of Uganda, and DFID Uganda. With guidance and support from the Country Lead, as PI, Robinah will lead the detailed design of methodologies and workplans for each phase. She will then lead the delivery of the research, which is likely to include conducting some primary research, analysis, and writing.

Richard Kibombo - Research officer - evaluation specialist

Richard is an evaluation specialist and has a Master's of Science degree in statistics from the University of Wisconsin, Madison, USA, and a Bachelor's of Statistics degree from Makerere University, Kampala, Uganda. He has vast experience of research and evaluations, as well as data management and analysis of both qualitative and quantitative data. He has conducted a number of multi-disciplinary and multi-country studies and evaluations in diverse fields, especially in the areas of health and education.

Richard will support Robinah in finalising the methodologies for each phase, and conducting and delivering the research and research uptake. He will conduct primary data collection at national and district level, qualitative and quantitative analysis, and report drafting.

Nicola Ruddle - Education specialist and project manager

Nicola is a senior education consultant at OPM and manages OPM's Education Financing team. She has experience in mixed methods evaluations of education programmes, as well as diagnostic and costing work. She has conducted qualitative research for the Global Partnership for Education as well as DFID Tanzania.

As OPM's project manager for the study, Nicola will be accountable for delivery and ensuring the objectives of the study are met to the quality standards upheld by OPM. As an education specialist, she will provide technical inputs across the design stages, and contribute to analysis and drafting as appropriate.

Nabil Hudda - Qualitative researcher and assistant project manager

Nabil is an assistant consultant at OPM, specialising in qualitative research. In the education sector, he has conducted M&E analysis for the annual Secondary Grade Learning Assessment survey in Sierra Leone for the DFID-funded Leh wi Lan project. He later managed, and provided technical inputs to, the qualitative deep-dive study for the same project.

Nabil will support the smooth running of the study in all aspects, including design of instruments and fieldwork, supporting primary data collection, qualitative analysis, and drafting. In addition, he will support the project management requirements of the project.

Bibliography

- Bartholomew, L.K. (2016) *Planning Health Promotion Programmes: An Intervention Mapping Approach*, 3rd ed., Jossey-Bass, San Francisco, CA.
- Beach, D. and Pedersen, R.B. (2013) *Process-Tracing Methods*, University of Michigan Press, Ann Arbor.
- Beach, D. and Pedersen, R. B. (2016a) *Causal Case Studies: Comparing, Matching and Tracing*, University of Michigan Press, Ann Arbor.
- Beach, D. and Pedersen, R. B. (2016b) 'Case selection techniques when studying causal mechanisms as systems', *Sociological Methods and Research* 47(4), online first.
- Beach, D. and Rohlfing, I. (2015) 'Integrating cross-case analyses and process tracing in set-theoretic research: Strategies and parameters of debate', *Sociological Methods and Research* 47(1), online first.
- Beach, D. (2019) *Process-Tracing Methods in Social Science*, Oxford University Press, Oxford.
- Bennett, A. (2008) 'Process-tracing: A Bayesian perspective', in *The Oxford Handbook of Political Methodology*, Oxford University Press, Oxford, pp. 702–721.
- Bennett, A. (2010) 'Process tracing and causal inference', in *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, 2nd ed., Rowman and Littlefield, Lanham, MD, pp. 207–19.
- Bennett, A. (2014a) 'Process tracing with bayes', *Qualitative and Multi-Method Research*, Spring issue, pp. 46–51.
- Bennett, A. (2014b) 'Appendix', in *Process Tracing: From Metaphor to Analytic Tool*, Cambridge University Press, Cambridge UK.
- Bennett, A. and Checkel, J. (2014) *Process Tracing: From Metaphor to Analytic Tool*, Cambridge University Press, Cambridge UK.
- Bennett, A. and Checkel, J.T. (2015) 'Process-tracing: From philosophical roots to best practices', in *Process-Tracing*, Cambridge University Press, New York, pp. 3–37.
- Berwick, D.M. (2008a) 'The science of improvement', *Jama-Journal of the American Medical Association* 299(10), pp. 1182–1184.
- Bess, G. (2004) 'Process evaluation: how it works', *American Indian Alaskan Native Mental Health Research* 11(2), pp. 109-120.
- Blazeley, P. (2012) 'Integrative analysis strategies for mixed data sources', *American Behavioral Scientist* 56(6), pp. 814–828.
- Bonell, C, Oakley, A et al. (2006) Process evaluation in randomised controlled trials of complex interventions, British Medical Journal, London.
- Boyden, J. and Ennew, J. (eds.) (1997) *Children in Focus A Manual for Participatory Research with Children*, Save the Children Sweden, Stockholm.
- Collier, D. (2010) *Process Tracing: Introduction and Exercises*, Department of Political Science, University of California, Berkeley.
- Collier, D. (2011) 'Understanding process-tracing', *PS: Political Science & Politics* 44(4), pp. 823–830.
- De Silva, M. (2014) 'Theory of change: a theory-driven approach to enhance the Medical Research Councils' framework for complex interventions', *Trials* 15, p. 267.

