



THE TIGER BRANDS
FOUNDATION

**Valuing the Impact of
Tiger Brands Foundation
Breakfast Programme
Limpopo**

Social Return on Investment study by:

Dr Madri Jansen van Rensburg

**South Africa
August 2017**



Resilience Analysis Consulting

Social Value International Accredited SROI practitioner

Executive Summary

This report is an Evaluative Social Return on Investment Analysis (SROI) commissioned by Tiger Brands Foundation (TBF). The foundation works since 2013 in close partnership with the Department of Basic Education's National School Nutrition Programme (NSNP) to provide breakfasts to learners. During 2017 TBF delivered over 50 million breakfasts. This study aimed to determine the social return on investment of the TBF breakfast programme. It further investigated and described the theory of change for all stakeholder groups involved in the programme.

Social Return on Investment (SROI)

The SROI methodology was originally developed by the Roberts Enterprise Development Fund in the USA, and was further enhanced in the UK, most recently through the Cabinet Office. Although SROI is a relatively new discipline in South Africa, it has been extensively used across the UK, United States, Europe and Australia for over a decade. It is a framework for understanding, measuring and accounting for the broad concept of value which incorporates social, environmental and economic benefits.

The context of this study was, thus, to assess the return on social value of the TBF breakfast programme using an Evaluative Social Return on Investment Analysis on the seven schools in Limpopo assessing the investment period from 2016 to 2017.

The major stakeholders are first determined and the theory of change is investigated for each stakeholder group. Outcomes per stakeholder group are described based on evidence from direct stakeholder engagement and interaction. Indicators are identified for each outcome. A financial proxy is then assigned to each of the outcomes of value and a sensitivity analysis is conducted; thereby a return on investment is quantified. Filters are applied to account for those external factors which may have an effect on the overall impact created.

The major stakeholder groups were identified as:

- Learners
- Most vulnerable learners
- Educators
- Food handlers/Mother helpers
- School based monitors
- Parents/caregivers
- School
- Community
- Vendors

Findings

The SROI analysis indicated that the programme delivers a SROI of 8.68:1 at least, i.e. for every R 1 invested approximately R 8.68 of social value is created.

A sensitivity analysis tested assumptions of especially the outcomes with the highest values outcomes creation. If the effects in reduction of participation by half are included the SROI ratio remains high at 8.03. When late-coming of learners is reduced to once a week instead of daily the SROI ration is 5.09:1. If all direct food benefits are removed a SROI of 7.74:1 remains. Adjusting the discounted values to higher levels decreased the SROI ratio to 8.14:1.

The learner group was the stakeholder group with the most outcomes and the highest value was created for this group. Educator outcomes showed high returns on the investment with food handlers and schools benefitting to a high degree.

It should be noted that a conservative approach to monetizing outcomes was adopted, while an attempt has been made to retain the different types of outcomes which occur at the different levels. Certain outcomes could not be included as a result of lack of evidence to allow monetising the outcomes.

Conclusions

The Limpopo province and specifically the area where the TBF breakfast programme is implemented is a poor peri-urban and rural area. The TBF programme is still in early stages with more investment and closer relationships (networking and partnerships) with schools, principals and learners.

The SROI indicated that the targeting is correct and that the programme has a wide influence on various stakeholders including the community. The impact was much wider than a specific group (e.g. learners) and a specific outcome (e.g. growth).

It will be importance in future to focus on some stakeholder groups with the potential to have a higher return on investment (e.g. educators) in programme interventions, but also in measuring change. Other groups with potential to influence the outcomes include principals School Governing Bodies members.

An important aspect that contributed to the high SROI ratio is the savings in costs. This is an important aspect of the investment and includes aspects such as procurement of food at cost price and having systems in place, e.g. transport.

Sustainability of interventions of this nature that targets basic needs (such as food) depends on continued inputs/investments. Close partnerships (and shared management) with the Department of Education in the province and the national Department of Basic Education contributes to the sustainability. It would also be important to add other investors (national and local small businesses).

The benefit for Tiger Brands in being able to illustrate the impact of the Foundation makes them a leader in this intervention. The SROI study also further illustrates the thought leadership of the Tiger Brands Foundation.

Recommendations

Programme/intervention

Some recommendations to strengthen the intervention as highlighted through the study include:

- Placing emphases/attention on other groups, e.g. Educators. This includes encouragement to eat the breakfast, but also recognising the important role they play in the programme.
- Human resource (recruitment and capacity development of staff should include different leadership styles and the influence of individuals (school principals, DoE, e.g.) on programme implementation and results.
- A possible award for most influential educator or emphasis on the role of the IQMS could enhance motivation of educators.
- Education and skills development of vendors so that they can improve their own understanding of nutrition and widen their markets.
- Water is a critical factor for any nutritional scheme or programme. It might be a topic of discussion or investigation to empower schools (and SGBs) to source local sponsorship to alleviate challenges in water
- The lack of kitchens is problematic for some schools. For example in the rainy season the wood for the open fires gets wet, making cooking impossible. TBF can in collaboration with other investors work on longer term solutions, keeping in mind that this is a large investment that should have input from the local community and SGB for optimal impact.

NSNP and other stakeholders and investors

The benefit specific to the early breakfast was evident in this study. The effect of combined breakfast and lunch further illustrates the need for collaboration to ensure learners eat regularly and early. Collaboration between stakeholders is necessary and ensuring that in the schools with no breakfast the NSNP meal is consumed as early as possible.

Monitoring and further evaluations

The study highlighted important aspects for further monitoring of the TBF programme and further research.

Monitoring (Mobenzi and SBM)

Some recommendations for monitoring include possible inclusion in the Mobenzi application and the monitoring by the School Based Monitors.

- Other indicators can be added: participation, late coming
- Information on groups can be gathered to inform programme interventions such as capacity development and motivation, e.g. Educators

Further research/SROI studies

The following suggestions are made for further research and impact evaluations:

- Repeat SROI in the province after 2 years.
- Include other provinces with different contexts (social economic, geographical, political) and different timelines/stages of development.
- Investigate the outcomes that can be generalised in new strategies for other provinces, e.g. educator influence and results such as improved attendance and punctuality.
- A SROI study on the schools with the NSNP (no TBF programme) will further enhance the understanding of the timing and added benefit of breakfast for optimal implementation.
- Investigate the differences between the initial set-up costs and cost of rolling out the programme and cascading the implementation to a wider beneficiary reach.
- Include qualitative research or a qualitative component to research studies (including in growth and anthropometric research) to aid the understanding the “why” of the changes documented.

TBF as thought leader

There are important lessons to be shared with the wider community with similar interest and target beneficiaries.

- Sharing the information and evidence on the importance of an early meal (breakfast) on punctuality of learners and educators and participation.
- The dissemination of the results of the study and the SROI ratio and value generated for different stakeholder groups including other foundations and corporate social responsibility projects. This will greatly increase the benefits and ultimate impact of these types of investments in social development.

Content

Executive Summary	2
Abbreviations and terminology	8
Introduction	9
Limpopo context	9
National School Nutrition Programme	9
Tiger Brands Foundation	10
TBF breakfast programme in Limpopo	11
The SROI approach	12
Meaning and value of the return ratio.....	13
Evaluation team	14
Scope of the TBF evaluative SROI	15
Time frame.....	15
Beneficiary numbers.....	15
Methodology and respondents	16
Questions and Tools.....	16
Participatory group discussions.....	16
Learner surveys	17
Vendor survey	18
Data analysis and interpretation.....	18
Qualitative data analysis	18
Learner survey data analysis.....	20
Counterfactual.....	20
Participants.....	21
Sampling	21
TBF breakfast stakeholders.....	23
Change for stakeholder groups	27
Learners	29
Having a full stomach/receiving a meal and alleviating hunger.....	31
Psychological and mental effects	32
Improved health and decrease in illness.....	34
Physical benefits	34
School attendance improve	35
Social behaviour.....	36
Subgroups.....	36
Most vulnerable learners.....	38
Educators	39
Food handlers/Mother helpers	41
School based monitors	43

Parents and caregivers	44
Community	45
Schools.....	47
Vendors	48
Unions and nutritional committees	49
The Investment	51
Outcomes.....	52
Period of Benefit	52
Monetisation	52
Outcome inclusion decisions	53
Potential negative outcomes	62
Outcome quantity and duration	63
Financial proxies.....	66
The SROI Filters	73
Deadweight	73
Attribution.....	73
Displacement	73
Drop-off.....	73
Discounted rate	74
Ensuring stakeholders and outcomes are relevant and significant (material)	77
Avoiding the risks of over claiming	78
The Social Return on Investment Results.....	79
Overview of Social Value	79
Outcomes with highest values.....	80
SROI Return Ratios	80
Sensitivity Analysis	80
Filters	81
Outcome with highest value: late-coming	81
Outcome with 2 nd highest value: Participation.....	82
Full stomach and hunger	82
Verification and dissemination of results	83
Recommendations	84
Programme/intervention.....	84
NSNP and other stakeholders and investors.....	84
Monitoring and further evaluations	85
Monitoring (Mobenzi and SBM)	85
Further research/SROI studies.....	85
TBF as thought leader	86
Conclusions.....	86

Accompanying documents	87
Impact Map (Excel format)	87
Methodology and tools manual	87
References.....	88
Appendix A: SROI Principles.....	89
Appendix B: Learners survey results: Limpopo.....	90
Appendix C: Vendor survey results: Limpopo.....	99
Appendix D: Scoping meeting participants	101
Appendix E: TBF: Head office running cost	102

Abbreviations and terminology

CWP	Community Works Programme
DBE	Department of Basic Education
FGD	Focus group discussion
HCW	Health Care Worker
NCEdu	Northern Cape Department of Education
NGO	Nongovernmental organisation
NSNP	National School Nutrition Programme
OVC	Orphan and vulnerable children
POC	Provincial co-ordinators
PV	Present value
SAPS	South African Police Service
SGB	School governing body
SMT	School management team
SROI	Social Return on Investment
SVA	Social value added
TBF	Tiger Brands Foundation
UJ	University of Johannesburg

Educators = teachers

Gogo = grandmother

Parents = caregivers

Food handlers = Voluntary food handlers = Mother helpers

Introduction

This report aims to calculate the Social Return on Investment (SROI) of the Tiger Brands Foundation (TBF) Nutritional Breakfast Programme in the Limpopo Province.

Limpopo context

Limpopo is the northernmost province of South Africa, bordered (by the Limpopo river) by Botswana, Zimbabwe and Mozambique. The capital is Polokwane, and Northern Sotho (Sepedi) spoken by the majority (52%) of the 5,404,868 people living in the province. The province is the 5th largest in South Africa (125,754 km²). Limpopo has the highest level of poverty of any South African province, with 78.9% of the population living below the national poverty line. The two municipalities that the TBF have project schools in are located in the Waterberg district.

Modimolle has a population of 68,513 with 30.8% younger than 14 years of age. Unemployment is 22.2% and youth unemployment is 28.9%. A large percentage (10.6%) of those 20 years and older, have no schooling. Agricultural commodities include grapes, sheep and cattle, game, nuts, vegetables, and grain.

