



Our impact story

Mary's Meals' Impact Assessment Report

**mary's
meals**

a simple solution
to world hunger

Forewords

In our many years of working in partnership with communities to deliver school feeding programmes, we have seen first-hand the immediate impact of providing a daily meal in a place of learning for some of the world's most vulnerable children. Although we regularly monitor indicators of our impact as part of our ongoing operations, this research was designed to provide a long-term, robust understanding of the impact of our work. It also gave us the opportunity to learn more about our approach to school feeding, including areas of strength and improvement and refinement opportunities.

We are very grateful to the many people who worked hard to design and deliver the impact assessment research and results. Most of all, we thank the hundreds of children, teachers and community members who so generously provided their input. As always, we learn so much from those children and communities we are privileged to serve. It is clear from this report that the efforts of all those involved in making our work possible – particularly the tens of thousands of community volunteers who give their time to ensure our school feeding programme is delivered – are having a far-reaching effect.

Looking forward, our findings and learnings give further motivation to the global Mary's Meals movement to continue working towards our vision that every child receives one daily meal in their place of education. These meals provide a strong foundation, allowing many more children to concentrate on their studies and grow up to become women and men who lift themselves and their communities out of poverty.

Graeme Little, Director of Programmes, Mary's Meals International

At the outset of Mary's Meals' five-year impact assessment research, I visited Malawi and Zambia, where I was able to see the schools and children and to observe the researchers first-hand. Over the course of the remaining research period, I revisited both Malawi and Zambia and during 2017 I was able to observe data collection in Liberia. The work of Mary's Meals is now more important than ever and, despite the challenges faced during the global pandemic, the excellent in-country teams have continued to feed children – now reaching more than 1.8 million children every school day.

My role throughout these past five years has been to validate the research processes of measuring the impact of the feeding programmes and provide a sounding board for the researchers to check their decision making. The research team has used quasi-experimental methodology throughout, collecting comparable data from schools in the ever-growing feeding programme and a rolling control group of schools. The data has been statistically verified and triangulated by multiple stakeholders and data-collection methodologies. As well as visiting the three countries, I have worked with the team remotely and am happy to endorse their research methodology and findings.

Readers of this report will be able to see the success of Mary's Meals in not only reducing hunger in schools but the impact this has had on the children and their families with improved health and wellbeing as well as increased attendance at school. It has been a pleasure to work closely with the team at Mary's Meals over the past five years and to witness the impact that the programme has on improving the lives of some of the most deprived young people in Africa.

Anne Garbutt, Research Associate, INTRAC

INTRAC is a UK-based non-profit organisation that builds the skills and knowledge of civil society worldwide to be more effective in addressing poverty and inequality. INTRAC does this through consultancy work, the provision of training as well as promoting research, analysis and reflection on key civil society topics.

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All images used in this report are from our school feeding programmes in Malawi, Zambia and Liberia, courtesy of Esme Allen, Kate Holt, Chris Norman, Michael Schofield, Chris Watt and Mary's Meals' staff.

Executive summary

In 2014, we set out to understand the impact of the Mary's Meals school feeding programme in two of our largest country programmes: **Malawi** and **Zambia**. We used a quasi-experimental research design over five years, with both programme schools and control schools, and included a baseline prior to when feeding began at the programme schools.

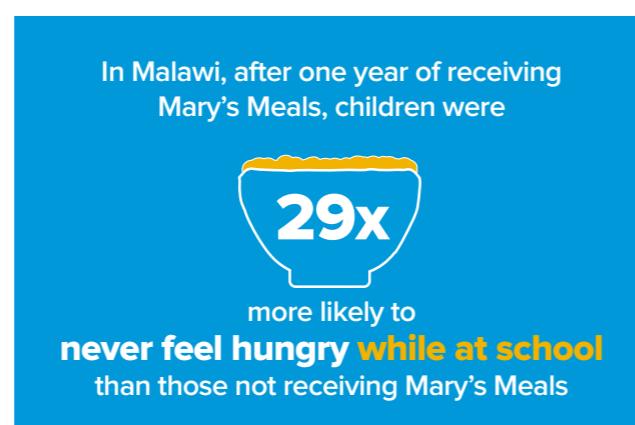
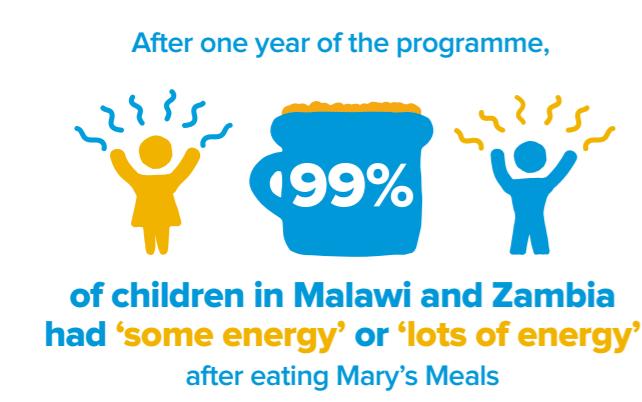
To ensure that all schools benefited from Mary's Meals, all control schools were incorporated into the Mary's Meals programme within one to two years (and were subsequently dropped from the research) and new, replacement control schools were added throughout the five years.

In Malawi and Zambia there were a total of **15,258 surveys**, **407 focus groups** and **87 interviews** of children, teachers, householders and volunteers conducted over the span of the five-year assessment, with data collected annually. In 2017, we added a third country – Liberia – to supplement our findings and expand our understanding in a very different country context.

Mary's Meals' school feeding programme significantly impacts child hunger, energy and wellbeing, increases school enrolment and improves attendance, and contributes to positive educational outcomes for children.

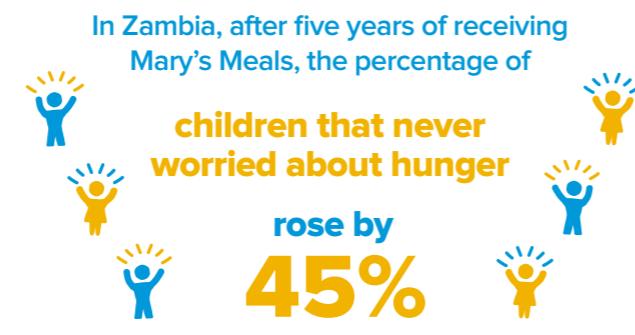
CHILD HUNGER AND ENERGY

Mary's Meals reduces hunger for both boys and girls, giving children energy at school. Hunger is reduced within the first year of the programme and our impact on hunger is sustained over time.



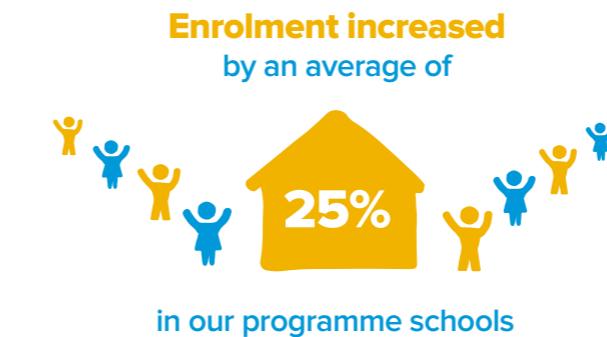
CHILD WELLBEING

Mary's Meals significantly reduces children's worries about being hungry and helps them to feel happier at school. Programme volunteers also worry less about their children being hungry.



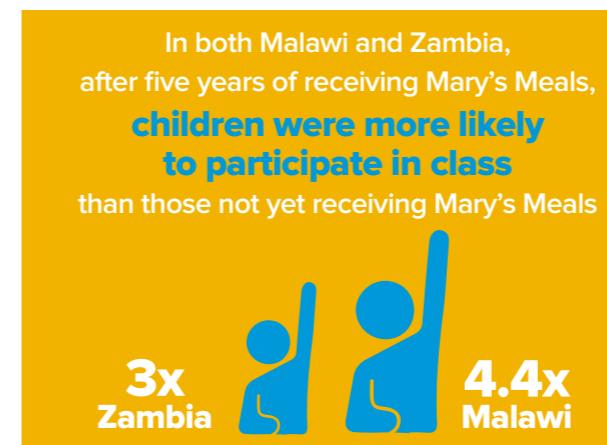
ACCESS TO EDUCATION

Mary's Meals increases school enrolment and improves attendance. In schools where our meals are served, far fewer children leave school early because of hunger.



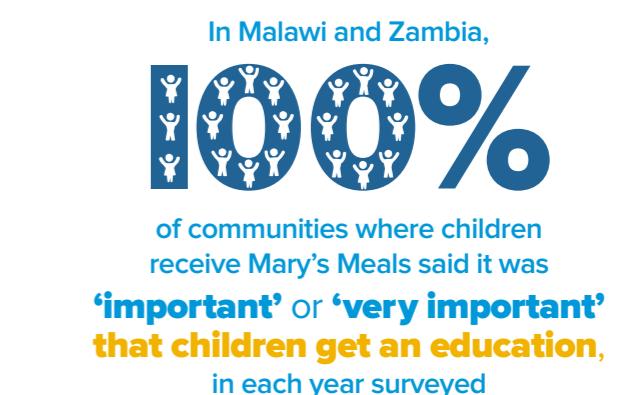
ENGAGEMENT AND PROGRESSION IN EDUCATION

Mary's Meals helps children to concentrate in class and makes them more able to participate in lessons.



COMMUNITY SUPPORT AND OWNERSHIP

Mary's Meals works in schools where community support for education is consistently high and actively engages volunteers in the school feeding programmes.



These results confirm that **a daily meal in a place of education has real and significant impacts for children**, and that these are evident within the first year and maintained over the five years. Our research also confirms and provides evidence for key aspects of our approach to school feeding at Mary's Meals. The findings demonstrate that our approach of providing a meal consistently, every day, achieves **positive outcomes for children's hunger, energy and wellbeing**. Our approach relies on community volunteers to serve meals each day and the communities we work with show a consistent commitment. This commitment is vital for a long-term, sustainable school feeding programme.

