



Schools Snack Programme Pilot - Lebanon

Promoting improved education and nutrition outcomes for disadvantaged Lebanese and Syrian Refugee Children in Lebanon

Foreword

Three years ago, I visited Lebanon to see how Syrian refugee children forced to flee their homes in the face of dangerous conflict were adapting with their neighbours and settling into schools in Beirut, Mount Lebanon and high up in the Bekaa Valley. The government and people of Lebanon were moving quickly to accommodate over one million Syrian refugees, but had been faced with the problem of what the children would do all day - forced by family circumstances in to child labour, and for many girls into early marriage. In April 2013, Theirworld published its groundbreaking report, authored by Kevin Watkins, which proposed that double-shift schools be adopted to cope with the rising numbers, and found that the government of Lebanon embraced the concept with the support of numerous international donors. What I was excited to see firsthand in visiting Lebanon in 2015 was the sight of Syrian children able to return to school, entering the new double-shift system and learning alongside Lebanese children.

Despite the short-term financing available at the start of the school year, the government of Lebanon went ahead with a trial system and have continued to build on this to accommodate over 300,000 children at the start of the 2018 school year, and the potential to do more if more funding is available. With no end to the Syrian war in sight, this system has become the new normal and has established a pathbreaking education system that avoids the need for extra school building infrastructure and for education to continue relatively uninterrupted - thanks to the hard work of the Government of Lebanon and the UN agencies, donors and partners working together.

However, as soon as a system is up and running, the first question to ask is whether any children are still missing out. Supporting the government of Lebanon and school system, Theirworld and many other international and local NGOs worked hard to address the barriers that might still keep children out of school - ranging from school transport, guaranteed safety for girls, language issues and child labour. All across Lebanon you can see programmes addressing the many barriers with much success.

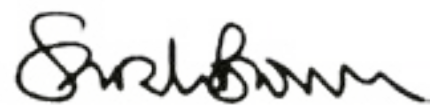
However, in 2015, an unexpected issue arose in the classrooms of Lebanon for the Syrian children. Annemiek Hoogenboom, Country Director of the People's Postcode Lottery, was visiting schools where Theirworld programmes were underway and engaged in conversations with children and teachers. What became apparent was that children were returning to school for the first time in years - all cherishing the opportunity to start learning again. But some children spoke of hunger during the day and missed school days, and teachers noted that children were failing in energy and concentration in their lessons. She brought the issue to Theirworld and asked the charity to explore

projects within its school programmes to determine what supplementary nutrition was required to ensure that children were not hungry and able to learn.

With the generous support and encouragement of the players of the People's Postcode Lottery UK, Theirworld launched a pilot programme that introduced healthy snacks for Syrian refugee and local Lebanese children at two public primary schools. There was huge interest in developing a snack programme that was inexpensive yet nutritious, and suited the tastes and requirements of the children while maintaining the highest health and hygiene standards.

In late 2016, I returned to Lebanon with Annemiek to see how the snack programme and other education projects were progressing. We were hugely impressed by the effect that a healthy, daily snack was having on the children. Teachers told us families were even enrolling their children in school after hearing they would be fed. We were impressed by the anecdotal evidence that showed how well children were doing while guaranteeing good supplementary nutrition, and also how this could be reduced once families were stable and home income increased (so putting more food on the family table). However, it was important to allow the pilot programme to document what we were observing in order for the findings to inform the government of Lebanon and other organisations.

Theirworld's three-year pilot programme, that impacted over 4,000 children, has now reached its conclusion. The evidence is clear: children who received nutritious snacks had increased attendance and better diet diversity. With 40% of Syrian refugees still out of school in Lebanon, we need to do everything we can to help them get an education and fulfil their potential, pushing for investment in education for every child, combined with a supplementary snack programme for as long as that is needed to support vulnerable families. Theirworld's findings on the improvement in learning, school attendance and diet diversity should encourage governments and donors to find innovative ways to support refugee children's education and nutrition. We hope others will now take up the baton, scale up the programme across Lebanon's schools and help many more disadvantaged children have the best possible start in life.



Sarah Brown, President, Theirworld



Introduction

What many believe is impossible – educating every child in the world – Theirworld knows IS possible. Theirworld works to unlock the solutions needed, helping every child have their best possible start in life. Theirworld believes in “when” and not “if”. A state of mind that does not fear the difficult and doesn’t believe in the so-called unattainable.