Bela-Bela (66,500 population) is famous for its hot springs. 28.1% of the population is younger than 14 years. Unemployment is at 22.5% and the youth unemployment is 29.8%. Tourism and agriculture are the main contributing industries to the economy. 9, 7% of those 20+ have no schooling. (StatsSA, 2012)

National School Nutrition Programme

The National School Nutrition Programme (NSNP) of the Department of Basic Education (DBE) aims to enhance the learning capacity of learners through the provision of a healthy meal at schools. Where it is implemented, the programme has shown to improve punctuality, regular school attendance, concentration and the general wellbeing of participating learners. Whilst learners are being provided with nutritious meals, they are also taught to establish and maintain good eating and lifestyle habits for life. (DBE, 2017)

The NSNP aims to enhance the learning capacity of learners through the provision of a healthy meal at schools. Where it is implemented, the programme has shown to improve punctuality, regular school attendance, concentration and the general wellbeing of participating learners.

Whilst learners are being provided with nutritious meals, they are also taught to establish and maintain good eating and lifestyle habits for life. Nutrition Education also provides educators with resource materials to support curriculum and to make every school a healthy school.

Schools are also encouraged to establish food gardens from which they obtain fresh produce (vegetables/fruit) to supplement the menu in line with South African Food Based Dietary Guidelines. Learners, teachers & parents are provided with skills to

grow their own food contributing towards long-term household food security. The gardens are also used as a teaching and learning resource and to beautify the environment.

The objectives of the programme are:

- To contribute to enhanced learning capacity through school feeding,
- To promote food production initiatives.
- To strengthen nutrition education for the school community.

The Department's targeting policy is to offer all quintile 1 to 3 primary and secondary schools in the province the opportunity to apply to participate in the NSNP. (DBE, 2017, 2016)

Tiger Brands Foundation

The Tiger Brands Foundation (TBF) was established for broad based community impact, and will be for the benefit of non-fee paying schools, vulnerable groups in society as well as projects that promote sustainable livelihoods in the areas in which such non-fee paying schools exist. To achieve this vision, the Foundation established an in-school breakfast feeding programme to complement the lunch provided by the Department of Basic Education – National Schools Nutrition Programme (NSNP). TBF work closely with the NSNP team in the selection of schools with strict criteria applied to each school prior to the in-school programme being implemented. The Foundation also plays a strategic, co-ordination and delivery role in partnership with a number of stakeholders including but not limited to the Department of Basic Education (DBE), Academic institutions (e.g. University of Johannesburg – UJ), Beneficiary schools ,parents/caregivers and community leaders, Tiger Brands. Tiger Brands allocates 5% (five per cent) of its dividends to the Foundation. In 2017, its sixth year, TBF has served more than 50 million meals.

The Foundation **belief statements**:

“We belief that:

- nutrition is the cornerstone for a healthy body and healthy mind
- all children should be given a fair chance to learn and develop
- all parents should play an active and integral role in the development of their children
- communities should be supported in the development and growth of their children
- the Foundation's value and longevity is linked to its ability to contribute to the evolution of society and its sustainable development
- the continuous search for improvement is what promotes the development of individuals, organisations and society
- nutrition programmes should be a fundamental component of the national education policy
- all genders should receive the same level and intensity”

The activities that TBF implements include:

- Salaries and performance bonuses for school-based staff (food handlers);

- School stipends, utensils and uniforms;
- Food, warehousing and distribution;
- Food parcels;
- Oversight and monitoring: Mobenzi handset and service fees; travel of Provincial Co-ordinators (PCOs);
- Kitchen donations;
- NSNP awards conference;
- Research;
- Capacity development;
- Partnerships (with Department of Basic Education and other sponsors);
- Marketing.
- and other investments (e.g. special events).

The beneficiaries and operation costs for the past two years are:

	2016	2017
Schools nationally	81	92
Learners nationally	58 147	63 605
Educators nationally	1 820	2 313
Food handlers nationally	314	347
Total beneficiaries nationally	60 281	66 265
Operating costs	R 18,951,560	R 23,925,378

TBF breakfast programme in Limpopo

The current TBF beneficiaries (2017) in Limpopo included 7024 learners and 237 educators and 38 food handlers at seven primary schools in Modimolle and Bela-Bela.

This SROI acknowledges the interaction and mutual influence of the TBF Breakfast Programme and the NSNP. An attempt was made to separate the influences as far as possible to avoid over-claiming. However some outcomes cannot be attributed to only the TBF and care has been taken to make adjustments in calculating the results for those outcomes. It has been further examined during the sensitivity analysis.

Activities included in this study:

- Food handler salaries and uniforms;
- Training of food handlers;
- Breakfast provision (supply of food, warehousing and distribution);
- Provision of utensils;
- National conference for school representatives.

Activities that were excluded mainly relates to the donation of kitchens (that was not implemented in this province) and partnership and marketing activities that contributes to the overall organizational efforts. The cost for the latter was included as national operational costs, but outcomes related to these were not measured directly as it relates to ore general influences.

The SROI approach

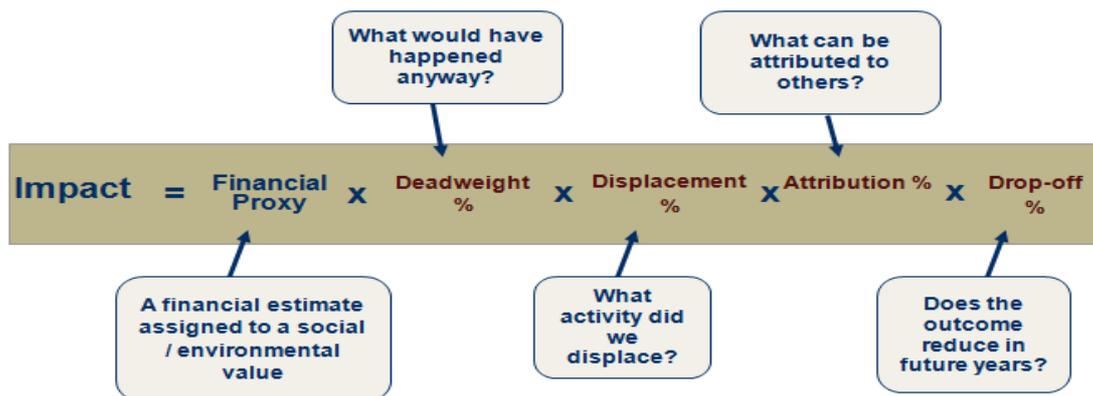
Social Return on Investment (SROI) is a measurement and accounting framework for the broad concept of value. SROI can be thought of as a broad approach to cost-benefit analysis which is primarily used in deciding whether or not the benefits resulting from an intervention justifies the costs. SROI has its roots in traditional return on investment analysis, but its definition of value includes the social, environmental and financial value created by an organisation. SROI explores the returns on the investment made in those who contribute to the change. The SROI ratio quantifies the financial value of the change compared to the investment value. The measurement, therefore, seeks to capture both the financial and social value of the change achieved through an intervention. (SROI, 2009, 2012, 2013a, 2013b, 2014).

There are two types of SROI: Forecast and Evaluative. This report uses an Evaluative SROI that is conducted retrospectively and based on actual outcomes that have already taken place. The approach follows that laid out by the international SROI Network. The guiding principles are listed in Appendix A.

SROI steps

1	Project scope	Clear boundaries of what the SROI analysis will cover, who will be involved in the process and how
2	Mapping outcomes	Engage with stakeholders to develop an impact map which shows the relationship between inputs, outputs and outcomes
3	Evidence outcomes	Find data to show whether outcomes have happened and then value them
4	Establish impact	Determine those aspects of change that would have happened anyway or as a result of other factors
5	Calculate the SROI	Add up all the benefits, subtract any negatives and compare the result to the investment. This is also where the sensitivity of the results can be tested
6	Report, use and embed	Report to stakeholders, communicate and use the results, and embed the SROI process in the organisation

To calculate the SROI the following formula is used. The specific aspects taken into consideration for the calculation for this SROI study are described later in sections.



Calculation of impact

Meaning and value of the return ratio

By calculating the **SROI ratio** a comparison is made of the investments (inputs) on the one hand and the financial, social and environmental returns (outcomes and impact of an intervention) on the other. In other words SROI measures the monetised value of benefits relative to the costs of achieving those benefits.

$$\text{SROI} = \frac{\text{Value of benefits}}{\text{Value of investment}}$$

For example:

A ratio of 2:1 indicates that an investment of R 1 delivers R 2 in social value.

A ratio of 1:1 indicates that the same amount of value was created than that invested.

A ratio of 0:1 means that there was no value created and that the investment did not yield any returns.

But, there is not just one return ratio calculated per study. After calculating the net present value, other analysis reveals how this ratio changes when different assumptions are tested. For example the sensitivity of the calculation can be tested to see the influence of:

- The amount of change (for example in increasing or decreasing the number of stakeholders in a group to show the impact of having more or fewer beneficiaries.
- The length of time that the benefit will last
- Different rand values of the change experienced (e.g. changing the value of the financial proxy)
- Changing the filters
 - **Deadweight** is an estimation of what would have happened if the intervention was never implemented.

- **Attribution** accounts for the percentage of the results for the outcomes caused by other organisations or people.
- **Displacement** is an assessment of how much of the activity displaced other outcomes.
- **Drop-Off** is a measure which recognises that outcomes could tend to reduce over time.

All these ratios present information on how specific changes will influence the programme and what influence it would have if some of the assumptions (as explained above) were incorrect. This can be a valuable decision making tool that can be used to determine where the best investment would be.

But, the SROI is about more than the ratio. The SROI provides a framework for exploring a programmes' impact. It can determine which stakeholders are more involved in, or affected by, the programme or intervention. In addition to the ratio, the final SROI report provides a detailed account of how the organisation is making a difference. The contextual information that enabled the calculation ensures a better understanding. The contextual information and the Theory of Change that is developed for each stakeholder group forms the main knowledge generated. The ratio focussed the attention and it is understood only in light of the explanation of the context and Theory of Change (or Results chain) according to which the change happened (or is anticipated to happen).

The SROI is therefore a means to a meaningful discussion on what can be achieved, what was achieved and what and how to change (stakeholder groups, beneficiaries, outcomes, activities or resources) to achieve a higher return on the investment.

Evaluation team

Dr Madri Jansen van Rensburg was the team leader responsible for design, day-to-day facilitation of the process and for drafting the reports. The team further included the Resilience Analysis administrator Ms Lerato Moeti, an experienced researcher in Mr Mpho Sesing and four additional research assistants recruited locally for the assignment. The additional researchers were responsible for data collection (Mr Kuchke Tlhoaelo, Mr Tshepiso Madisa, and Mr Abel Sepesu).

Madri is a double doctorate in Psychology and Consulting Psychology. She obtained two Master's degrees in Anatomy and Research Psychology reflecting her competencies in both health and social sciences. She is registered research psychologist and one of only two Social Value International accredited (previously SROI International) SROI practitioners in Africa.

She enjoys working in multi-cultural settings using mixed method approaches. Her work involved working with Children, Orphans and Vulnerable Children, HIV (mitigation and prevention programs) and Gender. Madri taught Anatomy at the University of the Witwatersrand and the University of Johannesburg (UJ). She is still attached to academic institutions such as UJ and UNISA where she is involved in supervising post-graduate students. She worked as full-time research manager for various NGOs including People Opposing Women Abuse (POWA), LifeLine Southern

Africa (Secretariat) and Project Support Group (a regional HIV NGO). She places a strong emphasis on practical and implementable research (especially enabling change on individual, group, organisational or community level).