At Mary's Meals, we are committed to continually learning and improving so that we can be good stewards of the resources entrusted to us, keep our promise to each child, and reach the next child waiting for Mary's Meals. **This Impact Assessment informed our work over the five years and has helped to identify key areas for further understanding or action in the future.**

Introduction: telling our story of impact

In 2014, we undertook an important initiative to more deeply evaluate the impact of the Mary's Meals feeding programme. Our experience, observations and small-scale research over many years told us that our work had made a difference to schoolchildren, and our field staff had shared many stories from the children, teachers, volunteers, and householders who they met in their day-to-day work. These individual stories were powerful and meaningful to the Mary's Meals family and motivated us to continue reaching children in need with a meal in their place of education.

With this five-year Impact Assessment, we endeavoured to design research that would robustly evaluate and understand this impact more broadly, as well as provide insights on how we could strengthen our work. As this was our first time embarking on a project of this size, from the onset, we chose to work with an external organisation to support and verify our work. We partnered with INTRAC, a respected organisation with extensive experience in supporting impact assessment.

From 2014 to 2019, we systematically collected data in two of our largest programme countries – Malawi and Zambia – from children, teachers, volunteers, and householders. In 2017, we added a third country – Liberia – to supplement our findings and expand our understanding in a very different country context. The project was designed and led by the Mary's Meals International (MMI) team, with input and data collection led by our staff teams in Malawi (MMM), Zambia (MMZ) and Liberia (MML).

This summary report is a part of the culmination of this project, drawing on data collected over the five years, and telling the story of the impact of our work in a new way, through robust research findings from Malawi and Zambia, with some added highlights and learnings from Liberia. The report provides an overview of what we did, why we did it, and what we found. We also provide some considerations that affected the research, and some that have led to changes in how we do our work.

The findings of this project have, and will continue to, strengthen how we carry out our work. We are using the findings to reflect on and improve our programming, to ensure that we are keeping our promise to each and every child. We will continue to build on this work in the years ahead, both through continued monitoring of our programmes and by delving deeper into some of the questions that arose from this process. Most importantly, the process of and findings from this work have strengthened our resolve to keep our promise, as they clearly demonstrate the importance of Mary's Meals to the children we serve.

About Mary's Meals

Our vision is that every child receives one daily meal in their place of education and that all those who have more than they need, share with those who lack even the most basic things. It is our mission to enable people to offer their money, goods, skills, time, or prayer, and through this involvement, provide the most effective help to those suffering the effects of extreme poverty in the world's poorest communities. We believe in good stewardship of resources entrusted to us.

We deliver high quality school feeding programmes across sub-Saharan Africa, Asia, Latin America, the Caribbean, and the Middle East, working towards the goal that classroom hunger is reduced by providing a meal to every child in every school that we support, every school day. By doing this we impact on the lives of children by supporting them to access, engage in, and progress within education.

We rely on the support of volunteers and our aim is that, through participation in our school feeding programmes, community support for education also grows. This works towards our long-term goal of increasing contribution and promoting replication of our programmes by local communities and/or governments.

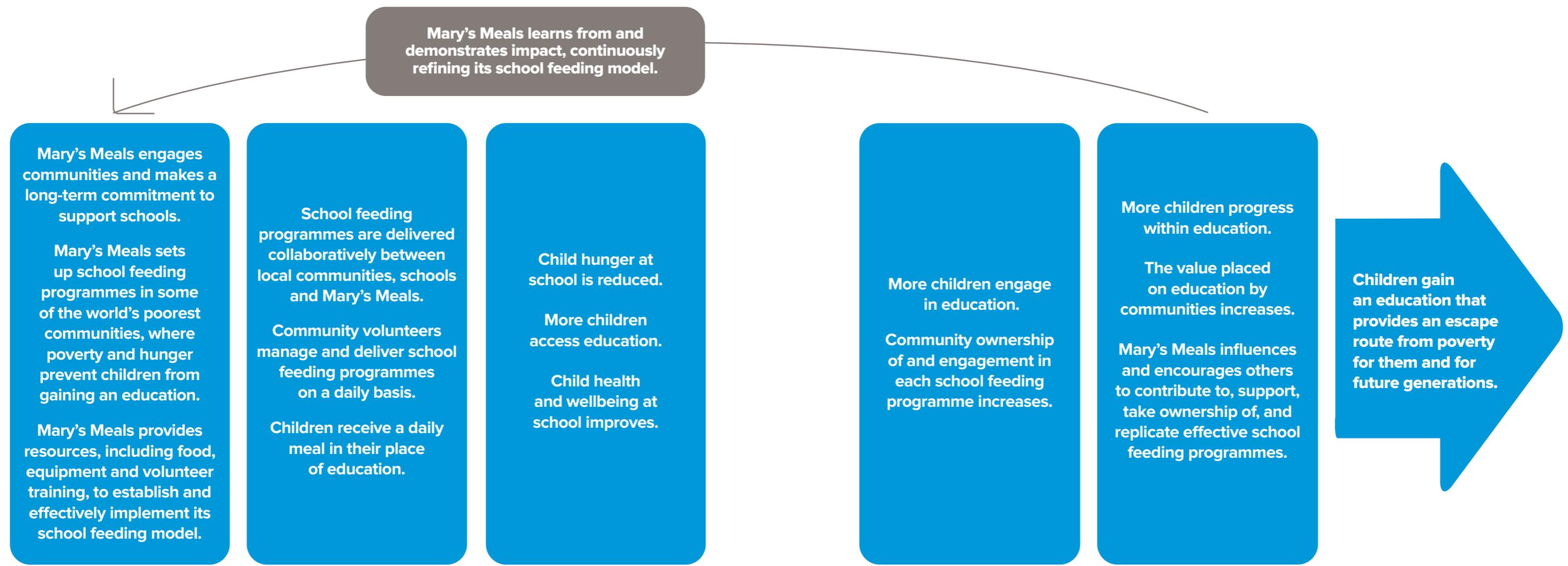
Each school and local community are equal partners with Mary's Meals in the delivery of the school feeding programme. Once food is delivered to the schools, the school and volunteers are responsible for storing and preparing the food and serving the meals to the children. Mary's Meals provides training, guidance and practical support to the schools and communities to ensure that the school meals programme is well-managed, inclusive, and meets safety and hygiene standards. A Mary's Meals School Feeding Officer (SFO) visits each school twice a week to monitor the programme delivery and to support the school and community in addressing any problems that have arisen. Throughout this report, when we talk about volunteers, we are referring to the people who cook and serve the school meals.



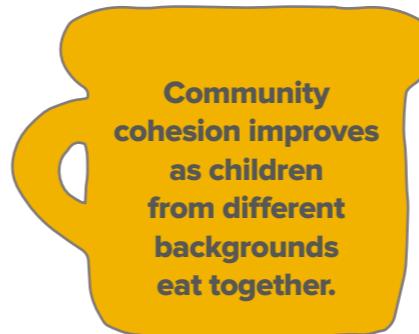
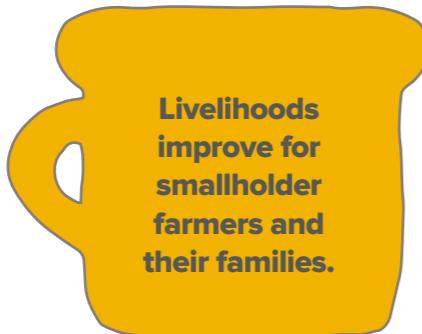
Our Theory of Change: how Mary's Meals works

Developing our Theory of Change at the start of the impact assessment process allowed us to reflect on the difference we believe our programme is making and articulate how our simple idea of providing a daily meal in a child's place of education leads to positive outcomes for children, schools and communities.

Mary's Meals enables people to offer their money, goods, skills, time, or prayer, and through this involvement, provide the most effective help to those suffering the effects of extreme poverty.



Other benefits



Our **impact assessment research design** was based on **core outcomes** relating to our **Theory of Change**. The Theory of Change was built on what we expected to see, based on our experience of our own programmes and evidence from existing literature on school feeding.

We recognise that achieving these outcomes has the potential to lead to impacts beyond the five years of our Impact Assessment, and that there is a body of academic literature that links these outcomes with longer-term benefits for children into adulthood. However, for this study and in this report, we purposely chose to focus in on the outcomes that we, as Mary's Meals, could measure and confidently report on within the span of the Impact Assessment. In other words, we wanted to know the story of Mary's Meals' impact over five years.

In this report, we have organised the findings of research based on the following outcomes and indicators:

	Outcome 1: Reduces child hunger
<ul style="list-style-type: none"> CHILDREN: feeling hungry in school; likelihood of receiving food before school TEACHERS: children's hunger in school COMMUNITIES: children's hunger in school 	
	Outcome 2: Gives children energy
<ul style="list-style-type: none"> CHILDREN: energy after the school meal TEACHERS: children's energy after the school meal 	

	Outcome 3: Improves child wellbeing at school
<ul style="list-style-type: none"> Worry about hunger Child happiness 	

	Outcome 4: Helps more children access school
<ul style="list-style-type: none"> Changes in school enrolment Changes in attendance and absence (missing school / leaving school early) Children out of school 	

	Outcome 5: More children engage in school
<ul style="list-style-type: none"> Changes in concentration difficulties Changes in participation difficulties 	
	Outcome 6: More children progress through school
<ul style="list-style-type: none"> Drop-out rates Repeating years 	

	Outcome 7: The value placed on education by communities increases
<ul style="list-style-type: none"> Views about the importance of education 	
	Outcome 8: Community ownership and engagement in each school feeding programme increases
<ul style="list-style-type: none"> Parental/community involvement in school activities 	

Designing the Impact Assessment: our approach

Our approach was designed to be rigorous and comprehensive to ensure that our findings were robust; but also to reflect Mary's Meals' values and to inform our future work.

To achieve this, we used the following principles:

- **Child-focused**
- **Quasi-experimental design**
- **Mixed methods**
- **Multi-country/multi-context impact**
- **Commitment to ethical and safeguarding practices**
- **Continuous programmatic capacity building and learning**
- **Recognising power dynamics and reducing bias**



Child-focused

The welfare of children has always been, and will always be, our primary consideration. At Mary's Meals, we believe that we can and should be capturing feedback from children and learning from their valuable insights. It's children's lives our work aims to change for the better, and so to not include their views prominently in our research would mean overlooking the opinions and experiences of those most affected by the work we do.