Theirworld is an innovative charity that, through research, pilot projects and campaigning, is at the forefront of testing and shaping new ideas to help children in the United Kingdom and around the world fulfil their potential.

Theirworld’s work encompasses research, campaigns and innovative projects spanning education and health, education in emergencies, safe schools, code clubs, early childhood development, gender equality initiatives, school nutrition pilot projects and global drives to ensure that promises to children for international funding commitments are kept.

For more information, visit www.theirworld.org.

This document will provide a snapshot into how Theirworld’s theory of change has positively impacted the lives of Lebanese and Syrian refugee children and their communities in Lebanon by providing healthy snacks during the school day. Through our scaling model of “create, propagate and accelerate,” the findings of this programme should help inform future scaling-up of education and nutrition programs.

The Challenge

Since the onset of the Syrian crisis in 2011, millions of Syrian children and their families have had to flee their homes for safety in Lebanon and other host countries neighbouring Syria, such as Turkey and Jordan. In Lebanon alone, around 20% of the population is now made up of Syrians, and the expanding numbers of school-age children mean there is an increased demand for school places in the country’s already overburdened public school system.

Theirworld supported Lebanon’s Ministry of Education and Higher Education (hereafter MEHE) to introduce a double-shift schooling system in 2013. This system would open access to more Syrian children who wanted a safe place to learn, by providing schooling for Lebanese children in the morning shift and Syrian children in the afternoon. The result has been, on average, 200,000 Syrian refugee children successfully enrolled in Lebanon’s public schools each school year since the double shift was launched.

Theirworld’s efforts did not stop there. With poverty an ever-pressing concern among Syrian families and disadvantaged Lebanese, additional interventions were required to ensure children could access education and were not going to school hungry. From 2016-2018, Theirworld worked collaboratively with MEHE, two public schools and three local food suppliers to pilot a snack programme to tackle the issues of short-term hunger and poor concentration among 4,000 disadvantaged children.

The results, summarised below, point to how small-scale healthy snack interventions have helped to address short-term hunger in students, significantly improve diet diversity and increase school attendance. Theirworld now recommends that the learnings from this pilot programme be adopted by the Government of Lebanon, aid agencies and civil society actors in Lebanon as they consider the feasibility of taking a snack programme to scale in the country.

The Intervention and Risks

"These snacks are a lifeline for the poorest children"

(Mrs Carine Sobhie - Teacher Coordinator, Mtein School)

"My students are so happy when the snacks arrive. They really help to keep the children motivated and smiling!"

(Mrs Souheir Choubassy - Headteacher, Taalabaya school)

Initial Research

In March 2016 Theirworld began to explore the feasibility of providing healthy snacks for Lebanese and Syrian refugee children. The results of Theirworld's initial research conducted in two public schools in Lebanon - Mtein School (Mount Lebanon) and Taalabaya school (Bekaa) - found that **a significant number of Lebanese and Syrian students were arriving at school without having eaten two to three hours beforehand.** The resulting short-term hunger could impact on students' ability to concentrate in class and retain information, and therefore contribute to lower grades and higher dropout rates.

It was concluded that a school snack programme which addressed diet diversity and short-term hunger could contribute to improved learning outcomes and reduced school dropout rates among students.

Risks

At the time of the initial research, there were no other existing programmes to provide food for children at the public school level in Lebanon. This raised a number of organisational and operational risks which would need to be addressed ahead of programme implementation:

Risk 1

Theirworld would be unable to locate snack partners in Lebanon who could deliver the programme within USD \$1 per snack, per student, per day - therefore rendering the programme financially unviable.

Mitigation: Theirworld worked with MEHE and the pilot schools to:

- Source two local food suppliers, each within easy reach of our target pilot schools (therefore no need for refrigeration of snacks which would incur greater upfront costs).
- Source one national milk supplier with an expansive network of local offices that could deliver to our target pilot schools with easy access to the school buildings on a daily basis.
- Negotiate affordable unit costs that would remain within the USD \$1 cap for the duration of the programme.

Risk 2

The lack of public school infrastructure in Lebanon would make it difficult to store food and milk safely, and to do so in compliance with international health and safety standards.