Madri has conducted various research and evaluation studies in SADC. Many of these focused on children (including orphans and vulnerable children). Previous SROI studies (both Forecast and Evaluative) were conducted for Merchants, SOS Children's Villages and Columba Leadership. All these involved children and youth as main beneficiaries.

Scope of the TBF evaluative SROI

This study included an investigation and calculation of the SROI for the Tiger Brands Foundation Breakfast Programme in Limpopo, looking back at the past 2 years. This evaluative SROI was done for the purpose of checking the reality of outcomes projected for the Breakfast Programme. The TBF programme in Limpopo was initiated in 2013 with five schools with two schools joining in 2016.

Time frame

The seven schools currently included in the programme joined the programme in the following timeframes.

	Joined programme	Current learners
Dagbreek Primary School	2013	1 179
Maokoeng Primary School	2013	1 434
Modimolle Primary School	2013	1 143
Hector Peterson Primary school	2013	1 086
Lekkerbreek Primary School	2013	1 056
Khabele Primary School	2016	639
Ulando Combined School	2016	487

Beneficiary numbers

The time period for the SROI study was set at the scoping meeting for two years 2016 to 2017. The study used the total number of beneficiaries for the past two years. The actual numbers are as follows:

	Total for two years
Schools	7
Learners	14 048
Educators	474
Food handlers/Mother helpers	76
Total beneficiaries for province	14 598

Methodology and respondents

A variety of respondents were included, representing the implementation organisation, the beneficiaries and other partners. The data sources included non-beneficiaries and previous beneficiaries to investigate the counterfactual. Information from previous studies of other provincial TBF programmes in South Africa (Alexandria and Lady Frere) was included to calculate factors such as deadweight, to triangulate the data and to ensure that the information is reliable, realistic and valid. A document and literature review of related materials further contributed to understanding the outcomes and context.

Participatory methods were used for the group discussions. The methodology, tools and questions for each group of participants, ethical considerations (including consent forms used) are attached as an additional document (**Field Manual and Data Collection Tools**). Engagement with the participant groups included:

- Discussions regarding who to include as stakeholders.
- Developing a theory of change (results chain) for each of the different stakeholder groups (e.g. educators provided insight not only in the theory of change for educators, but also for learners, parents, the school and other groups they identified as stakeholders).
- Discussions on inputs, outputs and outcomes (results) for each identified stakeholder group.
- Defining and identifying relevant indicators. Providing sources to verify the change and the amount of change that happened.
- Discussing filters (deadweight, attribution, displacement, and drop off) and negative and unintended results for all stakeholder groups.

In addition to the participatory group discussions and key informant interviews two short surveys were developed, learners and vendors. These surveys were administered to learners and to vendors at the schools by trained fieldworkers.

Questions and Tools

The engagements included beneficiary schools and non-beneficiary schools. This was done to enable comparison between the intervention and counterfactual. It also allowed (with literature and document reviews of other similar studies) to determine the amount of change and factors such as attribution and deadweight.

Participatory group discussions

Different types of participatory methods were used (e.g. “Living tree” with parents, “Body map” with learners, “Three pillars” with educators). Please see attached document **Field Manual and Data Collection Tools** for further information and a detailed description of all methods and all questions included in each engagement. The generic questions included:

- Development of the theory of change for own group by using “sticky notes” to brainstorm all changes. The changes were then arranged in logical sequence by the participants.
- Development of theory of change for other groups (e.g. Educators for learners to enable triangulation/verification)
- The material changes were identified and “starred”. For each of these additional questions were asked:
 - How will we know this is true? (indicating **evidence**, e.g. attendance registers)
 - What will be an indication that this change happened? (developing **indicators**)
 - How much (**amount**) of this change happened?
 - How long will these changes last (**duration, drop-off**)?
 - What is the worth of this change? **Financial proxies** – where these were not easy to determine a scale of items was used to give approximate values – for example: 1) sweets, 2) airtime, 3) McDonalds/KFC meal 4) clothes 5) tablet. These lists were developed to be appropriate to the specific context and physical location. Values were then assigned according to the value of the specific item.
- Other questions asked of each stakeholder group included:
 - What would have happened if there was no breakfast (if there was only the NSNP lunch)?
 - Are there any negative and unexpected things that happen because of the Breakfast programme?
 - Is there any other group or organisation that also contributes to the changes/results you mentioned?

Learner surveys

A short survey was developed to investigate the changes and comparison between beneficiaries and non-beneficiaries. It further aided in analysis of the subgroups of learners. It also collected data to determine outcomes attributed to TBF breakfast and those to NSNP lunch. Please see attached document **Field Manual and Data Collection Tools** for detailed description of survey and instructions for administration. The items of the survey included:

- Information:
 - School (to determine beneficiary or not)
 - Sex
 - Grade
 - Age
- Nutrition:
 - Eaten breakfast today?
 - Where eat breakfast (home, school, both, other)?
 - How often eat breakfast per week (of 7 days)?
 - How often eat lunch per week (of 7 days)?
 - Main benefit of eating breakfast (open ended)?
 - Main benefit of eating lunch (open ended)?

- Changes (main expected outcomes)
 - Days per week on time for school opening?
 - Days per month absent from school?
 - Often asking questions in class (participation)?
 - Participation in sport?

Vendor survey

A survey was developed to investigate the influence of the TNF breakfast programme on vendors who sell sweets and other refreshments at the schools. As this was a stakeholder group with possible negative outcomes the surveys investigated the changes for this group. The questions included:

- Information
 - School
 - Sex
 - Products
 - Customers
- School nutrition
 - Knowledge of breakfast programme
 - Influence of breakfast programme
 - Positive
 - Negative
 - Knowledge of lunch programme
 - Influence of lunch programme
 - Positive
 - Negative

Data analysis and interpretation

The dataset was complex with different participant groups providing information about them and other stakeholder groups.

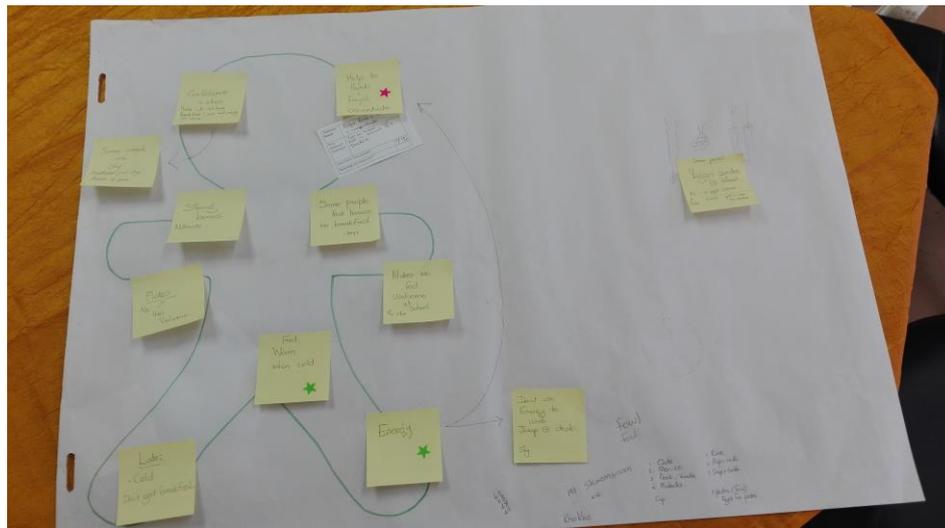
Qualitative data analysis

The group discussion (qualitative data) analysis entailed mapping from the data sheets from each participant group to a combined map for each identified stakeholder group. To represent results (outputs and outcomes) mentioned by more than one participant group a colour coding system was used. For example older boys were green stars. Adding these colour codes to each outcome triangulated the data sources. Each coloured sticker also contained an indication of how many schools or groups identified the outcome. The outcomes also contained information on the amount of change and direct quotes by participants. It verified the information and ensured that only valid and reliable outcomes were included in the description.

From this information the following were extracted for the decision making and quantification:

- Decisions regarding which stakeholder groups to include, based on material changes for each

- The theory of change for each stakeholder group
- The outcomes (and verification of these through triangulation)
- Duration of outcomes
- Sources of evidence
- Indicators
- Financial proxies and values
- Factors such as duration, drop-off, deadweight
- Attribution
- Negative and unintended changes and results



Example of data sheet of child participant group (Photo Madri Jansen van Rensburg)



Combined Theory of Change for learners with colour coding of all participant data source groups (coloured stickers) (Photo Madri Jansen van Rensburg)

Learner survey data analysis

See Appendix B for the results of the analysis of the learner surveys. This information was used to determine the differences between the beneficiary and non-beneficiary schools and to determine if the learner stakeholder group could be divided further into younger boys, older boys, younger girls and older girls. It further directed the calculation of discount factors.

The analysis of the survey data included descriptive statistics such as frequencies and cross tabulation of different variables and groups. Inferential statistics to determine statistically significant differences included students' t-tests and Analysis of Variance (ANOVA).

Vendor survey data analysis

The vendor surveys contributed to an understanding of the influence of the TBF programme. The information was analysed using frequencies to determine the amount of the outcomes. Opened ended questions were thematically analysed to determine the theory of change and outcomes for this stakeholder group. See Appendix C for the results.

Counterfactual

Determining differences between the intervention and counterfactual, included:

- Differences in responses from the group discussions, including estimations from different respondent groups (e.g. learner estimates of the effect size or financial values were triangulated with the estimates of other groups such as educators and parents).
- Differences recorded between reported estimates between the intervention and the non-beneficiary schools (e.g. participation in class).
- Differences between beneficiaries and non-beneficiaries in key outcomes captured in the survey (e.g. calculating the differences between those learners who eat at school, but might have access to breakfast at home).
- Published academic articles and literature that measures the same outcomes (e.g. estimates of growth indicators such as stunting and wasting).
- School-based data such as attendance rates and performance. This was compared between beneficiaries and non-beneficiaries.

Participants

The sizes of the different participant groups and the types of engagement with each group are presented in the following table. The sample included 389 surveys completed by learners and 19 by vendors. There were 49 group discussions, individual interviews and meetings with a total of 186 participants. In total the voices of 594 participants were included.

The participant groups included the groups identified as possible stakeholder groups and groups who were not stakeholders (direct or indirect beneficiaries), but who could contribute to the understanding of the changes (outcomes), the amount of change and factors contributing to the change. The participant groups are therefore more comprehensive than the stakeholder groups.

Sampling

The learners included for the survey were randomly selected to represent different grades and sex groups.

Participants for the qualitative engagements were sampled using non-probability sampling. The strategy was to have a representative sample. Instructions were given to school principals to invite the representatives according to inclusion criteria (including group sizes). Group discussions were repeated at different schools to ensure that different samples were included and to limit bias in selection.