For this reason, we spoke to children first and most often, and – from designing the surveys and discussion guides through to conducting the research itself – we sought to adapt our methods to ensure they were suitable and would enable children to feel capable and comfortable when sharing their opinions. Conducting this research with children at the centre, alongside the voices of parents, volunteers, local communities and school staff, has enabled us to gain a rich understanding of the outcomes of our school feeding programmes.

Quasi-experimental design

To ensure robust conclusions from our results, we used a quasi-experimental design.

A control group was used to gather data from children and communities not yet benefiting from Mary's Meals to demonstrate the change brought about by the introduction of the feeding programme against any natural changes that would have occurred over the period. On ethical grounds and in line with our child-centred approach, we chose to ensure that the schools and communities selected as control groups were identified as being part of upcoming programme expansions. This meant that while people in the control groups were not benefiting from Mary's Meals at the time, they would be part of our programme within two years. For this reason, we had 'rolling' control schools that changed every one to two years. To reduce bias during data collection, respondents at control schools were not aware they would soon be incorporated into the school feeding programme and externally hired researchers presented themselves as from our partner INTRAC, rather than Mary's Meals.

We also chose to conduct research from a baseline – a point in time just before Mary's Meals' school feeding programme had begun. This enabled us to look at whether any differences could be observed between before the programme had begun and once it had started.

PROGRAMME GROUP:

CHILDREN,
TEACHERS and
VOLUNTEERS

in **schools where the Mary's Meals programme was introduced** shortly after the research began (meaning we were able to collect baseline data for these schools before the programme intervention started).

CONTROL GROUP:

CHILDREN,
TEACHERS,
VOLUNTEERS and
HOUSEHOLDERS

where **Mary's Meals was not working** at the time of research.



Mixed methods

We collected both qualitative and quantitative data to document what was happening (mainly via quantitative data) and understand what that meant for children in schools and their communities (mainly via qualitative data). This approach also allowed us to validate, clarify, compare and contrast findings, and delve further into individual experiences of Mary's Meals' programmes, enriching our overall conclusions.

Multi-country/multi-context impact

It was important for us to capture whether, and to what extent, the outcomes of our school feeding programmes are influenced by country context. The two countries chosen for this research – Malawi and Zambia – were selected because of the scale of the programme in each country. It was important for us to consider more than one programme country, to understand the broader impact of Mary's Meals' programming. In each country, programme and control group schools were selected with the aim of being as representative as possible of the wider group of schools we were working in. Considerations for sampling have included school size, number of grade levels and school location (rural or urban). The additional research in Liberia was intended to get some perspective and provide a depth of understanding and considerations about our impact outside of the context of southern Africa.

Commitment to ethical and safeguarding practices

We believe that it is essential that the children we seek to support are protected from harm and can benefit from our programmes. We are fully committed to the rights of the child as stated in the United Nations Convention on the Rights of the Child (UNCRC) and we recognise our responsibility to ensure those rights are upheld. We also recognise the vulnerability of children in the contexts in which we work.

Our approach to safeguarding has been integrated within the research design and training. Research staff and enumerators were trained in and agreed to the Mary's Meals' child safeguarding policy and procedures as a condition of their employment contract.

Prior to data collection, Mary's Meals requested permission from the Ministry of Education in each country to undertake research. We also contacted the chosen schools to explain the research and request their permission to interview children, teachers and community members.

During the research process, the team implemented procedures to ensure the safety, security and privacy of participating children and adults.

These included, but were not limited to:

- Children and adults chose whether or not to participate in the surveys or focus groups and participants were able to stop the survey or focus group at any time if they felt uncomfortable with participating.
- Surveys and focus groups with children were undertaken with the written consent from a relevant responsible adult.
- When working with individual children, members of the research team remained within sight of another adult at all times.
- All survey and focus group responses were anonymised.

Continuous programmatic capacity building and learning

The approach was also designed to build the capacity of our in-country staff, with INTRAC advising and providing verification throughout the process. Our approach to capacity building included annual training on quantitative and qualitative research methods in each country, as well as in-the-field mentoring and support from MMI. Our Monitoring, Evaluation and Learning (MEL) teams in programme countries led the data collection process with support from our MMI staff. The data collection itself was conducted by enumerators, recruited from the local area and trained on quantitative and qualitative research methods. In some cases, data analysis was also done by our programme country staff, with support from the MMI team.

Throughout the data collection, we asked for and received programmatic feedback from participants. These school, regional and country specific findings were discussed with programme country MEL staff, who communicated our findings to the Head of Programmes in each country. This allowed us to monitor programmatic quality and instigated specific school visits or actions where necessary.



Recognising power dynamics and reducing bias

Since our mission is to ensure that meals are served in schools, we had to design and conduct the research in a way that recognised the potential for individuals to be hesitant to tell us when something was of concern. We were clear when speaking to research participants that we valued their voice and that their responses were confidential and would not be shared with the school. In programme schools, we assured them that their responses would have no effect on their ability to participate in the programme or have negative consequences on the continuation of the programme, so respondents would feel they could respond honestly, without fear of repercussions. They were informed that their responses could be used for programme improvement. Throughout the process, we looked at where there was a potential for bias, and mitigated to the extent possible. As an example, to eliminate the effects of hierarchy within teachers focus groups, we removed head teachers from the sessions and interviewed them separately. We involved in-country Mary's Meals staff in data collection and also hired independent local enumerators.

A benefit of recruiting local people to conduct the data collection was the element of trust between them and the children. It was important for children to be relaxed with the enumerators, so that they felt able to relay their honest experience of the programme.

Our partnership with INTRAC throughout was important to ensure the Impact Assessment gathered robust and – to the extent possible – impartial data. INTRAC supported MMI to design the research methods, supported sampling practices and conducted visits in 2015 and 2018 to observe and verify data collection. INTRAC was also involved in data analysis, as outlined in the section below.



Gathering the evidence: data collection and analysis

In Zambia and Malawi over five years

We carried out
15,258
surveys

We held
407
focus groups

We conducted
87 interviews
with CHILDREN, TEACHERS,
HOUSEHOLDERS and VOLUNTEERS

We collected data
every
single year

In the three years in Liberia, there were **5,821 surveys, 111 focus groups** and **52 interviews** of CHILDREN, TEACHERS, HOUSEHOLDERS and VOLUNTEERS, using a similar method and survey to one used in Malawi and Zambia.

Research tool	Data source	Sample size	Analysis and interpretation
Focus group	Student	305	Thematic coding using Nvivo
	Teacher	46	
	Volunteer	56	
Interviews	Students	38	Thematic coding using Nvivo
	Head Teachers	49	
Surveys	Students	9,767	Statistical analysis (student statistics independently verified by INTRAC)
	Teachers	3,226	
	Volunteers	1,624	
	Householders	641	

The same survey was used in all years and across both countries. The total sample size for surveys was calculated so that we could conduct statistical analysis based on a confidence level of 95 per cent and a confidence interval of five.

In each school, the research team used random selection to choose children from specified grades to participate in the surveys. To reach the required sample sizes for teachers and volunteers, the research team sometimes interviewed all available teachers and volunteers in the research schools.

Volunteers were considered to be any adult who participated in preparing, serving or otherwise volunteering for Mary's Meals in a school context.



In every school, children, teachers and volunteers were selected for focus group discussions. The qualitative data complements the survey data by providing rich contextual explanation, as well as opinion and feedback about the effectiveness of our programme.

Data analysis: understanding our data

Quantitative analysis

Data analysis was conducted by MMI staff. Additional statistical analysis was conducted by INTRAC on a sample of outcomes from the baseline, year one, and year five for the child datasets. We compared:

- **Control vs programme** – to understand what aspects were related to the programming and what were outside of programming control.
- **Year on year** – we compared year on year to see when the impact was greatest, and to look at factors that impacted our programming over time.
- **Gender and age** – we compared outcomes for boys and girls, or for different age groups of children.

For the child-specific indicators at baseline, year one, and year five, INTRAC conducted a mixed-effects logistic regression, with two levels of random effects. Variables used as regressors included age, gender, grade, dad, mum, brother, sister, groups and year.

Significant results are also analysed by their odd ratios and how likely the event is likely to occur given a certain characteristic, whether it's the programme group, their gender or who they live with.

Focus group and individual interviews were transcribed in each programme country. MMI staff then coded transcripts thematically using the software programme Nvivo for the expected indicators and outcomes, with flexibility to code any unanticipated outcomes. They were then analysed to understand trends in the data, and the story behind the quantitative data.

Data considerations and limitations

Work of this scope and length will have data considerations and limitations. We were working in two different country contexts, and sometimes with logistical challenges that delayed or challenged data collection. In some cases, data considerations or limitations impacted our results and the conclusions we could draw, and these are noted within the main findings sections.



Country overviews

Mary's Meals works in 19 countries around the world. Our five-year impact assessment research had a two-country focus – **Malawi** and **Zambia**.

Our shorter period of research in **Liberia** provided us with some further learnings about our programme and its impact in a different region of sub-Saharan Africa. Mary's Meals directly implements school feeding programmes in all three countries.



Malawi

Where we feed

Balaka, **Blantyre**, **Chikwawa**, Chiradzulu, Dedza, Dowa, Karonga, Kasungu, Likoma, Lilongwe, Machinga, Mangochi, Mchinji, Mulanje, Mwanza, Mzimba, Mzuzu, Neno, Nkhotakota, Nsanje, Ntcheu, Phalombe, Thyolo and Zomba.

Impact Assessment

Our research was conducted in **Blantyre** and **Chikwawa** between 2014 and 2019. There were five follow-up data collection points.