Mitigation: Theirworld worked with MEHE and the pilot schools to:

- Ensure local food suppliers were health and safety compliant.
- Ensure the national milk supplier was health and safety compliant, with local offices equipped with sufficient refrigeration to stock fresh milk safely.
- Ensure the pilot schools had fully-operational refrigeration spaces to store milk, with MEHE certifying these facilities as health and safety compliant.

Risk 3

Theirworld would not get the necessary buy-in from the pilot schools' teaching faculty, parents and the students themselves to deliver the programme successfully.

Mitigation: Theirworld worked with MEHE to:

- Facilitate discussions with pilot school leadership about the benefits of snack and milk provision for children (combined with the provision of learning aids to increase awareness of health and nutrition among teachers).
- Distribute formal written correspondence to parents informing them of the snack programme launch, the menu on offer and to encourage them to support the intervention.
- Give parents an opt-out option for their children if necessary.
- Facilitate discussions with the pilot schools' teaching faculty and students alike, for them to voice any concerns or dislikes regarding the snack programme menus. In response, Theirworld continuously improved the snack menu from baseline through to endline to ensure the food on offer was the best quality.

Risk 4

Fluctuations in school attendance numbers throughout the school year could lead to excessive food waste and waste of project financial resources.

Mitigation: Theirworld worked with pilot schools' leadership and their teaching faculty to:

- Create simple online tracking spreadsheets that could be updated by teachers with current student numbers and the uptake of snacks by students at the end of each week. These numbers would be shared with the snack and milk providers so they could adjust their delivery amounts ahead of time if required.
- Make available a Lebanon-based Project Consultant who would support the pilot schools to track snack and milk orders, and to better manage order quantities so as to avoid waste.

Project Implementation

Following an assessment of the feasibility and risks associated with snack provision, Theirworld's pilot snack programme was launched in September 2016 in two public schools in Lebanon - Mtein School (Mount Lebanon) and Taalabaya School (Bekaa Valley).

The primary objectives of the snack programme pilot were to:

- Increase educational outcomes at Mtein and Taalabaya Schools
- Increase enrolment and improve attendance at Mtein and Taalabaya Schools

A secondary objective of the pilot was to:

- Improve diet diversity among students at Mtein and Taalabaya Schools

To ensure Theirworld could effectively track learning and impact against the objectives outlined above, a research team was commissioned to conduct baseline through to endline observations of the programme.

Research Measurements - Definitions

Educational Achievement Measurement: student grades in mathematics and language classes (French and Arabic) were used as proxies to determine educational achievement.

Attendance Measurement: the number of missed days per total number of school days within an academic year. Data was analysed categorically as children missing more than 15% of school days versus children missing less than 15% of school days.

Diet Diversity Measurement: Or Diet Diversity Score (DDS) was defined as the number of food groups consumed over a period of 24 hours.¹



Menus

Choosing the menu was of central importance to the success of the snack programme. Theirworld worked collaboratively with local food suppliers, the pilot school leadership and MEHE to offer a versatile snack menu that was nutritious, culturally acceptable and one that our students looked forward to eating.

Theirworld was also keen to ensure that the menu included seasonal food options which were locally sourced. We worked with local food suppliers to develop both a winter and a summer menu which took these issues into account:

Winter menu (September - February)

- 1 x portion of milk per day
- 3 x savoury snack per week
- 2 x fruit / vegetable portion per week
- 1 x low fat sweet snack per month

Monday	Tuesday	Wednesday	Thursday	Friday
Sandwich kashkaval* with cucumbers	Banana	Sandwich labneh** with olive tapenade	Sweetcorn (cob)	Sandwich thyme with cucumber

* Kashkaval: yellow cheese made of cow's milk

** Labneh: a tangy, creamy yoghurt cheese

Summer menu (March - June)

- 1 x portion of milk per day
- 2 x savoury snack per week
- 3 x fruit / vegetable portion per week
- 1 x low-fat sweet snack per month

Monday	Tuesday	Wednesday	Thursday	Friday
Sandwich halloumi with tomatoes	Pear	Sweetcorn (cob)	Sandwich feta with tomatoes	Peach

Costs

The snack programme menu had been finalised, but what about the cost? Through consultations with a number of stakeholders on the ground in Lebanon, Theirworld was able to successfully secure a low-cost snack programme model. The final costs for each child enrolled on the programme amounted to USD \$1 per student per day. See the breakdown below:

Snack: \$0.79 cents per student per day.