Participant Group Sizes and Type of Engagement

Participants	Groups	Participants	Type of engagement
NSNP – DBE National	3	1	Scoping and dissemination meeting
TBF National Office		5	
DoE (including NSNP) – Provincial	1	2	Meeting
TBF Provincial coordinator	1	1	Meetings
Principal + SMT	6	15	Participatory group discussion
Principal + SMT (non-beneficiary)	1	1	Participatory group discussion
Educators	4	19	Participatory group discussion (school with 3 pillars)
Educators (non-beneficiary)	1	4	Participatory group discussion (school with 3 pillars)
Nutritional committee	3	8	Participatory group discussion
Food handlers/Mother helpers	3	11	Participatory group discussion (school with 3 pillars)
Nutritional committee + Food handlers (non-beneficiary)	1	4	Participatory group discussion (school with 3 pillars)
Parents/caregivers	2	7	Participatory group discussion (living tree)
Community leaders	0	0	No show
School based monitors	6	6	Individual interviews
School based monitors (non-beneficiary)	1	1	Individual interviews
Boys Grade 1-5	3	16	Participatory group discussion (body map)
Girls Grade 1-5	3	15	Participatory group discussion (body map)
Boys Grade 6,7	3	20	Participatory group discussion (body map)
Girls Grade 6,7	3	21	Participatory group discussion (body map)
Non-beneficiary Boys Grade 8,9	1	5	Participatory group discussion (body map)
Non-beneficiary Girls Grade 8,9	1	5	Participatory group discussion (body map)
Previous beneficiaries Boys Grade 8,9	1	8	Participatory group discussion (body map)
Previous beneficiaries Girls Grade 8,9	1	11	Participatory group discussion (body map)
Boys Grade 1-5		88	Surveys
Girls Grade 1-5		90	Surveys
Boys Grade 6,7		81	Surveys
Girls Grade 6,7		85	Surveys
Non-beneficiary Boys Grade 1-5		11	Surveys
Non-beneficiary Girls Grade 1-5		10	Surveys
Non-beneficiary Boys Grade 6,7		12	
Non-beneficiary Girls Grade 6,7		12	
Vendors		19	Surveys
Total	49	594 (186 + 408 surveys)	

TBF breakfast stakeholders

For the SROI, only stakeholders who contributed and/or benefitted directly from the TBF breakfast programme were included in the calculations of this study. During the scoping meeting a group consisting of TBF and NSNP representatives (see Appendix D) proposed different stakeholder groups that they thought benefitted from the programme. Continued engagement with TBF and the beneficiaries and the different stakeholder groups provided opportunity to finalise the stakeholder groups that would have material changes. It further clarified information and added additional context needed for the development and verification of outcomes, indicators and financial proxies. Values for the financial proxies were sourced from relevant service providers or existing indices. The following stakeholders were included for the TBF SROI in Limpopo:

- Learners
- Most vulnerable learners
- Educators
- Food handlers /Mother helpers
- School based monitors
- Parents/caregivers
- School
- Community
- Vendors

The following table provides a description of the extended list of all stakeholders who were initially regarded as possible contributors or beneficiaries of the study. It provides information on the decisions made to include or exclude specific groups and the motivation for these decisions.

The groups who did not have material change or outcomes and were therefore excluded from the calculations were:

- Nutritional committee: The nutritional committee have extra work to assist with management of breakfast. Although this is a possible negative effect, all the committee members reported that the benefits of having alert and participating learners outweigh any negative effect. They do the work during their normal working hours' commitment. The benefits outweighed the cost. The positive outcomes were included in the educators' outcomes.
- Departments of Education, district and provincial level: Although there are significant benefits for these groups their investment equals the benefits. Furthermore the DoE is regarded as a key implementation partner and as such is through normal SROI principals not included in the calculation. Specific outcomes regarding the partnership (e.g. the benefit of school based monitors is included in the calculation.
- Union (their outcomes were included in the DoE outcomes): The unions appreciate the breakfast as it helps them reach their targets regarding quality through the reduction of late coming. Although the outcome is realistic it is counted with those of the educators and not double counted for the union too.

Stakeholders and the decision as to their inclusion in the analysis

Stakeholder group	Included or excluded	Reasons	Comments
Learners	Included	They are direct beneficiaries through eating breakfast.	The benefits include all aspects of the learners: physical (e.g. growth, activities), mental (cognitive development and ability to concentrate), social (behaviour), etc. The data suggested that the boys and girls were not differently influenced. In the few instances where there were statistically significant differences these were adjusted for in the calculations. This was confirmed by the previous studies conducted for TBF. There was also no significant difference between younger and older learners. For the small differences the total beneficiary numbers were adjusted in the calculations. These assumptions were further tested in the sensitivity analysis.
Vulnerable learners	Included	The most vulnerable learners (poorest) had an additional outcome in that they received the surplus breakfast stock for holidays.	The group of most vulnerable learners had an additional outcome specific to them that did not form part of the general outcomes for learners.
Educators	Included	They are direct and indirect beneficiaries of the breakfast.	They are direct beneficiaries as they are allowed to and many eat the breakfast. They are also indirect beneficiaries through the benefits to the learners such as their ability to concentrate in class.
School	Included	The schools were included as there were significant and material changes to the school reputation which in turn influenced the district and more peripherally the province education department.	The school includes the school management team and principal and the school as an organisation (with reputation and organisational indicators such as enrolment and performance rates). The district was influenced a little and the province to a lesser degree. This is expected to increase in the future as the programme is only two years in existence at present.
Parents/caregivers	Included	They are indirect beneficiaries through children eating at school	There are different categories of parents including those who have no money to those who do have and provide breakfast at home. They all benefit.

Stakeholder group	Included or excluded	Reasons	Comments
Food handlers/ Mother helpers	Included	Food handlers benefit directly through eating the breakfast and the stipend they receive.	Food handlers are appointed for a year and receive a stipend for this work. They further benefit through eating the breakfast and indirectly as they are parents of the learners who eat the breakfast.
School based monitors	Included	School based monitors receive a stipend from the education department.	The stipend of the school based monitors is a benefit through the TBF programme close relationship with the provincial education department that is specific to Limpopo and reflects the ownership the department took in the programme.
Community	Included	The community benefits indirectly through the benefits to the children, food handlers and school.	The community has increased sense of pride and hope through the corporate investment. They are more involved in the learners and school. The community benefits through a reduction in negative behaviours as a result of fewer children being hungry (fewer incidents of petty crime) and some work opportunities for the food handlers. SAPS members are free to do other work due to less time spend at school meetings with parents and principals. The reduction of people looking for food on the rubbish dump resulted in improved hygiene and safety. Some community members benefit from the breakfast and left-over food (Community Works Programme and other people from the community). Pig farmers collect waste.
Vendors	Included	There were some benefits for the vendors regarding selling small packets of sugar. The negative effects of the vendors who are now not able to sell at the schools were included.	The negative effects of the vendors losing their target markets at the schools were not raised by many stakeholders. It was not regarded as a major negative as the negotiation process seemed to have been well planned and accepted. However, since the research team did not interact with this stakeholder group directly it was felt that some negative effect has to be included in the calculation of the SROI.
Nutritional committee	Excluded	There was no specific change for this stakeholder group.	The changes resulting from the TBF breakfast was the same as for the educators and school and is included in that calculation. The increased time and effort of the committee to monitor and manage the breakfast did not seem to be a negative effect as they considered the benefits to outweigh the extra duties. The time is included in the seven hours of teaching time that remains the same at each school.

Stakeholder group	Included or excluded	Reasons	Comments
Education Department	Excluded	The outcomes for the provincial and district education department offices were excluded as they are a key partner in the implementation of the TBF programme in Limpopo.	Although there are significant benefits for these groups their investment equals the benefits. Furthermore the DoE is regarded as a key implementation partner and as such is through normal SROI principals not included in the calculation. Specific outcomes regarding the partnership (e.g. the benefit of school based monitors is included in the calculation.
Unions	Excluded	The TBF programme indirectly contributes to the union fulfilling its targets on quality, however this influence is not material	The reported change was not distant. The result of quality education was also included in the calculation for schools and the education department and would have constituted double counting and over-claiming.

Change for stakeholder groups

The theory of change defines the interconnectedness between the overall outcomes. Each theory is based on a chain of events taking place, using the results of the activities/outputs and immediate, intermediate and long term outcomes as a foundation. The following description and diagram is based on the main categories of outcomes as they related to the overall programme inputs, activities related to different stakeholder groups. The following sections present the Theory of Change (Value Chain) and the outcomes included in the calculation for each stakeholder group.

Inputs: The inputs for this study are not separated for each activity. This is due to the national programme costs (for specific activities such as the conference and other operational costs such as marketing) being proportionally assigned according to beneficiary numbers.

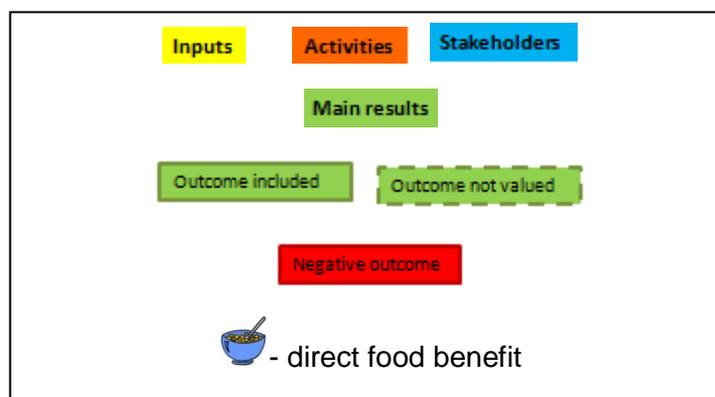
Activities: The activities of the TBF breakfast programme for this province (and beneficiary schools) are:

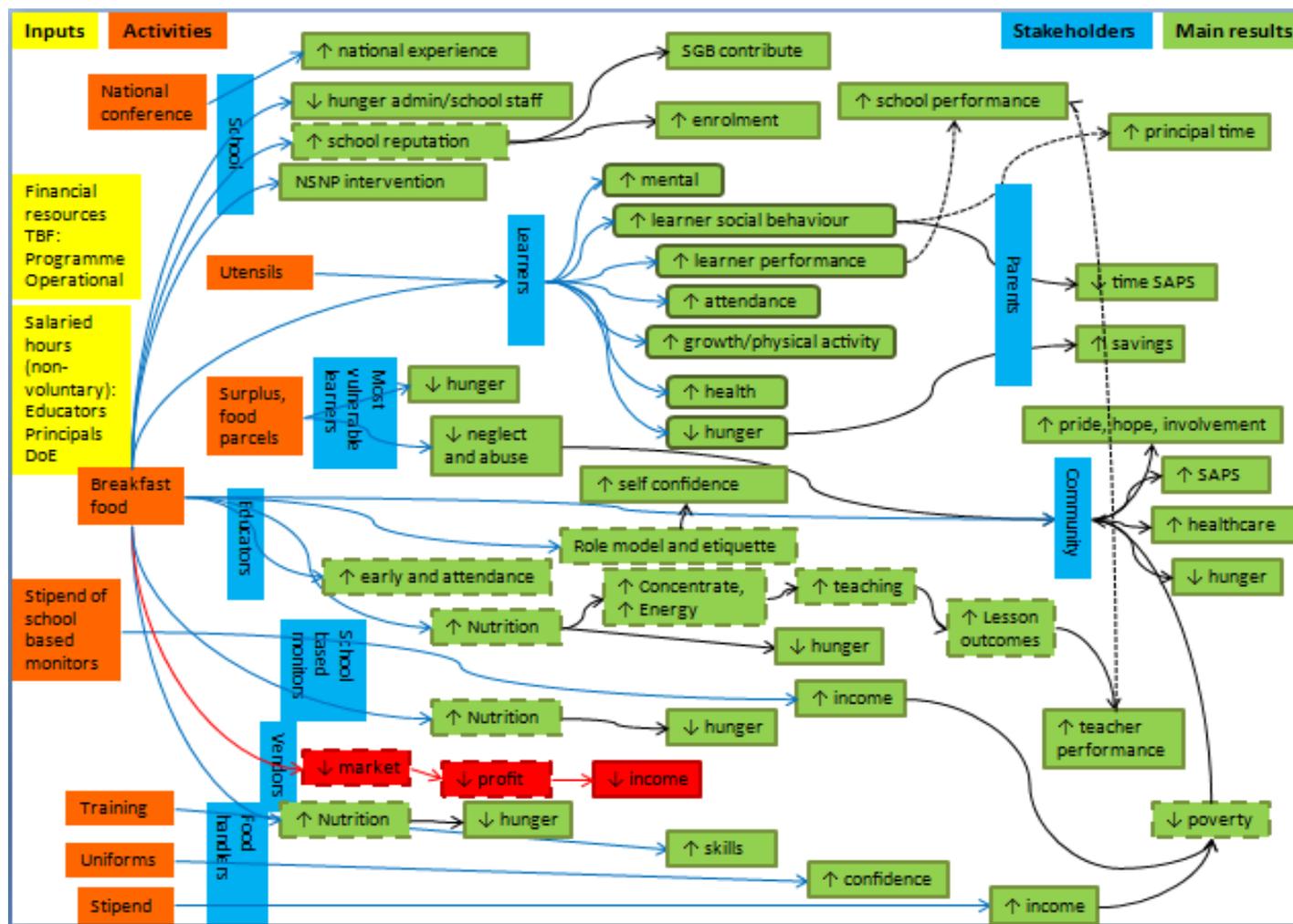
Stakeholder groups:

- Learners
- Most vulnerable learners
- Educators
- Food handlers
- School based monitors
- Vendors
- Small businesses
- Schools Parents
- Community

Results: The main categories of results (the outcomes will be discussed in further detail in the next section) are represented and the inter-linkages shown.

Complexity: Not all stakeholders were directly targeted (beneficiaries of programme activities). These stakeholders were influenced indirectly through the results of activities with other beneficiaries





Overall programme framework

Learners

The learners are the main beneficiaries of the TBF breakfast programme. Group discussions with learners focussed on their perceived outcomes. This was triangulated by information provided by the other groups of respondents such as parents, educators, etc. The short surveys with learners further clarify the outcomes for the learners (see Appendix B). Information from previous studies on the TBF breakfast programme further provided information on outcomes and indicators.

Inputs: The main inputs of the TBF breakfast programme are targeting learners and include the provision of the food materials and utensils and stipends and training for the food handlers to enable them to prepare the food.

Activities: Indirectly the preparation of food by food handlers, teaching of table manners and routine when eating.

Outputs: The direct outputs are the delivery and consumption of the food and having utensils, time and space to eat the food in an orderly manner.

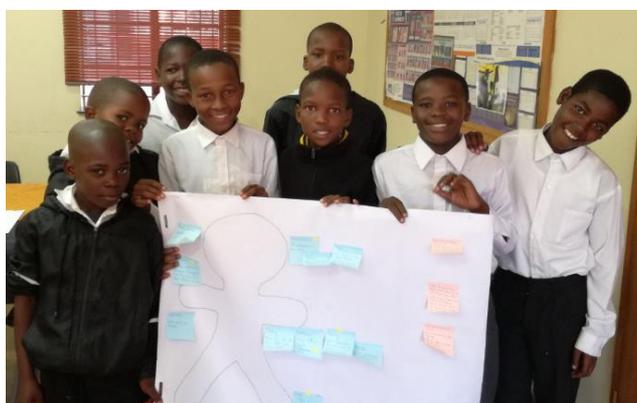
Outcomes: The main outcomes for learners are related to the following broad themes (discussed in more detail after figure):

The main outcomes for learners are related to the following broad themes:

- Having a full stomach and alleviating hunger
- Psychological and mental effects
- Improved health and decrease in illness
- Physical benefits
- School attendance improve
- Social behaviour

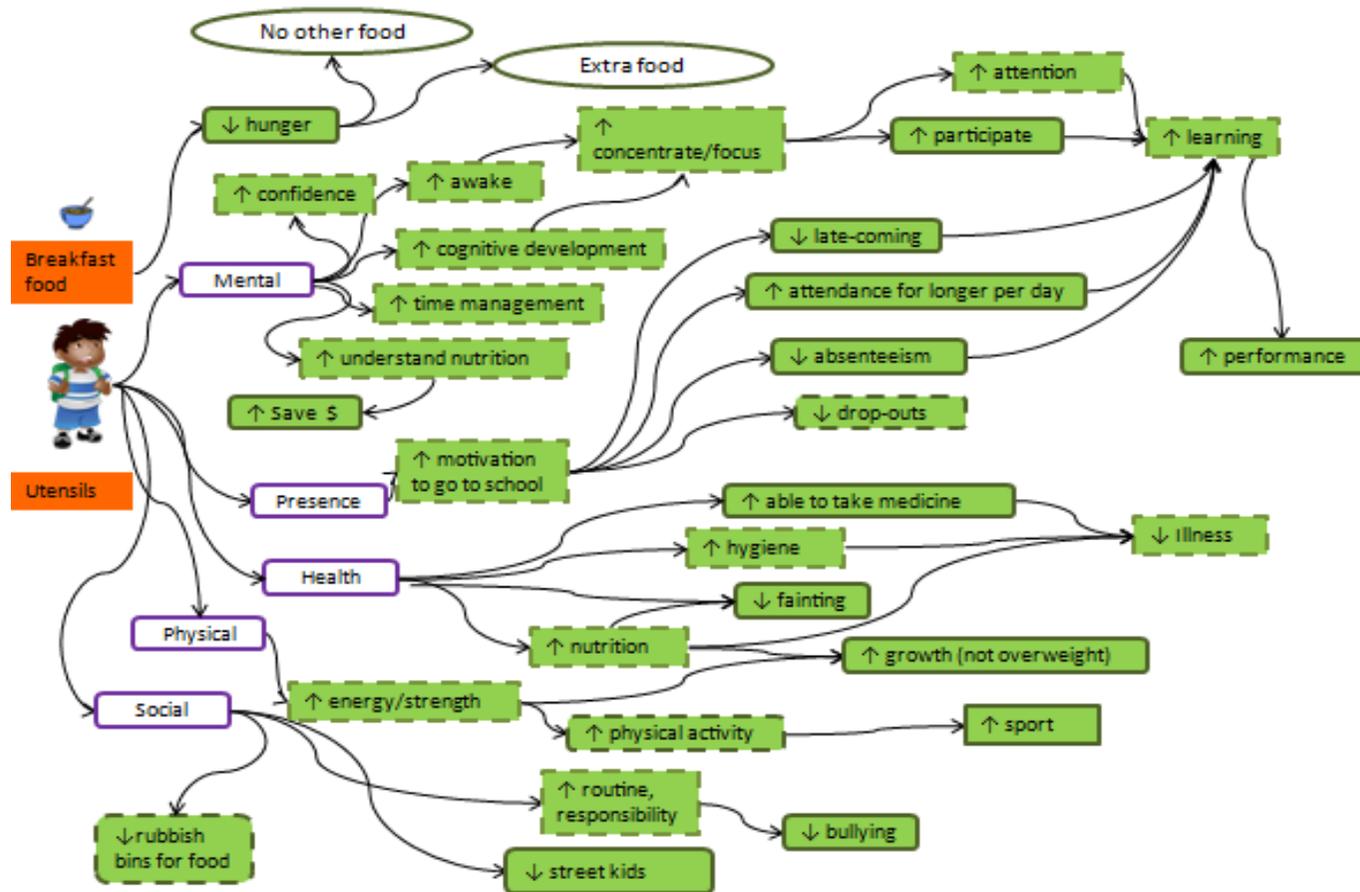


See the following diagram for a visual representation of the theory of change for these outcomes for the learners.



(Photo Madri Jansen van Rensburg)

Theory of Change for learners



Having a full stomach/receiving a meal and alleviating hunger

The main influence of the TBF programme is the provision of a meal that prevents hunger. This had a large benefit to the majority of learners. During the group discussions all stakeholder groups declared that due to poverty many children have no food at home and go hungry. Many of the children have only the TBF breakfast and the NSNP lunch to eat each day. They appreciate the warm meal on cold days.

Your stomach makes sounds and other children laugh at you (Older boy)

Some children have nothing to eat at home (Older boys and girls)

The learners are from poor families; they have nothing to eat at home (Nutritional committee)

There is no money to buy food (Nutritional committee)

They sleep without food (Nutritional committee)

I used to eat my lunch for breakfast (Older boy)

Most of the beneficiary schools parents/caregivers were not able to provide breakfast for a variety of reasons:

- Unemployed
- Living on grants as only money
- Parents who are employed, but who leave home too early to prepare breakfast
- Children living with a grandmother
- Child headed-households

In the surveys distributed to the learners, 78.2% reported that they ate breakfast the morning of the data collection and 81.2% reported that they ate breakfast at school. Of these 59.8% ate only at school (21.4% ate both at home and at school). None of the non-beneficiary school learners ate breakfast at school and only 24.4% at breakfast at all (at home). The following outcomes are therefore identified to be included in the SROI as it linked to having a full stomach and not going hungry:

Hunger outcome	% of learners	Description
No benefit	18.8%	Learners who do not eat breakfast at school
Benefit from extra meal	21.4%	Learners who eat breakfast at school and home
Benefit from TBF: eat only at school	59.8%	Learners who are eating due to TBF. These learners will have a deadweight applied to the calculation as it is assumed that some learners might have eaten at home if TBF were not providing breakfast.

*calculations based on differences between beneficiary and non-beneficiary surveys and previous studies of TBF breakfast programme, see page Appendix B.

The outcome related to the decrease in hunger was divided into two subgroups based on the above information. 1) the learners for whom this benefit prevents

hunger as they have no other breakfast (59.8%) and 2) those learners who have an extra meal (21.4%).

Psychological and mental effects

Learners reported that they enjoyed the breakfast and felt happy after eating the breakfast.

I am happy after eating the breakfast and not grumpy (Older girls)

The breakfast makes me feel welcome at school (Older girls)

Learners reported a change in their self esteem. Learners are less shy, especially since all learners are eating the breakfast. Their self confidence improved.

I believe I will pass (Younger girl)

I am not giving up (Younger girl)

I can ignore negative comments (Younger girl)

This confidence further led to them being more confident in class. This had a direct influence on participation in class and improved learning.

When I do not have breakfast I am not ready to work (Older girl)

I am not shy to talk in class (Young girl)

The educators, school based monitors and parents reported a significant change in the cognitive development of learners.

The most common benefits as listed by the learners in the short surveys were the increase in energy and being able to concentrate (focus) and being able to do school work (see Appendix B). The increased energy is an important outcome, but it is early in a chain of change and is therefore not included in the calculation.

Our bodies feel energised (Young boys and girls)

The learners are not sleepy in class anymore and are able to focus and concentrate due to the breakfast.

There is no more sleeping in class (Principal and SMT)

Learners concentrate better (Educator)

Learners are no longer losing interest in class (SMT)

I can't focus on an empty stomach (Older boy)

I work hard on my studies (Older boy)

The breakfast keeps us awake in class (Younger boys and girls)

The breakfast helps us to focus on what our educators teach us (Younger boys and girls)

We focus better at school (Younger boys and girls)

We can think fast in class (Younger boys)

We can be focussed on school work (Younger boys)

The learners are more active in class, due to their increased self confidence, but mostly due to effects of the nutritious breakfast. The learners, educators and nutritional committee reported that the learners remain active even if they do not eat lunch. In the surveys 35% of the beneficiary learners reporting participating more in class compared to 27% of the non-beneficiary school. Younger children (foundation phase) were significantly more likely to have increased participation in class.