Mary's Meals in Malawi

- Malawi was the first country where we established a school feeding programme
- Feeding started in 2002
- We serve likuni phala (a fortified maize-soya porridge or 'Corn Soya Blend')
- In 2016, a devastating drought in Malawi left 6.5 million people (40 per cent of the population) facing severe food insecurity, which is likely to have affected children and households in both programme and control schools during our research
- The meal was served at about 10.30am (until 2016), and at 7am (after 2017)
- We serve meals in pre-schools, primary schools and some secondary schools
- In 2019, our final year of research, our Malawi programme was reaching:
 - 1,021,360 children
 - 982 schools

Schooling in Malawi

- The first eight years of education are compulsory
- Primary school from age six to 14, but older children are often found in primary school
- Secondary school from age 15 to 19
- No school fees at state primary schools; fees are charged for secondary school



Zambia

Where we feed

Chipata, Chipangali, Kasenengwa, Lumezi, Lundazi and Mambwe.

Impact Assessment

Our research was conducted in **Chipata** between 2014 to 2019. There were five follow-up data collection



Mary's Meals in Zambia

- Feeding started in 2014
- We serve a fortified maize-soya porridge or 'Corn Soya Blend' (CSB)
- The meal is served during mid-morning break between 10am and 11am (in general, the school day begins at 8am and ends by 3pm)
- We serve meals in pre-schools, primary schools and junior and senior secondary schools
- In 2019, our final year of research, our Zambia programme was reaching:
 - 118,836 children
 - 222 schools

Schooling in Zambia

- The first seven years of education are compulsory
- Primary school from age seven to 14
- Junior secondary school from age 14 to 16
- Senior secondary school from age 16 to 19
- No school fees at state primary schools, but parents pay PTA fees
- Fees are charged for secondary school

Liberia



Mary's Meals in Liberia

- Feeding started in 2006
- During our research period, children received either fortified CSB porridge, or rice and beans
- In 2020, the meal was changed to rice and beans
- Meal times vary, and food is often served after school has ended
- We serve meals in pre-schools, primary schools, junior and senior secondary schools
- In 2019, our final year of research, our Liberia programme was reaching
 - 159,479 children
 - 626 schools

Schooling in Liberia

- Primary school from age six to 12
- Junior high school from age 12 to 15
- Senior high school from age 15 to 18
- No school fees for state primary schools; fees are charged for secondary school, at many schools parents pay PTA fees
- The vast majority of children are overage for their grade

A snapshot of what children told us

It's important that we listen to feedback from children to understand how daily meals are making a difference to their lives and their experience of education. Here is a snapshot of our impact story in their own words.

“It has helped me and if it wasn’t for porridge, I don’t think I could have been coming to school.”

Grade 6 pupil receiving Mary’s Meals in Zambia
(Impact Assessment year five)

“No-one leave early nowadays because we eat porridge so we don’t feel hungry.”

Grade 4 pupil receiving Mary’s Meals in Malawi
(Impact Assessment year three)



“Mary’s Meals brings a smile on my face each school day, because I’m assured that hunger will never be a reason for me to not concentrate in class.”

Grade 5 pupil receiving Mary’s Meals in Malawi (Impact Assessment year five)

“Mary’s Meals supports my education every day by providing the nutritious meal which keeps me energetic in class every day.”

Grade 5 pupil receiving Mary’s Meals in Malawi (Impact Assessment year five)



“Mary’s Meals means hope to a better primary education in Malawi.”

Grade 5 pupil receiving Mary’s Meals in Malawi (Impact Assessment year five)

“I have been receiving porridge for the past 7 years. It has helped me gain weight, it gives me energy and I don’t stay hungry in class.”

Grade 7 pupil receiving Mary’s Meals in Zambia
(Impact Assessment year five)

“When there was no Mary’s Meals, I used to be hungry and go back home but this time, when I come to school, I can be encouraged to learn.”

Grade 5 pupil receiving Mary’s Meals in Liberia
(Impact Assessment year three)

“The introduction of the feeding programme has helped me to concentrate in class because I am always full and I worry less about finding food at home when I knock off. I have also gained [weight], and I look healthy because of phala (porridge).”

Grade 7 pupil receiving Mary’s Meals in Zambia (Impact Assessment year five)

Results introduction: the impact of Mary's Meals

In the discussion of our results, we focus on the key outcomes that we believe are core to our work of feeding all children in their place of education. Our research findings demonstrate a story of impact at three different levels – the child's immediate need, the child's education, and the child's community. As with any research summary, this report cannot tell all the stories of impact, nor can we provide an overview of every single indicator collected over the five-year period, or all of the nuances that we learned about our programming throughout this process. As such, we focus our discussion on the outcomes and findings most relevant to our programmes and the children we serve.

For children who receive a meal every school day, we have immediate and significant direct outcomes. Many of these findings are not surprising – we expect our programme to have direct, positive outcomes for a child's hunger, energy and wellbeing at school. If we did not have a strong impact in these areas, we would not be meeting the promise that we make to the children. These direct and attributable impacts are discussed in the **Child hunger and energy** and **Child wellbeing** sections.



With regard to the educational outcomes we looked at, we acknowledge that Mary's Meals plays a role, but there are many factors outside of our control that influence these outcomes. That is not to negate either our responsibility to play our part, or the important role that we do play in reducing barriers to education. For these outcomes, discussed in the **Access to education** and **Engagement and progression in education** sections, we have evidence that our programmes contribute to positive outcomes, but that for some indicators, other barriers and factors have a strong influence on a child's ability to get an education.



At the community level – although our focus will always be first and foremost on the children we serve – we realise that Mary's Meals has an impact beyond the child, to the local community and the volunteers who are so integral to our approach to school feeding. For these indicators, discussed in the **Community support and ownership** section, we knew that we were purposefully working with communities who usually have a high engagement in, and value for, child education. Our research helped us to get some initial understanding of the impacts that Mary's Meals has on community engagement, but we still need to better understand this critical part of our school feeding approach.



Mary's Meals and gender parity

Mary's Meals works in country contexts where there are many barriers to gender equality in society and in education in particular. Ensuring that our work impacts girls equally to boys is of the upmost importance to us. With this in mind, we analysed our quantitative data by gender. In our programme schools, **enrolment was approximately 50% girls, and girls and boys both benefited equally in our outcomes – showing that Mary's Meals achieves gender parity in its outcomes.**



Overall, the findings in the five results sections are focused on prioritising the perspectives of children, while providing a robust understanding of our overall impact, so we ensure that we are keeping our promise to the children that we serve.



IMPACT ON CHILDREN



When we consider the impact of Mary's Meals on **children's day-to-day school lives**, we have overwhelming evidence that Mary's Meals has a **clear, substantial, and significant impact**.



IMPACT ON EDUCATION



When we consider the **impact on educational outcomes for children**, we have evidence that for some indicators we have a clear impact, while for others we have some impact, but we were unable to get the data to really understand the extent that Mary's Meals contributes to educational outcomes.



IMPACT ON COMMUNITIES



When we consider the impact of Mary's Meals on the **communities that are integral to our approach**, and who volunteer their time and resources to ensure children have a daily meal at school, we have qualitative evidence of impact, but still have areas that we seek to better understand the nuances of our impact.

Outcome 1: Reduces child hunger

Outcome 2: Gives children energy

CHILD HUNGER AND ENERGY

Our focus is first and foremost on **the children we serve**. Therefore, the first outcome we looked at was whether we were **reducing children's hunger** and **increasing their energy levels at school**. Although we strive to make a difference through education in the long term, we value – and see the power of – the immediate benefits of a daily meal in school. These work hand-in-hand: a child who experiences the immediate benefits of eating a meal at school will be able to do their best at school, leading to longer-term educational success.



Mary's Meals gives children energy at school



Mary's Meals reduces hunger in the first year and the impact is sustained over time


Mary's Meals reduces hunger for both girls and boys



CHILDREN

Our indicators

- Feeling hungry in school
- Likelihood of receiving food before school
- Energy after the school meal

What CHILDREN told us:

It was crucial for us to capture children's own experiences of hunger and energy and understand how Mary's Meals had an impact on their experiences. Overall, the reasons for child hunger at school were complex. Across both countries, children repeatedly told us that they often come to school without eating breakfast. Some of the most common reasons for this were a lack of availability of food – or money to purchase food – at home, as well as the seasonal fluctuations in the availability of food and paid work. Some children told us that they walked more than an hour to reach school every day and, before daily meals, those with long walks noted that they worried about whether they would have energy for the walk home after school.

After one year of the programme,



of children in Malawi and Zambia had 'some energy' or 'lots of energy' after eating Mary's Meals

These interrelated factors meant that children often arrived for the start of the day feeling hungry and with low energy. Before Mary's Meals, some children would not have food or money to purchase food at school, and consequently felt hungry in school all day.

For many of these children, hunger drove them to leave school in search of food before lessons finished. For children who stayed until the end of the school day, many expressed that hunger affected their learning. Children told us how hunger directly affected them in the classroom in a range of ways, including feelings of weakness, sleepiness, dizziness and headaches.

In Malawi, after one year of receiving Mary's Meals, children were



more likely to never feel hungry while at school than those not receiving Mary's Meals

Our qualitative and quantitative data in both Malawi and Zambia provides clear evidence that when daily meals are introduced, children's hunger decreases and the meal we provide gives them energy. In both countries, when children began receiving Mary's Meals, we saw a significant reduction in children feeling hungry at school compared to the control group.



TEACHERS and COMMUNITIES

Our indicators

TEACHERS

- Children's hunger in school
- Children's energy after the school meal

COMMUNITIES

- Children's hunger in school

What TEACHERS and COMMUNITIES told us:

Findings from our surveys and discussions with teachers, local householders, and programme volunteers, complement and add context to the findings from children. In Malawi we saw a **49% reduction in volunteers and householders reporting that children are hungry most of the time or always; and in Zambia, a 43% reduction.** Teachers consistently told us that the programme is important for children at school and shared stories of the positive changes they saw in children once they had started receiving Mary's Meals at school.

“The children are looking healthy, they are energetic. In the past, they would just knock off and run home, but this time around they stick around, up until three or four o'clock they are still playing around because of the porridge.”

Teacher whose pupils receive Mary's Meals in Malawi
(Impact Assessment year one)

“[The porridge] gives me energy and I don't stay hungry in class. It keeps me awake all the time and I pay attention when the teacher is teaching in class.”