Milk: \$0.21 cents per student per day.

Total: \$1.00 dollar per student per day

Theirworld designed a snack programme that included healthy food sourced locally and per-student unit costs that were affordable. In doing so, Theirworld hoped to provide a proof of concept for snack provision in public schools that could be easily scaled nationally and sustained by the Government of Lebanon, other aid agencies and civil society networks following the end of the pilot in Summer 2018.



What We Have Learned

"I am thankful that they provide a snack at school. The food is very tasty and nutritious and keeps us going through the late afternoon hours."

(Ilaf, Syrian refugee student, female. Snack programme beneficiary, Mtein School)

"I eat my snacks during my break at school - I really like the cheese sandwiches! I like the milk too and sometimes save some to take home."

(Ziad, Syrian refugee student, male. Snack programme beneficiary, Taalabaya School)

At the close of Theirworld's pilot snack programme in summer 2018, the endline research outputs indicated significant successes that point to the potential of achieving greater educational and nutritional gains for Lebanese and Syrian refugee children, should the programme be taken to scale in the future.

An average of 5.2% of Syrian refugee students across both pilot schools were recorded as missing school at endline. This is compared to an average of 11.2% missing school at programme start. Although this improvement cannot be attributed to Theirworld's snack programme alone², it is encouraging to see more and more Syrian refugee children in particular accessing education and staying in school for the duration of the academic year.

Diet diversity scores have consistently improved in Theirworld's two pilot schools from baseline through to endline, with a significant increase in vegetable and dairy intake among both Lebanese and Syrian refugee students. In addition, **an average of 10% of Syrian refugee students across both pilot schools were recorded as skipping lunch at endline, down from 26.5%** of students at programme start. These dietary improvements coincided with improvements Theirworld made to the school snack menu throughout the programme and, therefore, such gains can be assumed to be attributed to the provision of Theirworld's school snacks.

Furthermore, Theirworld's pilot snack programme has **contributed considerably to monitoring and evaluation data on the nutritional status of both Lebanese and Syrian refugee children within the public school system in Lebanon.** Theirworld has been committed to taking measurements over time as part of this programme pilot, a research investment that larger development aid agencies also delivering food programmes in Lebanon have not yet committed to doing. These findings will thus be instrumental in any future planning of national school-feeding programmes in Lebanon and the wider Middle East region.

Unexpected challenges

With several programme gains came some unexpected challenges that will need to be interrogated further by the government of Lebanon, aid agencies and other civil society organisations looking to scale school-feeding in Lebanon beyond Theirworld's pilot.

The endline research results showed an **absence of significant change or improvements in grade data** recorded for both Lebanese and Syrian refugee students at both pilot schools. Given the research methodology, this could imply that other external factors were likely at play during programme delivery which hindered students' educational attainment. There are additional student educational needs that Theirworld's snack programme could not have addressed alone, such as issues with the quality of education and disruptions in classroom activity.

The increase in Syrian refugee students who remain food insecure at Taalabaya school in particular was also a concern (up from 21.9% of students at baseline, to 32% of students at endline). This increase was in line with broader demographic trends in the country based on year-on-year data recorded as part of the 2017 Vulnerability Assessment of Syrian Refugees in Lebanon, which indicated that the percentage of households with severe and moderate food insecurity significantly increased from 23% in 2015 to 38% in 2017.

When looking to scale this programme model, potential delivery partners will need to factor into any research design what are the most accurate measurements and methodologies to use that will capture the impact of school snack programmes, and how these can be adversely affected by external factors outside of the school's control (i.e. families' socioeconomic status / socio-political environment / unhealthy food ecosystem outside of the target school environs).



Headline Figures

4,000 Lebanese and Syrian children provided with a daily portion of healthy food and a daily portion of milk at school.

40 teachers provided with learning tools on the positive impacts of healthy food to educate themselves and their students.

Attendance

Taalabaya School

6.8% - The percentage of Syrian children missing more than 15% of school days. Down from 14% recorded at baseline.

Mtein School

3.6% - The percentage of Syrian children missing more than 15% of school days. Down from 8.4% recorded at baseline.