We don't think constantly about food in class (Older girl)

The learners are active and alive (SMT)

We ask questions in class after breakfast (Older girls)

We can now read aloud in class (Older girls)

The breakfast gives us ability to write and focus on school work (Younger boys and girls)

I can talk more and ask questions in class (Younger boys and girls)

We participate in class (Younger boys and girls)

They do not complain about us anymore (Younger boys and girls)

There is no noise in class (Younger boys and girls)

We can answer the educators' questions (Younger boys and girls)

I am able to think faster and give the correct answer (Older boy)

Learning improved as the learners report that they remember things better. This leads to improved performance and ultimately to better results for learners.

When the stomach is full you can enjoy class and learn better (Older girl)

Whatever we are taught in class we understand clearly (Younger boy)

The learners perform better, especially if they write tests in the morning (School based monitor)

Some learners show or will have increased academic performance. As the performance also depends on other factors, including the NSNP lunch and teaching methods and efforts, a higher deadweight will be applied to this outcome.

Other outcomes include learners gaining time management skills and how to save money. They further reported to be more responsible regarding food and what they eat.

No more waking up very early compared to prior to TBF (Parent)

I am no longer wasting money on sweets and snacks (Older boys)

We should eat the food and not waste it (Younger boys and girls)

Improved health and decrease in illness

The learners' health improved linked directly to the nutritious breakfast being consumed (vitamins, minerals, fibre, etc.) and improved eating habits. Due to the table manners learners improve their hygiene which influence their immune systems.

We are more comfortable in class and at home (Older boy)

It gives us a healthy body and mind (Younger boys and girls)

They wash their hands before eating (Educator)

The school based monitors and food handlers reported that some learners are taking chronic medication. Because of the breakfast the learners are able to take the medication each morning on time. According to the teachers this significantly decreased incidences of learners collapsing at school.

Learners reported not feeling dizzy and fainting anymore (this was confirmed by all other data sources and the learner surveys).

The benefit of decreased illness is represented (and counted) in the community outcome as a decrease in clinic visits.

Learners no longer buy yesterdays' food from the vendors that makes them sick (Mother helper)

Breakfast keeps my body strong to fight disease (Younger boys and girls)

Physical benefits

The TBF breakfast is regarded as a highly nutritious meal that provides sustained energy.

Breakfast sustains the learners throughout the day; some don't feel hungry at lunch (Older boy)

The main physical effect of eating the breakfast was the influence on physical growth. This was confirmed by the results of the UJ studies. Learners reported having more energy (25%) and feeling stronger (11%). The educators reported decrease in obesity not just linked to the breakfast, but indirectly due to the increased physical activity. According to the UJ studies there is a decrease of 1.7% in obesity due to the breakfast. Although stunting and wasting are other indicators of growth, these were not reported in the current study as prominent indicators.

Without breakfast we feel weak (Younger boys and girls)

When you walk you do not fall easily (Older boys)

We have stronger bones because of the nutrients (Older boys and girls)

We gain weight (Older boys)

There is reportedly an increase in physical activity, including participation in sport and in playing.

They have sustained energy for sport (Educator)

We can't perform in sport if we did not eat the breakfast (Older boys)

We jump higher (Younger boys and girls)

School attendance improve

Parents, educators, principals, SMT and school based monitors reported that children are motivated to come to school due to the fact that they get breakfast.

Learners are also more punctual (on-time and early) due to the breakfast being served. Educators reported that before the breakfast 60% of learners were on time. This increased to 80%. At other schools it increased from 30% to 70, from 30 to 80%, from 50% to 80% and from 50% to 90%. (The average % increase is 36%; the study used 25% to be conservative in the calculation). The current late comers are mostly due to transport issues.

They come early to school because they know there is breakfast (Principal and SMT)

The really needy learners come very early to school (SMT)

Learners attend school on time, because they know they will eat at school – no more hungry (Mother helper)

There is an increase in attendance and learners attend more classes, no do not skip some classes. The learners are less likely to skip classes and they now stay at school from breakfast to lunch. At the non-beneficiary schools some learners only arrive for the lunch and/or disappear after having eaten. The attendance improved from 60/70% to 90%.

Learners come to school even when they are ill (SMT)

There are less drop-outs and a decrease in child employment as the youth stay in school longer (at least till the finish grade 7). This was especially true for boys who used to leave school and go to work on the farms or become street kids. This is mostly driven by a need for food. The principals and SMT estimated that there used to be a drop-out of up to 40%, which is now decreased to zero or only a few (and then for other reasons).

Social behaviour

Learners were exposed to etiquette regarding table manners and eating. Further than this the learners became more disciplined as they sit down to eat breakfast and lunch. This had implications in respect for educators and parents and spilled over to the community.

They know there is a time to eat (Educator)

They sit down when eating (Educator)

The learners assist in collecting dishes and utensils. These lessons and habits are reportedly continued at home, e.g. washing dishes at home.

I can do home chores, like wash the dishes (Young boy)

Learners previously use to look for food in rubbish bins. This no longer happens. There are also fewer street kids and children begging on the streets. Injuries to these children decreased.

An important outcome is the decrease in bullying at school. There is a decrease in lunch box theft and bullying and mockery at school.

There used to be mockery due to socio-economic status, but now all learners eat the breakfast at school (Educators)

Subgroups

There was no difference between the outcomes for boys and girls, or for older and younger learners. There was, however a difference in the amount of benefit. This has been included in the calculations and separate outcomes were not created for each of the four sex/grade groups. The calculations made adjustments for certain outcomes to be only relevant for certain groups (e.g. decreased drop-outs mostly reported for older boys).

The differences between the groups as examined through self-reporting surveys with learners are described in detail in Appendix B. In essence the differences between the four age/sex groups (younger boys, older boys, younger girls, older girls) were:

- Younger boys reported more frequently that they eat breakfast (F=6.980, p=0.000).
- Boys more frequently participated in sport (F=6.558, p=0.000)

To enable understanding of the difference between beneficiary and non-beneficiary learners, the surveys were also distributed in a non-project school. The resulting differences were included in the calculation of the magnitude of the benefits for the beneficiary groups. The results show that the following were significantly different between the beneficiary and non-beneficiary learners:

- 78% of beneficiary learners reported eating breakfast compared to 24.4% of non-beneficiaries (t=-8.152, p=0.000).
- The beneficiaries on average ate breakfast 4.6 times a week compared to the non-beneficiaries (1.6 times a week) (t=10.405, p=0.000)

Outcome	Indicator	In SROI index
Learners		
Learners eating breakfast and therefore not hungry		
Learners who are no longer hungry as a result of the breakfast (41.3%)	# learners who eat breakfast at school only and have no other means	Yes
Learners who eat an additional breakfast at school, in addition to eating breakfast at home (43.3%)	# Learners reporting that they eat breakfast at school, although they eat breakfast at home too	Yes
Learners who do not eat breakfast	# Learners who report not eating breakfast at school	No
Psychological and mental effects		
Self confidence improve	# learners who are more confident and assertive	No
Learners have increased cognitive development	# learners who have improved cognitive development	No
Learners stay awake in class	# learners who do not fall asleep during first 3 periods of school	No
Concentration level in class of learners improve	# learners who report being able to concentrate in class	No
Learners are able to participate more in lessons	# hours that learners participate more actively in class per year	Yes
learners improved academic performance as evident in academic promotion	% increase of learners promoted to next grade	Yes
Time management skills	# learners who are better able to manage their time	No
Learners save in not buying sweets	# learners saving money that they would have spend on sweets and snacks before TBF	Yes
Learners learn about the nutritious value of food and to appreciate food	# learners who do not waste the breakfast	No
Illness decreased and health improved		
Improved hygiene of learners due to table manners and washing hands before eating	# learners washing hands before eating	No
Learners are more healthy at school and do not faint	# of learners who used to faint at school who no longer faint	Yes
Learners are able to take chronic medication after eating breakfast	# learners able to take their medicine for chronic illnesses on time in the morning	Yes
Physical activity		
Learners feel stronger	# learners able to remain physically active during school day	No
Improved growth of learners	% learners who are not overweight	Yes
Increased physical activity due to increased energy and strength	# learners able to participate in sport due to energy from breakfast	Yes
Learners attendance improve		
Learners are motivated to come to school due to the fact that they receive breakfast	# learners are motivated to come to school	No
Decrease in late-coming for school due to the pull effect of the breakfast	# decrease of learners coming late for school	Yes
Learners stay longer at school and complete more lessons and do not skip classes	# learners who stay longer at school	Yes
Decrease in drop-outs from school	% decrease in children who drop-out of school	No
Increase in attendance (decrease in absenteeism)	% increase in attendance	Yes
Social		
Learners learn table manners, responsibility and routine	# learners learn responsibility and routine and are able to replicate this in other situations	No
Children stay at school and are less likely to work, beg or start living on the streets	% decrease in street children and begging	Yes
Learners do not search for food in rubbish bins	# learners who do not go to rubbish bins to find food anymore	No
Learners are not involved in stealing of lunch boxes or other bully behavior	% decrease in bullying at school	Yes

Most vulnerable learners

The most vulnerable learners included orphans and vulnerable children (OVC) and Child headed households (CHH). These vulnerable learners had additional outcomes to that already mentioned and included and are related to outcomes that decrease their vulnerabilities.

The very needy learners arrive early at school to get the breakfast (Older girl)

The learners stay far and have to walk to school; they get up early to be on time for breakfast (Principal and SMT)

The child headed households are in more need as the social workers take long to respond due to their processes (Principal and SMT)

An immediate outcome was that the learners received the surplus food distributed to the school that was not used during the term time. Educators identify the most vulnerable learners, who then receive this as food parcels for the holiday time. Most of them would have no other food and educators mentioned how these learners lose weight and waste during weekends and holidays.

At the end of the term the vulnerable learners get the surplus breakfast ingredients to take home (Educator)

Needy families benefit from left-over stock when the school closes – they receive food parcels. (Mother helper)

Another positive outcome for the vulnerable learners was the increase in self confidence as is evident in the amount of food they eat and their assertiveness.

The vulnerable learners used to be shy and they would eat small quantities as they are scared to be told they eat too much (Older boy)

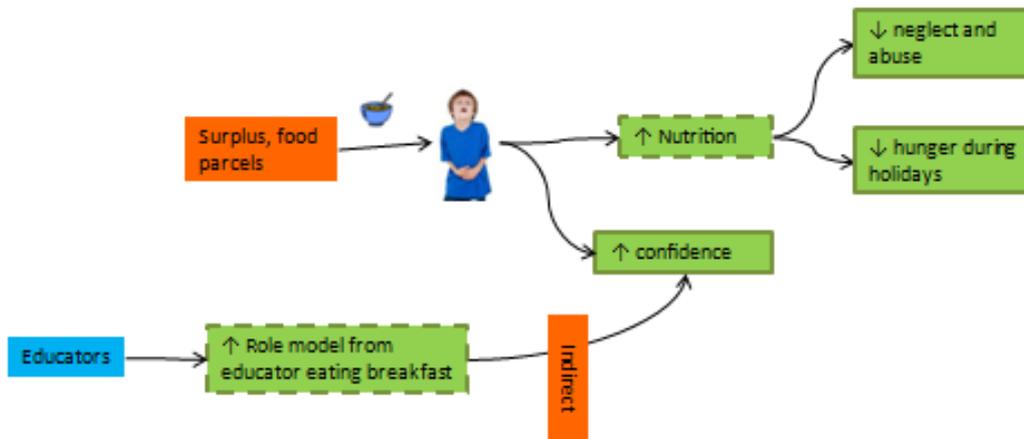
Now the needy learners are able to say: “I am hungry please put more” (School based monitor)

There were reports of decreased abuse and neglect due to the breakfast programme. This includes direct benefit of having food, but also due to the lighter burden on the family.