Grade 7 pupil receiving Mary's Meals in Zambia
(Impact Assessment year four)

All of these stakeholders discussed the hardships that children faced at home and how Mary's Meals' promise of at least one meal a day is supporting children through their schooling. Teachers, who told us about the changes they had seen in their classrooms since the start of the feeding programme, noted that reduced child hunger resulted in children concentrating more during lessons and participating more in class. For a further discussion of these outcomes, see the section on Engagement and progression in education.

Although communities spoke very positively about the impact of the school feeding programme on children's hunger and energy levels, our discussions revealed that there were many external factors that may have a negative impact on child hunger – such as a lack of food at home owing to poverty and seasonal variations in access to food. Our research shows that Mary's Meals can offer some protection from these external factors that contribute to hunger, and proves we do play an important role in addressing hunger at school. However, our purpose is not to meet the entire dietary need of children.

After five years of the school feeding programme, children in our programme schools were five times and six times more likely to state that they never felt hungry in school (in Malawi and Zambia respectively) in comparison to the control group.

Alongside this, we heard from children that Mary's Meals gave them energy for in-class learning and, beyond that, for example, for the long walk home at the end of the day for some children: **99% of children in Zambia and 96% of children in Malawi stated that they had a little or a lot more energy after eating Mary's Meals.**

“I have been eating porridge since it started. I don't usually eat at home because there is no food so when I come here, I eat a lot and I feel full and happy. It really gives me energy to walk back home.”

Grade 6 pupil receiving Mary's Meals in Zambia
(Impact Assessment year five)

There was also a clear indication that Mary's Meals is meeting its aim of reaching all children at a school, regardless of their gender – **girls were just as likely to have reduced hunger and increased energy as boys.** Our findings also show that these outcomes are sustained over time, meaning that even after five years, both girls and boys are still far less likely to be hungry at school and they have more energy than before Mary's Meals.



In Mary's Meals schools, we saw equal reductions over time in how hungry both girls and boys said they felt

Considerations and learning about hunger and energy

Our findings on child hunger and energy levels reveal some trends and differences, which allowed us to learn throughout the five-year impact assessment period and continue to help inform our programmes and overall approach to school feeding.

Key considerations and learnings include:

Normalisation after the initial impact

Both countries show an immediate reduction in hunger from the baseline stage (before feeding begins) to year one of our data collection. The reduction in hunger continues to be significant in both countries by the end point. However, the impact lessens slightly as time goes on. When compared to results from our control group, we clearly see that hunger is much lower in programme schools than schools not yet receiving Mary's Meals, but these findings suggest that our largest impact on hunger happens in the first year after the programme is introduced. This may be explained by a 'normalisation' effect, where, over time, children become more accustomed to eating Mary's Meals in school on daily basis, and increasingly perceive it as a normal part of their school day. We observed a similar trend with how children reported their energy levels after eating – where the percentage of children reporting that they felt they had 'lots of energy' after the meal reduced slightly after the first year and more children noted having 'some energy' instead. We believe that a school meal should indeed be a normal part of a child's school day, and therefore we interpret this phenomenon in a positive sense, as it **shows how our consistently delivered school feeding programme provides children with sense of stability and continuity.**

Timing of the school meal matters

Based on what we have learned from delivering school feeding programmes for more than a decade, we advise schools to arrange for Mary's Meals to be served to children during their mid-morning school break. We did not fully capture meal serving times during our research, but we know that the time that meals are served can vary from school to school and be affected by external factors. In Malawi, for example, the timing of meals

changed during our research period because of a new government policy that required school meals to be served before school started rather than during breaktime. Although our findings on reducing hunger were still significant after this change, the change in meal timing did affect hunger and energy later in the school day. In Zambia, the meals were served at mid-morning break as intended. These differences provided an opportunity for us to compare the impact of serving Mary's Meals at different times of day, and our findings confirmed that mid-morning feeding does lead our desired outcomes. This informs our approach and guides implementation across our programmes.

There are differences in our impact on hunger and energy levels depending on the age of the child



Although there were very positive outcomes overall, data analysis showed that in both countries older children reported a smaller increase in energy gained from the meal and a smaller reduction in hunger over time compared to those in the lower grades. We believe there are two possible reasons for this: older children do not feel as much benefit from the meal as younger children because they may require bigger portions, and older children are more likely to have been receiving the meal for the longest period of time and are therefore more susceptible to the normalisation effect outlined above.

In Zambia, after five years, children in the programme group were



more likely to
never feel hungry at school
than those not receiving Mary's Meals



Highlights from Liberia

Hunger

In comparison with Malawi and Zambia, a much higher percentage of children in both control and programme schools in Liberia told us that they were hungry in 2016, before Mary's Meals started school feeding. In the three decades prior to this, two devastating civil wars and the Ebola virus epidemic caused major loss of life and widespread, long-lasting socioeconomic disruption in Liberia, which may explain why our data shows higher hunger levels compared to Malawi and Zambia. Children had similar experiences to those in Malawi and Zambia in terms of arriving at school hungry and being hungry at school. When our daily meals were first served, there was a significant reduction in children saying they were hungry at school in comparison with control schools.

By the third year, our findings from programme schools suggest a normalisation may have occurred since reduction in hunger is lower than it was in the first year. Even so, a child receiving Mary's Meals after one year was **more than twice as likely to report never feeling hungry at school** than a child not receiving Mary's Meals. These are promising indications that Mary's Meals is having an impact in what is clearly a food-insecure context.

One factor that may play a role in this is that (as previously mentioned) our data revealed that the older a child was, the lower the reduction in hunger (and smaller the perceived increase in energy). Liberia's history of war means most children are older than the official age for their grade, often by several years. Therefore, the age of the children in the programme schools tends to be older, which may be why the impact on hunger seems to be less.

"We eat the Mary's Meals for energy."

16-year-old girl receiving Mary's Meals in Liberia
(Impact Assessment year one)

Energy

Although children not receiving Mary's Meals reported having less energy at school than children receiving Mary's Meals, the difference between the groups is minor. Our research revealed that some schools were serving Mary's Meals at the end of the school day to encourage children to stay at school, which could explain why – when we focus on in-school energy – it appears Mary's Meals has no effect. This important learning across all three countries has led us to look at meal serving times more closely.

CHILD WELLBEING

We hope that **when a child receives a meal at school**, there are not only physical benefits, but also benefits to the child's wellbeing. In short, we hope that providing a meal lets children be children – **happy and free of worry about hunger**. We believe that children who are happy and not worried at school are **better equipped to make the most out of their education**.



CHILDREN

Our indicators

- Worry about hunger
- Children's happiness

What CHILDREN told us about their wellbeing:

Worrying about hunger

Mary's Meals operates in areas of high food insecurity and hunger. In general, definitions of food insecurity that include hunger tend to be limited to being hungry, and typically exclude worrying about being hungry. We believe that if a child frequently worries about being hungry at school – or worries about where their next meal will come from – this shows an acute level of food insecurity and indicates that their wellbeing is being compromised. This is why we chose to investigate our impact on levels of hunger (see the section on Child hunger and energy for further discussion) but also on levels of worry about hunger.

We asked children to identify on a scale of 'never' to 'always' how often they worried about hunger during school. Our data from before daily meals were introduced clearly shows that children frequently worried about being hungry at school – around 40% of all programme children in Malawi and Zambia told us they worried about being hungry in school 'most of the time' or 'always'. After children started receiving Mary's Meals, our data shows the impressive impact of our programme on this outcome, with the figures **falling to 14% in Zambia and 25% in Malawi after five years**. In fact, our results show that this is one of the areas our work has the largest impact on. Overall, once children begin receiving Mary's Meals at school, the frequency of their worries about being hungry at school greatly reduces. Although our findings show that we do not completely eradicate every child's worries, a considerably larger proportion of children tell us that they worry much less often, and children are far more likely to tell us that they never worry about being hungry at school anymore.

Worry around hunger is complex, and we are aware that children also worry about food beyond in-school hunger, as food security is an issue in households. We asked children about worries around when they were next going to eat, which broadened the question to allow children to reflect on their experiences outside, as well as inside, school. Our results from this indicator show the same positive impact when the school feeding programme is introduced. Once children began receiving Mary's Meals, the proportion who told us that they never felt worried about when they were next going to eat greatly increased, with statistically significant results seen in both Malawi and Zambia, which began instantly and were sustained over time. **After five years of the school feeding programme, children in our programme schools were between 9 and 9.8 times more likely to report never worrying about when they would next eat in comparison to the control schools, in Malawi and Zambia respectively.**

In focus groups, children told us that knowing that Mary's Meals would be served consistently every day meant they were less worried about when they would eat next, even when they were unsure about if they would get a meal at home. This highlights how important the daily, consistent feeding aspect of our programming is, and that we must stay committed to keeping our promise each and every day so children do not worry about hunger in school and when they will eat next.

In Zambia, after five years of receiving Mary's Meals, the percentage of





Happiness

Mary's Meals hopes that as a result of reducing how often children worry in school, they will feel happier, thus contributing to their overall wellbeing. Our results show that happiness is another key outcome where Mary's Meals has had a powerful impact.

Although a high percentage of children told us that they were happy or very happy at school before the programme was introduced, after they started receiving school meals, there were increases in both countries.

After five years of receiving a daily meal, children in our programme schools were between 1.8 and 2.8 times more likely to say they were happy or very happy at school in Malawi and Zambia respectively. At control group schools, although the majority of children still said they were happy at school, the proportions were lower than those who attended schools that were part of our programme and there were strong, statistically significant differences.

In our focus group discussions, children consistently linked their increased happiness levels at school to receiving a meal and, conversely, they told us that, on the occasions when food was not served as planned, it made them unhappy.



This again highlights the responsibility Mary's Meals has to children and reinforces the importance of us keeping our promise to them. Our discussions also revealed several common key factors that children say affect their happiness or sadness while at school: success at school (in lessons and assessments), being able to pay school fees and attend, being able to play with friends while at school or home, arriving at or being at school while hungry, or having arguments or fighting with other pupils.