Educational Attainment

Taalabaya School

5% increase in Maths grades - recorded for Lebanese children as compared to baseline. A marginal decrease in Arabic and French grades from baseline to endline was also recorded for this cohort.

Mtein School

6% increase in Maths grades - recorded for Syrian children as compared to baseline. No significant change recorded in Arabic and French grades from midline to endline for this cohort.

Grade changes among Lebanese children were not reported as only 31 students were matched for analysis, thus there were insufficient numbers to run statistical analyses on.

Dietary Habits

Taalabaya School

8% - The percentage of Syrian students interviewed at endline who reported skipping lunch. Down from 33% of Syrian students recorded at baseline.

Mtein School

12% - The percentage of Syrian students interviewed at endline who reported skipping lunch. Down from 20% of Syrian students recorded at baseline.

Diet Diversity

Taalabaya school

2.0 - The diet diversity score for Lebanese students at endline. Up from 1.0 recorded at baseline.

2.0 - The diet diversity score for Syrian students at endline. Up from 0.7 recorded at baseline

Mtein school

5.0 - The diet diversity score for Lebanese students at endline. No change from score recorded at baseline.

2.3 - The diet diversity score for Syrian students at endline. Up from 1.1 recorded at baseline



Scaling the programme

“School snack programmes should be continued in Lebanese public schools, particularly in those that host Syrian refugees, as they can improve the diet diversity of children coming from food insecure households.”

(Dr Hala Ghattas, Lead Researcher - Theirworld School Snack Programme)

“We would be so happy to have a snack programme again in our school. The snacks were so important to the children, they helped them to learn better. Whatever we can do to support another programme like this, we will do.”

(Mrs Souheir Choubassy, Headteacher - Taalabaya School)

Central to Theirworld’s theory of change model is to consider how investments in low-cost, impactful pilot projects will have the potential to be taken to scale by governments, local public and private sector organisations and civil society networks operating in our target countries. The research findings from our Lebanon pilot snack programme point to great potential in scaling this approach nationally.

Recommendations

When considering national scalability of a programme of this kind, Theirworld recommends that potential future delivery partners in Lebanon take account of the following:

1. Build on Theirworld’s current research findings to design a robust monitoring and evaluation framework to support future snack programme delivery, which will track improvements in child educational attainment, attendance and nutritional status.
2. Explore alternative public school snack programme models that will respond to the differential economic needs of Lebanese and Syrian refugee students. For example: by introducing a model that offers both fully-funded school meals for those children most in need, alongside subsidised alternatives that children from families who have more financial resources at their disposal can contribute to during the academic school year. Such considerations will also be helpful as the government of Lebanon looks to transition its aid provision for Syrian refugee children from emergency status to a more protracted crisis situation.
3. Use Theirworld’s research findings to guide interrogations of the wider food ecosystem in and around public school institutions in Lebanon as part of any future school feeding programme delivered. This approach will promote improvements in the nutritional status of food accessible by Lebanese and Syrian refugee children prior to, during and after school. There are plans to look at the wider food ecosystem surrounding schools, and this work can build on Theirworld’s pilot snack programme findings.

With the right planning, project design and sufficient interrogations of how Lebanon’s wider food ecosystem impacts on the health, wellbeing and educational performance of Lebanese and Syrian refugee children within the public school system, a sustainable national school-feeding programme building on Theirworld’s current findings is not only possible but would be transformational.

Notes

1. Diet was classified according to nine food groups as recommended by the Food Agriculture Organization (FAO), which include: (1) cereals, roots and tubers; (2) vitamin-A-rich fruits and vegetables; (3) other fruit; (4) other vegetables; (5) legumes and nuts; (6) meat, poultry and fish; (7) fats and oils; (8) dairy; and (9) eggs.

See: Food Agriculture Organization (2011) Guidelines for measuring household and individual dietary diversity. FAO Rome, Italy.

2. In parallel to Theirworld's snack programme interventions, the Lebanese Ministry of Education and Higher Education has been delivering a targeted enrolment campaign for Syrian children of school age to access public school under its Reaching All Children Through Education (RACE) strategy. See: http://www.mehe.gov.lb/uploads/file/2016/Oct/RACE%20II_FINAL%20Narrative_29AUG2016.pdf [Accessed August 2018]

Acknowledgements

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