The OVCs move between family members, not all who give them food (Principal and SMT)

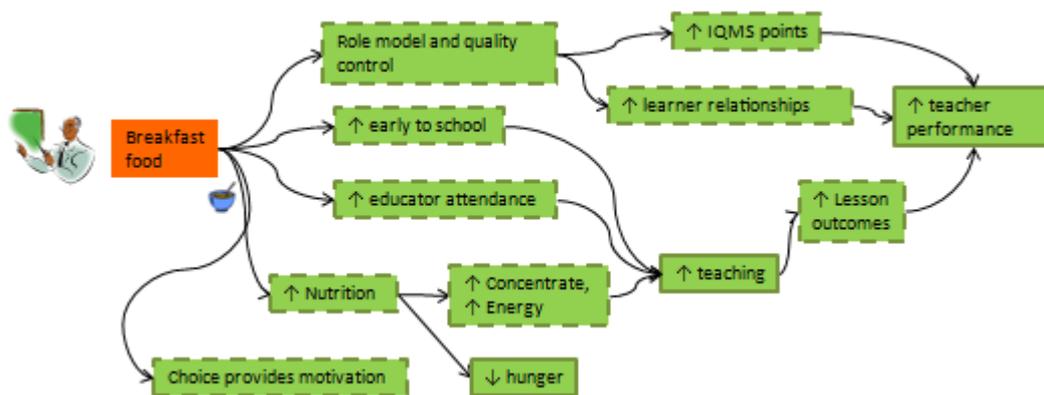
Outcome	Indicator	In SROI index
Vulnerable learners		
Reduction in vulnerabilities regarding food	% learners who are not wasting during holidays	Yes
Reduction in vulnerabilities regarding abuse and neglect	# learners who are no longer neglected and abused	Yes
Improved self confidence and assertiveness of the vulnerable learners	# learners who are more confident and assertive	Yes

Theory of Change for most vulnerable learners



Educators

Theory of Change for educators



Educators are allowed to eat the breakfast. Although not all of them use this opportunity there are some educators who report that they eat the breakfast (including bachelors and those who leave home very early and do not have time to eat breakfast at home).

I used to drink tea for breakfast (Educator)

We are given a choice to eat the breakfast (Educator)

The fact that educators have a choice to eat the breakfast and the food itself boost their morale and motivates them. It is estimated that 10% of educators eat the breakfast once a week.

The educators who ate the TBF breakfast reported having more energy and being more active. This was confirmed by the principals, SMT, nutritional committee and school based monitors.

The educators are more punctual and arrive at school early, due to the responsibility to dish the breakfast, but also because learners are early and they are able to teach from the first lesson. The educators attendance improved as they are more motivated, have learners to teach and because they are ill less often (due to the improved health of learners).

Educators further benefit indirectly as they are better able to teach as learners are more awake, participate more in class and are able to focus on their class work. Since there are more learners present in the morning the educators reach more learners and do not need to repeat lessons unnecessarily.

It is difficult to teach a child with an empty stomach (Educator)

It is easier to keep discipline in class when the learners have eaten (Educator)

There is no need to go back and re-teach absent learners (Educator)

We can work at a faster pace (Educator)

Longer term benefits include improved lesson outcomes and improved results. Although evidence of these exists at present it will probably be more prominent in the future. It is partially captured in the outcomes for learners and for the school.

Educators go the extra mile to assist learners during the breakfast. This improves their general performance and gives them extra point during the IQMS assessment. The department gives them incentives for this.

Educators have better interactions with learners. The educators are better able to identify and interact with learners who are needy or have problems at home.

Educators have a different perspective. They can recognise learners who are hungry easier (Educator)

Another benefit in educators eating the breakfast is that they model behaviour to the children. Shy children who would not eat the breakfast and those who would not trust the breakfast's value are motivated to eat. The educators are also able to give feedback to the food handlers to the taste and quality of the preparation of the food.

The educator eats so we are happy to eat (Younger boy)

Some educators pretend to eat the breakfast, just to motivate the learners to eat (Nutritional committee)

Educators can give advice to the mother helpers (food handlers) to why learners are not eating (SMT)

The negative aspect of the TBF breakfast programme on educators is the extra duties in dishing the food and supervising the breakfast. This is not included in the calculation for two reasons: 1) the time is salaried time that they are supposed to be at school and 2) all the educators interviewed expressed a strong feeling that they

benefit more from this activity than any negative effect. The tasks did not displace any other work or activities.

I have no problem to supervise the learners (Educator)

I am at school for the same per day; it does not take any more of my time (Educator)

Outcome	Indicator	In SROI index
Educators		
Educators can have convenient breakfast	% educators not hungry due to having TBF breakfast	Yes
Educators feel motivated by having a choice to eat the breakfast	# educator with increased morale	No
Educators have improved concentration and more energy	# educators with improved concentration and more energy	No
Educators now come to school on time	% educators arriving on time for school	No
Educators attendance improve	% educators who are attending every day	No
Educator/learner relationships improve	# educators more able to identified learners as vulnerable and receive attention	No
Teaching and learning improve	# periods able to teach more effectively	Yes
General performance of educators improve as educators are recognized as going the extra mile for learners	# educators who perform better on IQMS assessments	No
Lesson outcomes improve	# educators who perform better on KPAs	No
Improved results	# educators reach performance goals	Yes
The educators act as role model to encourage learners to eat breakfast	# educators who are positive role models	No
Educators have additional tasks NEGATIVE	# hours extra work to assist with breakfast	No

Food handlers/Mother helpers



(Photo Madri Jansen van Rensburg)

Food handlers, or mother helpers as they are called in Limpopo, are parents who are employed to prepare the food for the NSNP. The TBF breakfast programme does not employ other food handlers, but use the same persons. They receive a stipend of R 550 for this additional service. There contracts are for one year only. The beneficiary

school food handlers were found to be very punctual and responsible in their tasks. Most of them start just after 5 o'clock in the morning.

One of the immediate benefits to the food handlers was that they could partake in the breakfast. If there is any food left after the surplus food has been distributed to OVCs, the food handlers receive some of the food as a hamper.

They also benefitted from receiving a stipend and uniform. The stipend of some of the food handlers were used to pay for some essentials for their children and some reported paying for school uniforms for their children as their financial situation improved.

I receive a clean and neat cooking uniform (Mother helper)

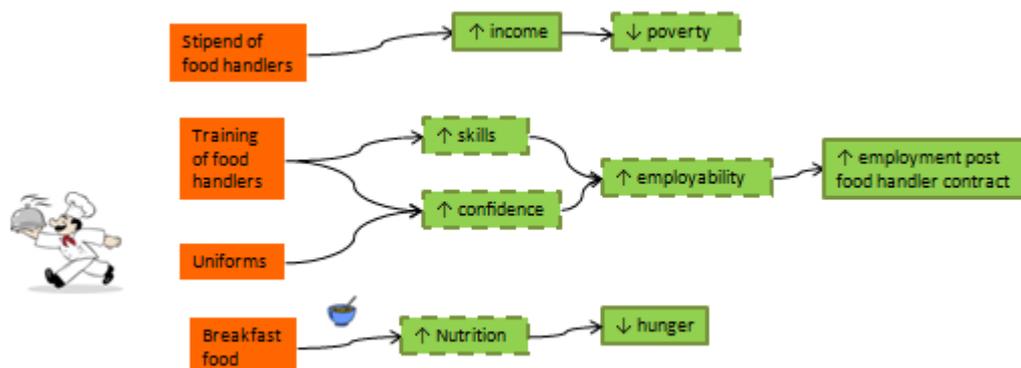
As there is no time to eat breakfast before coming to work, it helps being able to eat at school (Mother helper)

The food handlers gain new knowledge (nutrition, safety and hygiene) and skills (communication, team work and cooking for large groups).

We learn many things, like washing hands before cooking (Mother helper)

Although there could be a negative aspect in that the food handlers start their day very early, they did not consider this as a negative. The tasks did not displace any other tasks or responsibilities.

Theory of Change for mother helpers/food handlers



Outcome	Indicator	In SROI index
Food handlers		
Food handlers eat breakfast	# food handlers not hungry due to eating breakfast	Yes
Food handlers appreciate the uniform	# food handlers reporting increased confidence due to uniform	Yes
Increase in income for food handlers	# food handlers receiving stipend each month	Yes
Food handlers use their stipends to pay for school uniforms or events for their children	# children of food handlers being able to attend events	No

Outcome	Indicator	In SROI index
Food handlers		
Skills development of food handlers including communication and team work	# food handlers who developed new skills	Yes
Food handlers gained new knowledge (including nutrition, safety and hygiene)	# food handlers who gained new knowledge	Yes
Food handlers learn new skill in cooking for large groups (including measurements)	# food handlers who practically apply their skills outside school	No
Food handlers arrive very early in the morning NEGATIVE	# of food handlers arriving earlier in the morning	No

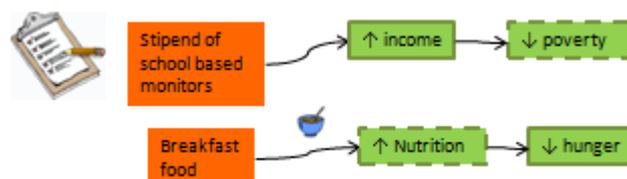
School based monitors



(Photo Madri Jansen van Rensburg)

The school based monitors eat the TBF breakfast. The stipend of the school based monitors is a benefit through the TBF programme close relationship with the provincial education department that is specific to Limpopo and reflects the ownership the department took in the programme. This level of partnership is unique and contributes significantly to the project. Although the benefit is wider than only the project schools for this study the benefit of stipends will be calculated for the seven project schools only. The benefit is wider than this.

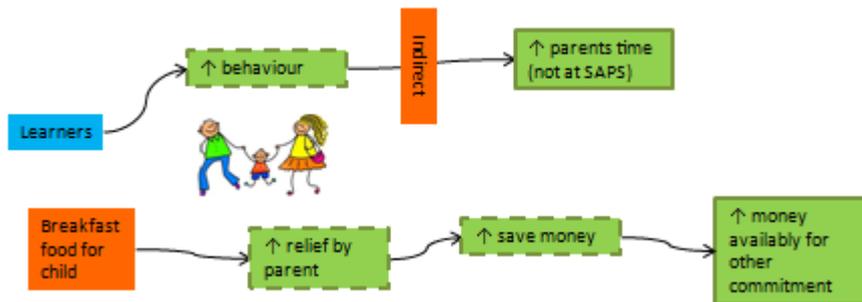
Theory of Change for school based monitors



Outcome	Indicator	In SROI index
School based monitors		
School based monitors eat breakfast	# school based monitors not being hungry	Yes
School based monitors receive a stipend by the DoE	# school based monitors from beneficiary schools who receive stipends	Yes

Parents and caregivers

Theory of Change for parents and caregivers



Parents/caregivers (including grandmothers or gogo's) are not able to provide for their children due to a variety of factors from unemployment and poverty. Many of the parents are dependent on social grants and live on farms or in squatter camps. They appreciate the TBF breakfast. Some parents experience it negative that the children are exposed to the breakfast in that they now expect the same at home. Parents are not able to provide the same at home.