Some children also expressed that receiving a meal at school made them feel loved and cared for. As one child expressed: **"It has helped me and if it wasn't for porridge, I don't think I could have been coming to school to be honest, when I see Mary's Meals I feel happy and feel loved. Mary's Meals is 'chikondi' [love] to me."**

COMMUNITIES

Our indicators

- Worry about hunger
- Children's happiness

What COMMUNITIES told us:

Worrying about hunger

Although our focus is on child wellbeing, we realise that we also have the potential to decrease worry within families about child hunger. We asked members of local households and volunteers – mostly parents of school-going children – about how frequently they worried about their children feeling hungry at school. Our findings clearly show that the introduction of the school feeding programme resulted in a vast reduction in parents' worries, and that this was sustained over the five years of research. **The percentage of volunteers and householders reporting that they worry about children being hungry in school at least sometimes reduced by 59% and 25% in Malawi and Zambia respectively.**

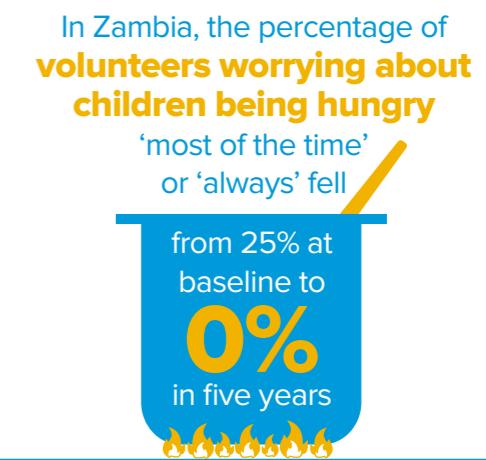
This is in stark contrast to the householders we interviewed in communities where Mary's Meals was not yet present – not only did parents worry more often, but over time, the percentage of parents who frequently felt worried increased in both countries, indicating a worsening food security situation.

"There is a great change because children can come to school while hungry but there is a hope at school so they don't worry."

Teacher whose pupils receive Mary's Meals in Malawi (Impact Assessment year one)

Happiness

Our data from surveys and focus groups with teachers and volunteers supports the results we obtained from our surveys and discussions with children. Overall, in both countries, when daily meals were introduced, teachers and volunteers told us that children were much happier at school. As a teacher in Zambia explained: **"When the volunteers are delayed, children are busy peeping through the windows to see if the volunteers are coming to school. When they see them, they shout happily that they have come to cook."**



Highlights from Liberia

Worrying about hunger

Our research did not identify the same impact on worry about hunger in Liberia as was found in the other two countries. The results showed that programme schools were already showing less worry even before Mary's Meals was introduced, as compared to the control schools. This suggests that the children in the programme group were potentially less food insecure than in the control schools even before the school feeding programme was introduced, and we therefore plan to do further specific research in a broader and more representative group of programme schools to get further clarity on worry in our Liberia programme.

Happiness

As we found in Malawi and Zambia, the **impact of our programme on children's happiness in Liberia was also significant, with children receiving Mary's Meals two times happier than those in the control group.** Many children we spoke to recognised that being hungry affected their mood or behaviour. For example, prior to introduction of the school feeding programme at their school in Liberia, a group of Grade 3 boys and girls explained how hunger can affect their interaction with their classmates. One child noted that when he was hungry: "When my friends are around, I don't want to be around them."

ACCESS TO EDUCATION

There are many children around the world who still do not access primary education, owing to a combination of physical, social, economic, cultural and other factors. Although providing a daily meal in a child's place of education cannot address all of these factors, we are hoping that by serving Mary's Meals, we are **helping to motivate families to prioritise their children's education and send them to school**. We also hope that the promise of receiving a nutritious meal each day encourages regular attendance by children at school, so that they have **consistent opportunities to learn and the chance of a brighter future**.

To assess whether Mary's Meals has an effect on children's access to education, we looked at changes in school enrolment, numbers of children out of school and changes in children's attendance.

Our findings suggest that the school feeding programme results in **increased enrolment** at schools where children receive Mary's Meals, as well as an **improvement in attendance**.



ENROLMENT

Our indicators

- Changes in school enrolment
- Changes in attendance and absence
 - missing school
 - leaving school early
- Children out of school

What our results tell us about ENROLMENT:

In both countries, our data shows that after daily meals are introduced, the number of children enrolled in schools increases. This trend not only occurs in the first year after the feeding programme begins, but our data shows that it is sustained over time. In contrast, at control group schools, we see that between our baseline data collection and one year later, although there was a small increase in enrolment across both countries (as expected with natural rates of increase), it was much less than the increase at schools where daily meals had been introduced. This suggests that our school feeding programme is resulting in more children being enrolled at the schools benefiting from Mary's Meals.

While the data from our focus groups also indicates that householders, children and teachers all think enrolment increases when daily meals are introduced, our research highlighted that there are a range of factors external to the presence of our school feeding programme that may encourage parents to choose one particular school over another, including school fees, perceived teaching

quality, school resources, and the distance children need to travel to get to school. This means that even when enrolment increases, we cannot say for certain that Mary's Meals is the only reason for the children enrolling at that particular school, but that the offer of daily meals contributes to the increased enrolment. Our focus group discussion findings also suggest that increases in enrolment in programme schools can lead to increased pressure on existing school resources, such as classrooms and materials, and respondents often cited increased class sizes. This is a potential unintended negative consequence from introducing daily meals. In our broader programmes, we have tried to mitigate this by taking a clustered approach in most locations, introducing feeding at all schools in an area so that children are not forced to move schools to receive Mary's Meals. We also regularly link in with Ministry of Education in the country, to raise awareness for possible further action. The effectiveness of this clustered approach could be an important area for further research.

**Enrolment increased
by an average of**



ATTENDANCE

Our indicators

- Changes in attendance and absence
 - missing school
 - leaving school early

What our results tell us about ATTENDANCE:

In addition to assessing whether Mary's Meals influences children enrolling in school, we also sought to research whether receiving a school meal encourages children to attend school more regularly and for longer. In both countries, our survey data from interviews with children showed that before we began serving daily meals as well as at control group schools, many children would leave school before lessons had finished. The primary reason given for this was being hungry and leaving to try to find food, although other reasons were also given. Our statistical analysis did not show a clear significant impact of our programme on rates of children leaving school early in Malawi, and only showed it to be significant at year five in Zambia, with children being 2.7 times more likely to stay at school until the end of lessons. However, at schools in our programme groups in both countries, after daily meals are introduced, our data shows a clear reduction in the proportion of children saying they had to leave early because of hunger, showing that Mary's Meals reduces or removes the barrier of hunger to staying in school for the entire day.



Absence from school reduced significantly



in both countries once daily meals were introduced

In terms of full-day absences or not attending school for multiple days, children report a decrease in absenteeism following the introduction of the school feeding programme. In Malawi, the percentage of community members reporting that their children are absent at least one day a month reduced **by 14%, while in Zambia there was a reduction of 31%.**

“Now pupils come more often than the way they used to. Now they come every day.”

Teacher whose pupils receive Mary's Meals in Zambia (Impact Assessment year one)

Data from both our surveys and focus groups with teachers demonstrates clearly that they think the introduction of Mary's Meals improves children's attendance. In both countries, teachers commonly observed that once children started to receive a daily meal at school, there were far fewer who left early because of hunger. Teachers referred to the programme as incentivising the children to attend school and remain in class, so they receive their meal.



“The learners sometimes openly say we are hungry, let us knock off, let us go.”

Teacher whose pupils do not yet receive Mary's Meals in Malawi (Impact Assessment year one)

Although hunger was not the most commonly cited reason for children missing full days of school in comparison with other factors, such as illness, the percentage of children who did cite hunger as a reason for missing school reduced in both countries after daily meals were introduced: **a reduction of 6% in Zambia and 8% in Malawi.** Our results show that although Mary's Meals can help improve attendance, there are many factors that can cause children to be absent, or attend school but then leave before lessons are finished. The main reasons children gave for this fell into two categories: problems at school – which included teachers not being there, unplanned school closures, or the school meal not being prepared as planned – or problems at home. In our final year of data collection, we adapted our questions on attendance for children to help us to understand the reasons they were absent from school in more detail. This revealed that, for children who received Mary's Meals who recently missed school, the majority did so because of problems with their uniform (usually because it wasn't clean), because they didn't have their schoolbooks, or because they hadn't paid their school and/or PTA (Parent/Teacher Association) fees.

Although these findings highlight that there are multiple barriers that children face in attending school each day – many of which our school feeding programme cannot address – they also show one key area that is within our control, which is ensuring that children are consistently fed in school every school day. Our qualitative data showed that in the infrequent case where a school meal is not served as planned, there is an adverse impact on children's attendance.

This finding re-enforces to us the importance of the promise we make to children when we introduce our programme at their school. There are various reasons for non-feeding days and, as a key part of our ongoing commitment to children, we are continually monitoring non-feeding, identifying barriers to feeding and working to overcome these issues.

In Malawi, children leaving school early because of hunger reduced from

29%

to

12%

from baseline to year five

OUT OF SCHOOL CHILDREN

Our indicators

- Children out of school

Our findings about

OUT OF SCHOOL CHILDREN:

In our survey data, we saw a rise in the number of householders and volunteers who told us they did not know of any children out of school in the local area once Mary's Meals was introduced: **an increase of 12% in Zambia and 25% in Malawi**. We also saw an increase in the same indicator in our control group but, overall, this is lower than in the communities with programme schools. In our focus group discussions, many teachers and householders spoke about there being fewer children who were out of school compared to before the feeding programme began; however, from our data collection we are not able to collect information on whether newly enrolled pupils are children who have never been enrolled in school, children who are returning to school after a period of extended absence, or children who have transferred from other schools. Focus group discussions also revealed that there are local rules and initiatives which, in conjunction with Mary's Meals' programmes, are likely to play a role in encouraging or requiring parents to enroll their children in school. These initiatives include fines for out of school children, changes in school fees and 'mothers' groups' – local community members who go from house to house to ensure children are enrolled in school.