- DFID (2011) *DFID Ethics Principles for Research and Evaluation*, retrieved from www.gov.uk/government/publications/dfid-ethics-principles-for-research-and-evaluation
- Falleti, T. (2006) 'Theory-guided process tracing in comparative politics: Something old, something new', *APSA-CP: Newsletter of the American Political Science Association* 17(1), pp. 9–14.
- Fearon, J. D. (1991) 'Counterfactuals and hypothesis-testing in political science', *World Politics* 43(2), pp. 169–195.
- George, A. and Bennett, A. (2005) *Case Studies and Theory Development in the Social Sciences*, Belfer Center Studies in International Security, The MIT Press, Cambridge, MA.
- Glasgow, R.E., Lichtenstein, E. and Marcus, A.C. (2003) 'Why don't we see more translation of health promotion research to practice? Rethinking the efficacy-to-effectiveness transition', *American Journal of Public Health* 93(8), pp. 1261–1267.
- Hall, P. A. (2013) 'Tracing the Progress of Process-tracing', *European Political Science* 12(1), pp. 20–30.
- Hawe, P. (2004) 'Complex interventions: how "out of control" can a randomised control trial be?', *BMJ online* 328(7455), pp. 1561–1563.
- Jansen, Y.J.F.M., Foets, M.M.E. and de Bont, A.A. (2010) The contribution of qualitative research to the development of tailor-made community-based interventions in primary care: are review, *The European Journal of Public Health*.
- MRC (2008) 'Developing and evaluating complex interventions: the new Medical Research Council guidance', MRC, United Kingdom.
- Moore, G. (2014) 'Process evaluation of complex interventions', UK Medical Research Council Guidance, MRC Population Health Science Research Network, London.
- National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (1979) 'The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research. Department of Health, Education, and Welfare', retrieved from www.hhs.gov/ohrp/humansubjects/guidance/belmont.html.
- Open University (no date) 'Ethics Principles for Research Involving Human Participants', retrieved from https://www.open.ac.uk/research/main/sites/www.open.ac.uk.research.main/files/files/OU%20Ethics%20Principles%20for%20Research%20Involving%20Human%20Participant.pdf.
- Oxfam (2011) *Process Tracing: Draft Protocol*, Oxfam GB, retrieved from www.betterevaluation.org/en/resources/guide/process-tracing_draft_protocol
- Pawson, R. and Tilley, N. (1997) Realistic Evaluation, Sage, London.
- Public Health England (2018) 'Process Evaluation Guidance', retrieved from www.gov.uk/government/publications/evaluation-in-health-and-well-being-overview/process-evaluation.
- Punton, M. and Welle, K. (2015) 'Straws-in-the-wind, hoops and smoking guns: What can process tracing offer to impact evaluation?', *IDS CDI Practice Paper* 10.
- Ricks, J. I. and Liu, A. H. (2018) 'Process-tracing research designs: a practical guide', *American Political Science Association* 51(4), pp. 842–846.
- Rogers, M. (2008) 'Using programme theory to evaluate complicated and complex aspects of interventions', *Evaluation* 14.

- Slater, D. and Wong, J. (2013) 'The strength to concede: ruling parties and democratization in developmental Asia', *Perspectives on Politics* 11(3), pp. 717–733.
- Slater, D. and Ziblatt, D. (2013) 'The enduring indispensability of the controlled comparison', *Comparative Political Studies* 46(10), pp. 1301–1327.
- Uganda Bureau of Statistics (2017), retrieved from https://www.ubos.org/publications/statistical/20/
- UNHCR (2019) 'Uganda Country Refugee Response Plan, January 2019 December 2020', revised in March 2020.
- US Department of Health and Human Services (2009) *Code of Federal Regulations TITLE* 45 *Public Welfare*. 'PART 46. Protection of human subjects', retrieved from www.hhs.gov/ohrp/policy/ohrpregulations.pdf.
- Van Evera, S. (1997) *Guide to Methods for Students of Political Science*, Cornell University Press, Ithaca, NY.
- Waldner, D. (2015) 'What makes process tracing good? Causal mechanisms, causal inference, and the completeness standard in comparative politics', in *Process-Tracing*, Cambridge University Press, New York, pp. 126–152.
- White, H. and Phillips, D. (2012) 'Addressing attribution of cause and effect in small-n impact evaluations: Towards an integrated framework', *Working Paper 15*, 3ie.
- WK Kellogg Foundation (2004) Logic Model Development Guide: Using Logic Models to Bring Together Planning, Evaluation and Action, WK Kellogg Foundation, Battle Creek, MI.
- Zaks, S. (2017) 'Relationships among rivals (RAR): A framework for analyzing contending hypotheses in process tracing', *Political Analysis* 25(3), pp. 344–362.