In Malawi, the proportion of volunteers who didn't know of any out of school children rose from  23% to 48% from baseline to year five



Our data also revealed that there are a multitude of barriers that many of the families face in being able to enroll their children in education. Hunger and lack of food is just one factor among many, and our data shows that the most significant barrier to both enrolment and sustained attendance may be whether a family has the means to pay school fees and other education-related costs. The extent to which this is a barrier varies, depending on the local costs of schooling, overall economic context in a region or country, and from household to household. Other barriers our research identified include children's own motivation to go to school, family encouragement and support, distance to travel to school, the number of children in a household, the perception of the value of investing in education when faced with limited employment prospects, and – for girls in particular – marriage and pregnancy.

Our research shows that households adopt different strategies to try to overcome barriers to accessing education for their children. Some families will delay the entry of their younger children into schools, and others will enroll children who later drop out when there is a strain on financial resources, which leads to 'yo-yoing' enrolment. The focus group discussions also made it clear that overcoming these barriers may not necessarily lead to regular or sustained attendance, and many children face difficulties in progressing through school, which is discussed in more detail in the next section (Engagement and progression in education). Our commitment over the long term remains: to ensure that there is a daily meal provided so the major barrier of hunger is removed – even if other barriers persist – and parents and children are incentivised to attend regularly by the daily meal.



Highlights from Liberia

Within our programme schools, our data **shows an increase in enrolment by 29%** after three years of receiving Mary's Meals, whereas control schools show a smaller increase in enrolment over the same period. Class sizes in Liberia are often capped, which means that past a certain point we may no longer see an increase in enrolment at any school. This suggests that Mary's Meals may act as an incentive for parents to enroll their children in school, alongside other factors.

In terms of attendance, no significant difference was seen between programme and control schools when it came to the percentage of children who said they had left school before their lessons finished for the day at least once in the past two weeks. However, in our results relating to the reasons why children had left early, the percentage that said hunger drastically reduced at programme schools once the meals were introduced, whereas it continued to be the most common reason cited by children in control schools.

With long-term research such as this, it can be difficult to keep the conditions the same for each data collection point and, in this case, two of our control schools were converted into Bridge International Academies. In 2016, Liberia's Ministry of Education announced the Partnership Schools for Liberia (PSL) initiative, a public-private partnership with Bridge International Academies, designed to transform the education system. It is likely that this change may have resulted in increased attendance and therefore larger class sizes and findings from our focus groups support this.

More so than in Malawi and Zambia, it was reported that early marriage and teenage pregnancy played a factor in lack of enrolment and dropping out of school. The long-lasting impacts of Ebola and the civil war means that there are children much older than normal for grade level in primary, with children who would normally be in senior school in middle primary. These children, especially girls, have responsibilities such as of raising children, and this is a major barrier to education.

Outcome 5: More children engage in school

Outcome 6: More children progress through school

ENGAGEMENT AND PROGRESSION IN EDUCATION

We expect that **when children are less hungry and have more energy**, as discussed in the section on Child hunger and energy, **they are able to concentrate better and participate more** in school. Over time, we hope that these building blocks help them progress through school, which will support them to make the most out of their education.

In this section, we discuss two related aspects: engagement and progression. We looked at children's participation in lessons and their ability to concentrate in class as well as drop-out rates and repeating school years. These two outcomes are related, in that a child who is more **capable of engaging** in lessons is **more likely to progress** from one year to the next.



ENGAGEMENT IN EDUCATION

Our indicators

- Changes in concentration difficulties
- Changes in participation difficulties

What CHILDREN told us:

When we asked children about their participation in lessons – which we defined as joining in during lessons and answering the teacher's questions – as well as their ability to concentrate, our survey data revealed a significant impact because of the programme.

In terms of participating in class, we noted that after five years of the programme, children receiving Mary's Meals were **3 times more likely in Zambia and 4.4 times more likely in Malawi to report never having difficulties in participation in comparison to the control group.**

When we look at concentration difficulties, the impact is also clear. There was a significant difference between children receiving Mary's Meals and those not yet benefiting from our programme. **After five years of the programme, children receiving Mary's Meals were 4.3 times and 5.4 times more likely to report never having problems concentrating in Zambia and Malawi respectively.**

“We concentrate [in class] because we eat phala (porridge).”

Grade 4 pupil receiving Mary's Meals in Malawi
(Impact Assessment year three)

Indeed, when we look at our findings from the focus groups, children often told us that after the introduction of Mary's Meals, they were more able to concentrate and participate in class. Children also demonstrated a good understanding of the link between being hungry, lacking energy and not being able to engage in their lessons. They repeatedly expressed that school meals have a positive effect on their energy levels, making them less tired and more able to focus on their work or the teacher talking. As a Grade 7 girl who receives Mary's Meals in Zambia said: **“It keeps me awake all the time and I usually pay attention when the teacher is teaching in class.”** Children also told us that their classmates were paying more attention as well, and there was an overall better classroom environment since the programme was introduced.

In Zambia, the percentage of children reporting that **they never had difficulty concentrating** rose from





What TEACHERS told us:

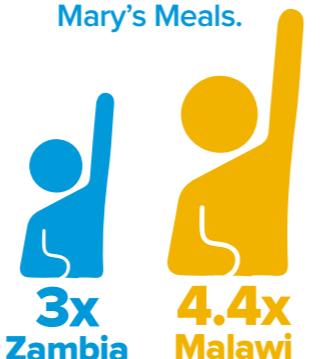
Similar to what children told us, our surveys and focus groups with teachers at programme schools revealed that the introduction of Mary's Meals created a better environment in their classroom, with children participating more than before, being more able to focus, and fewer falling asleep during lessons. They also referred to the link between hunger and concentration difficulties and said there had been a positive change since Mary's Meals began feeding in their school and hunger was reduced. This is in stark contrast to the experience in control schools, where teachers commonly reported that children would have trouble concentrating, would often sleep during class, or they would not be following what was being taught.

“Performance in class has changed, when you are hungry then concentration becomes low, when you have something [to eat] at least you find that everyone can understand your explanation, they write, at least the whole class can understand.”

Teacher whose pupils receive Mary's Meals in Zambia
(Impact Assessment year one)

While children tended to report a greater variation of reasons for not engaging in lessons, teachers generally put more emphasis on hunger as a reason for lack of engagement from children. As discussed in the section on Access to education, teachers also noted that class sizes became larger following the introduction of Mary's Meals, and mentioned some unintended negative impacts from this in terms of children's ability to participate in class, as well as noise levels and disruption increasing. Mary's Meals continues to link in with the Ministry of Education in country to raise awareness of this for their further action.

In both Malawi and Zambia, after five years of receiving Mary's Meals, children were more likely to participate in class than those not yet receiving Mary's Meals.



PROGRESSION THROUGH SCHOOL

Our indicators

- Drop-out rates
- Repeating years

During our research, **both programme and control schools saw a reduction in the number of children repeating a grade and dropping out. Although by the final year the repetition rates were lower in our programme schools** than in the control schools, the difference was small. We asked teachers about exam results, children repeating grades and dropping out, but this only tells part of the story. Our findings on these outcomes would be more accurate if we could verify them with school-level data, but we were unable to get that information.

Many of the barriers outlined in the previous section also affect progression. External factors include households' financial circumstances,



Highlights from Liberia

“[I] have many sisters not going to school. All got married, they desired it. Some of them [are] already big for their class. They might have been ashamed to come back to say for example they are in the 1st grade.”

Girl in Grade 7 receiving Mary's Meals in Liberia
(Impact Assessment year two)

Despite Mary's Meals' policy of serving school meals during mid-school break, our observations in Liberia show that meals were often served at the end of the school day. We saw no significant difference with either engagement

“[The] season where foodstuffs are less, most of the children stop coming to school. Hence as teachers... we advise them to repeat. They stop to help their families to find food.”

Teacher whose pupils do not yet receive Mary's Meals in Zambia
(Impact Assessment year two)

the distance to school, and family support to attend school. Householders and teachers also mentioned that children may drop out (or stop attending periodically) when there is a need to support the family by engaging in paid or unpaid work, especially during the lean season. Sometimes children will re-enrol in school, but it can lead to children dropping out altogether. Additionally, children in both countries mentioned transferring to another school as their families moved for work or they were sent to live with relatives, which can also lead to repeating the year. If a child repeats often, they become older than classmates, and the chance of them dropping out altogether increases.

Teachers and householders note that girls may drop out of school to get married or have children, highlighting that pressure increases as they get older. Children and adults refer to the cultural shame that surrounds pregnancy. Girls who have given birth and been out of school for many years may be embarrassed to re-enter school at a lower grade than their peers.

or progression. The timing of the meal could be the explanation for lack of improvements in engagement at schools, as children were not gaining the in-class benefits of the meal. We are committed to reviewing our learnings around serving times in Liberia with the Liberian government and other stakeholders, with a view to optimising our impact by adjusting the time of serving if necessary.

In terms of rates of children dropping out or repeating years in Liberia, we see very similar patterns in our control group and programme group, with reductions seen in both groups. In Liberia, teachers noted that girls in particular may drop out of school to get married or have children, and this pressure increases as they get older.

Outcome 7: The value placed on education by communities increases

Outcome 8: Community ownership and engagement in each school feeding programme increases

COMMUNITY SUPPORT AND OWNERSHIP

Our approach to school feeding includes working in partnership with parents, teachers, and communities to achieve our common goal: to improve children's learning in school through the provision of a daily meal in their place of education.

By fostering strong working relationships and **building community capacity to implement school feeding**, we aim to **increase communities' involvement and engagement in education**.

Mary's Meals works in schools where community support for education is consistently high



Mary's Meals' volunteers are actively engaged in preparing and serving school meals



COMMUNITY PARTNERS

Over the longer term, we aim to build community ownership, which is critical for the sustainability of our school feeding programmes. We also aim to help increase communities' involvement in education and the value they place on education. We recognise that the process of increased community ownership may not be fully complete within our five-year impact assessment timeframe. However, within the five years, we did expect to see some indications that engagement and support for education were increasing.

Throughout our research, we aimed to capture the degree to which community support for education changed over time, and the role Mary's Meals played in these changes. We also attempted to see how community support for education may have differed at schools that were not yet receiving Mary's Meals – those schools in our control groups. It is important to note that our control group schools may not have acted as a true control against which to compare programme schools for these indicators. At Mary's Meals, we know that strong community involvement and engagement in education is one of the pillars on which the success of our programmes is built, therefore it is one of our key selection criteria when identifying new schools to reach through programme expansion.

As outlined in the methods section, for ethical reasons, the schools that were in our control groups were also ones that we knew we would be bringing our programme to in the near future, which means they already had a good level of engagement in education when this research was carried out. The same can be said of the pre-feeding baseline at programme schools – our selection criteria for schools included in our programmes necessitates that community engagement is already very strong. This means that these comparisons may not accurately represent the wider context in each country.

To explore the topic of community support for education, we spoke to the volunteer cooks who prepare Mary's Meals, as well as householders with children at the school, about their attitudes towards education and their involvement in their children's education and other school-related activities. We also spoke with teachers to get their views on parental involvement in the children's education and the value placed on education. Although we spoke to these members of the community extensively, the main emphasis for the Impact Assessment was to get their perspectives on the child-specific outcomes. We did get some understanding of their own experiences and motivations, but our findings suggest this is an area worth considering for future research.



VALUE IN EDUCATION

Our indicators

- Views about the importance of education

Our results show that community support for education was very high even before Mary's Meals' school feeding programme was introduced. In both countries, we found that communities – whether in programme or control groups – placed a high importance on children's education and this result remained constant throughout our research project.

The more in-depth conversations we had with respondents through focus groups and interviews offer more nuanced insights on this topic. During focus groups, those from both programme and control groups confirmed that community support for education is generally high and parents encourage their children to attend school. However, as one teacher summarised, thinking that education is important may not necessarily always translate into actions to support their children to attend school. Furthermore, there are many factors outside of Mary's Meals' control that prevent parents from prioritising education.

Teachers frequently commented that parents who were not educated themselves were less likely to understand or appreciate the value of education for their own children and were also less likely to be able to support their children effectively through their education. They emphasised the importance of children having role models around them who are able to show why education is important.

Another point teachers mentioned was that children who have become orphaned often struggle to attend school because of a lack of support and encouragement.

When we spoke with parents – who overwhelmingly placed a high value on the education of their children – our discussions showed that their decisions and perspectives on education were more nuanced than the teachers' general view that parents who were not educated did not value education. While many parents did aspire for their children to have a better future and therefore valued their education, factors such as poverty, the uncertainty of their household income, and their ability to provide for their families prevented them from making sustained, long-term investments in their children's education. This demonstrates that there are a range of factors involved in making decisions about sending children to school that are beyond the scope of Mary's Meals, and that parents may place a high value on education but still have difficulties investing in their children's education.

In Malawi and Zambia,



of communities where children receive Mary's Meals said it was '**important**' or '**very important**' that children get an education, in each year surveyed

ENGAGEMENT IN SCHOOL FEEDING

Our indicators

- Parental/community involvement in school activities

Our qualitative data demonstrates that the school feeding programme offers parents and other community members an opportunity and an incentive to become more involved in their local schools.

Consistently delivering Mary's Meals' school feeding programmes requires ongoing input from volunteers to activities including: attending meetings and training, organising cooking rotas, ensuring there is enough water and firewood, training new volunteers, keeping track of stock levels in storerooms, and consistently cooking the food and safely serving the meals to children each school day. In addition, communities contribute material goods including firewood and water. Quite simply, our programmes could not run without the daily dedication of volunteers who gift their time and community resources, and the consistent delivery of school meals during the Impact Assessment in programme schools is an indication that volunteer contribution was high.

Although we did not seek to quantify this outcome, we did ask volunteers about their motivations for volunteering, recognising that they dedicate a substantial amount of time to ensure school meals are served. The reasons volunteers gave for starting and continuing to volunteer provided insights into the value they placed on the Mary's Meals programme, and we heard the same reasons consistently, year after year, and in all countries.



There was an indication that Mary's Meals increased community engagement at the onset of the programme.

Many of the volunteers we spoke to started volunteering for the first time at schools to deliver Mary's Meals.

As to why volunteers continued to give their time to prepare and serve Mary's Meals, the most common reason given was "to make sure that our children are not hungry." Another common reason given was that volunteering was a way to support their children's education (which also reinforces the value they place on education), alongside "to help them learn better," indicating that they see the daily benefits of Mary's Meals on children's learning. Most of the volunteers were parents, caregivers, grandparents, or other relatives of children at the school, and many volunteers were motivated by the direct benefit their own child received, although they also noted the wider benefit to all children.

"We volunteer to make sure that children are not hungry by cooking the nutritious meal."

Volunteer who serves Mary's Meals in Malawi (Impact Assessment year five)

Overall, the story that we gathered from volunteers – alongside the consistent delivery of school meals at the programme schools we witnessed throughout the Impact Assessment – shows that there is an initial increase in volunteer engagement to start school feeding and a consistent level of community engagement to ensure that the meals are served each day, and we also have some indication of the motivations for volunteering. However, the indicators we used to understand community engagement only gave part of the story and this critical part of Mary's Meals' impact is worthy of future research to gain a better, more full understanding. The Impact Assessment helped us identify the need for more detailed information on our volunteers, and we have since been working to include this in our ongoing programmatic monitoring data.



Considerations and learnings about community support for education

Some communities give stipends to their volunteers



Mary's Meals does not compensate volunteers nor advocate for volunteers to be compensated. However, at some schools, the community has decided to provide volunteers a small stipend, usually through Parent Teacher Association (PTA) fees. Although this was an incidental finding that we did not have the opportunity to explore in more depth, where this is the case, it most likely affected volunteer motivations. The decision to provide a stipend is also an indication that community members value their volunteers and the Mary's Meals programme, so are willing to contribute monetarily to ensure it continues. Understanding how stipends affect volunteering and community engagement is an important future research direction to consider.

Only parents with children in school were interviewed



Our research was limited insofar as we only interviewed parents who had at least one child who was attending school. This group of parents may have had a higher value on education than those who do not have children in school. However, as we strive to reach the most vulnerable children, we appreciate that it is also important to understand the role Mary's Meals may play in encouraging parents to send their children to school.

There are gendered dimensions to volunteering



Another aspect of volunteer engagement we did not fully capture through this research was how our programmes are affected by and also affect traditional gender roles. Although Mary's Meals works with schools to promote gender equality, we observed that the majority of volunteer cooks were women whereas in community meetings involving decision making, more men were often present.

Highlights from Liberia

Our findings from Liberia are similar to those from Malawi and Zambia. As with the other two countries, a major factor in selecting schools to become part of Mary's Meals' Liberia programme is existing high levels of community engagement at the school. This means that even at our control schools and before we started feeding at programme schools, there would be strong community involvement. Furthermore, as noted above, we only interviewed parents who had children enrolled at school, which may have resulted in bias. It is important to note that in Liberia, the school day is often split into two sessions, with the younger grades attending in the morning, and older grades in the afternoon. In these cases, we observed that meals were also being served in two sessions, with the same volunteers staying at the school the whole time. This shows a very high level of volunteer commitment and dedication to the programme, showing the value these parents and community members place on the education of

their children and the importance they place on ensuring children eat a nutritious meal while at school. As one volunteer in Liberia noted: **"I love the children in my community, therefore when Mary's Meals came and the school was looking for volunteers, I decided to come and help."**

We also observed that people more commonly mentioned volunteer cooks receiving small financial contributions in Liberia compared to other countries – either from PTA fees or a separate payment from the community. This suggests that although some members of the community may not be able to contribute their time to the programme, they may be willing to contribute in other ways.

"We are volunteering for our children. When the children come to school without food, I cannot feel happy."

Volunteer who serves Mary's Meals in Liberia
(Impact Assessment year three)

Conclusions and next steps

When we first decided to undertake the five-year impact assessment process, we did so with confidence in our approach to school feeding, as well as with a commitment to using learnings from this work to improve our programming. This is critical so that we can continue to keep our promise to the children we currently serve, and to reach more children in need of Mary's Meals.



The learnings from this work confirm that our approach to school feeding is highly impactful.

Our findings suggest that although eating Mary's Meals at any time will benefit children's hunger levels, it is important to provide a daily meal consistently and during mid-school break, to achieve the maximum benefit for children's hunger, energy and wellbeing whilst in school. In country contexts where girls experience significant barriers to education, it is important to note the gender parity of our findings. In our programme schools, there is parity in enrolment and **girls and boys both benefit equally from Mary's Meals.**



The findings also reaffirm that Mary's Meals plays a role in educational outcomes for children.

A daily meal provides an incentive for children to enrol and attend school and helps them to concentrate and participate in classes. The barriers to good educational outcomes are wide and varied and school feeding plays a critical part in ensuring positive educational outcomes for children. Although the primary focus of our work is children, we also have indications that our impact is broader, and is felt in the schools and communities where our daily meals are served.



The Impact Assessment has identified areas for change and raised questions that we need to better understand. **Ongoing, minor changes were implemented throughout the five years** as they were identified, as our teams continually learned from the results and made operational programme changes as needed. Additionally, we have taken our learnings from this process and implemented continual monitoring of key outcomes across programmes, to ensure that we continue to have our intended impacts.

In some cases, **we were limited in our abilities to answer some of the questions that we wished to understand.** For example, our data on progression was limited by our ability to gather the information that would have best answered that question. We remain committed to an ongoing focus on learning here, and in implementing stronger data collection and monitoring to further develop understandings of our impact. In other cases, **we identified a need for a deeper understanding.** For example, the partnership of communities and the dedication of the volunteers are fundamental to our approach – without them, we would not be able to keep our promise to feed children every school day.

We collected some valuable data on community level impacts, including rich qualitative stories, but we are committed to learning more about this critical part of our approach in future.

At Mary's Meals, we are focused on continually learning and improving so that we can keep our promise to every child we serve and continue to move toward the realisation of our vision that every child receives one daily meal in their place of education, while ensuring we are good stewards of the resources entrusted to us. This report is an important contribution to our work, and we intend to use it to inform our work in every country and every school where we work.



Looking forward, this work gives us additional confidence that our school feeding approach very positively impacts the lives of children where we work. We will also build upon the learnings and opportunities identified as our work and mission develops and grows in scale in the years ahead and continue to put learning at the heart of all we do.



**mary's
meals**

a simple solution
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