Our children become choosy and we do not have money for decent food (Parent)

Parents have decreased stress and pressure to supply breakfast to their children. Parents therefore motivate their children to attend school. This change is not material as it was also argued that some parents might be become dependent on the assistance. The outcome is further captured in the following outcome.

Few parents are able to prepare lunch boxes or even breakfast (Principal, SMT)

Parents worry when it is school holidays and there is no food (Principal)

We know our children will get an education (Parent)

Parents reported an increase in knowledge. This include being more aware of nutrition. They are aware of Tiger Brands products and copy the TBF menu, e.g. eating oats and making instant porridge. Some parents reported having more knowledge on children's rights, but this could not be directly linked to the TBF programme.

Parents save money in that they do not buy breakfast foods. Other parents save money because the children do not ask for money to buy snacks from the vendors. Not all parents are using this money for commitments towards their children.

Parents save time due to the decrease complaints from the school and the need for parents to meet with school principals. Due to a decrease in criminal activities by the learners trying to find food, parents also no not need to engage with SAPS that often.

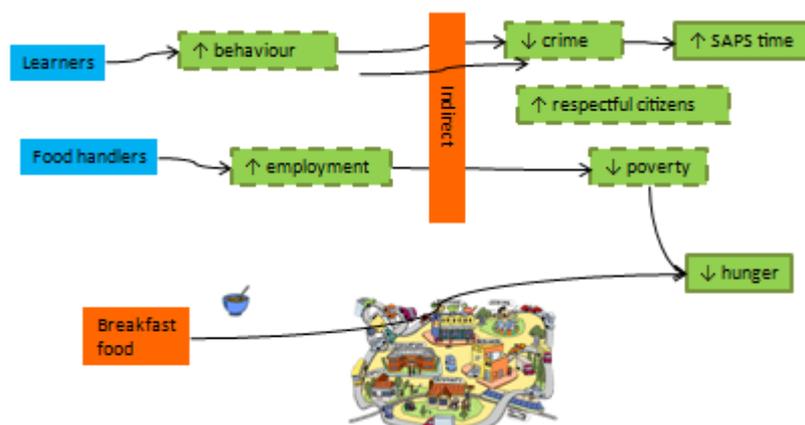
There is less stress because no SAPS vehicles visit our houses daily (Parent)

Outcome	Indicator	In SROI index
Parents/Caregivers		
Parents feel relieved that the school provide something to their children to eat	# parents who feel relieved that their children are getting something to eat at school	No
Parents save time and money by not having to provide breakfast and they can use the money for other commitments	# parents who have money available for other commitments	Yes
Parents feel pressured to provide the same breakfast at home.	# parents who have to buy food they cannot afford	No
The parents does not need to spend time to meet with SAPS and principals	# hours parents saved by not having meetings with SAPS and principals	Yes

Community

The community benefits are the most distant and indirect benefits of the TBF programme. These are very important outcomes.

Theory of Change for community



There is increased involvement of the community to encouraging learners to attend school.

The breakfast directly helps with social development. It helps in alleviate poverty. Although the department of social development provides food parcels for the most needy, this often makes the recipients feel stigmatized. The TBF breakfast programme does not discriminate between persons from different socio-economic levels.

The TBF breakfast saves parents from credit to buy bread from breakfast (Mother helper)

Learners are more respectful to educators, parents and the community.

We great everyone (Younger boy)

The community benefits on a social level through the decrease in petty crime and negative behaviours of children such as begging on the street. There is an actual

outcome in the saving in time of SAPS officers who used to have to go to schools regularly to solve these negative behaviours or have to investigate petty crimes.

No more huge numbers of children roaming the streets (Educator)

It is saving SAPS time in that they do not have to chase learners to bring them back to school (Educator)

There are food and jobs (food handlers) in the community and although small it assists in decreasing of overall level of poverty. The number of jobs is included in outcomes for food handlers.

Although not many, there are community members benefitting directly from eating the breakfast. This includes workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast.

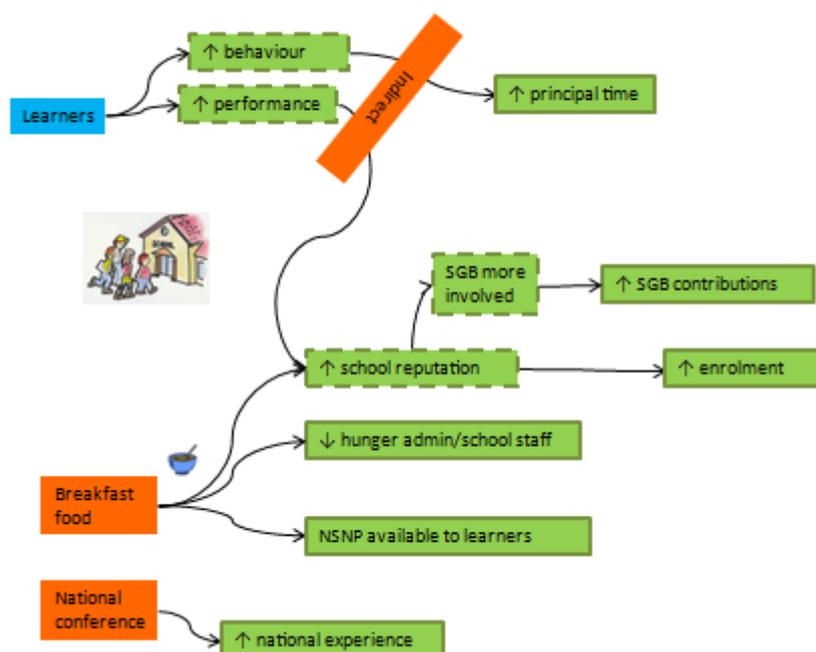
In addition some drop-in centres get the left over stock. They provide breakfast to vulnerable learners during the school holidays. This benefit to the drop-in centres was included with the outcomes for the vulnerable learners.

Pig farmers were also reported to collect left-overs. This outcome is probably more related to the lunch and left-overs will include fresh produce and peels of vegetables. Little of the breakfast is reported to be left over after breakfast or thrown out as waste. The correct measures are made even if the learners do not eat a certain porridge food handlers adjust the amount cooked. There is little waste as children mostly finish their plate of food. Educators dish according to the learners need and want. Left over breakfast is eaten by other groups such as mentioned in previous outcomes.

Outcome	Indicator	In SROI index
Community		
Learners are more respectful to educators, parents and community	# learners who are more respectful citizens	No
Decrease in SAPS time spend on petty crime and negative behaviours of children and youth such as begging	# hours SAPS save by not having meetings with parents and school principal	Yes
Overall decrease in poverty level	% decrease in poverty rate	No
Workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	# of workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	Yes

Schools

Theory of Change for schools



Apart from the learners and educators (and teaching staff) there are various other school workers eating breakfast. These include:

- General and admin workers
- Bus drivers who wakes up early and do not have time to eat breakfast at home
- The security at the gate has nowhere to cook or prepare food. They are hungry on the morning.

The fact that there is breakfast served at the school (direct influence) and the improved attendance and performance (indirect effect) raise the reputation of the school. Through the improved results of the school, the school reputation improved. A school reported improving from below 40% to 97% in one year. Parents now rather enroll their children in these schools.

There are children who come from very far to be enrolled in this (farm) school (School based monitor)

The utensils provided by TBF was appreciated in one school and disregarded at another.

The utensils are nice and colourful (Nutritional committee)

Cups are not meant to eating, it is for drinking (Educator)

The school principal is less busy having meetings with SAPS and parents regarding negative behaviours of learners. They also use less time to wait for late-comers outside the school building.

The school principals attend the TBF conference in Gauteng. Not only is this an event that raises the reputation (and experience – e.g. to fly for the first time) of the principal, but it presents an enormous learning opportunity through expert and peer sharing of experiences. The school reputation further increases due to being recognised nationally.

The TBF conference opened my eyes to not just see problems, but to solve them (Principal)

The TBF breakfast had an influence on the NSNP implementation in that the learners who eat breakfast are more likely to also eat the NSNP lunch. The breakfast therefore motivates learners to eat lunch and through improved attendance due to the breakfast brings them in proximity to be part of the lunch benefit.

There is increased involvement of the School Governing Body (SGB) at some schools. They are involved in:

- Supplying firewood for cooking
- Building a temporary shelter for cooking
- A parent visit the school each day to check the food quality

Outcome	Indicator	In SROI index
Schools		
School employees eating breakfast	# supporting staff at school eating breakfast, not hungry	Yes
Improvement in attendance of learners and educators due to receiving breakfast	% increase in school attendance rates	No
Reputation of school increases and more learners want to enroll in school	# new enrollments	Yes
Decrease in school principals time spend on meeting with parents and SAPS	# hours principals save by not having meetings with parents and SAPS or fetching learners from rubbish dump	Yes
Increased knowledge by participating in national conference and networking	Increased experience and sharing opportunity on national level	Yes
NSNP lunch being eaten because learners are at school due to pull effect of breakfast	# of children who can benefit from the NSNP because the breakfast motivated them to attend school	Yes
Increased involvement by SGB in school regarding food	# benefits initiated by SGB (firewood, kitchen shelter and monitoring)	Yes

Vendors

The change for vendors was negative. There was a definite influence on the vendors as they have lost business at the schools. They had a loss of income. However, the impact is not that high as the vendors were asked just to postpone their sales till after

10 o'clock to allow learners to have a nutritious breakfast first. They are not happy about this strategy (see Appendix C).

The TBF programme stopped vendors from selling to learners in the morning (Educator)

Negotiations with the vendors have been difficult and caused some challenges (Nutritional committee)

The learners sometimes vomit the red simba's they buy from the vendors (Principal and SMT)

Needy learners benefit from the schools lunch, which is very helpful (Vendor)

Some of our items such as achar do sell because learners mix it with their daily meal (Vendor)

Learners enjoy their meals with achar and little snack after lunch meal which gives me opportunity (Vendor)

Learners buy sweets and snacks after their lunch which gives a boost to our business to earn a cent (Vendor)

We are no longer allowed selling in the morning as per the school instruction. So that learners can eat the TBF breakfast before buying from us (Vendor)

I feel negative that they stopped us selling in the morning, but the school doesn't stop the other small businesses (Vendor)

We cannot sell till 10:00, but now the teachers sell in their classrooms (Vendor)

Outcome	Indicator	In SROI index
Vendors		
Loss of income due to vendors not selling at schools NEGATIVE	# vendor income lost	Yes

Theory of Change for vendors



Unions and nutritional committees

The outcomes of unions and the nutritional committees were not included in the calculation

Outcome	Indicator	In SROI index
Unions		
The unions are benefitting from the programme directly and indirectly by reaching their targets	% targets reached due to the TBF programme	No
Nutritional committee		
There are additional work and tasks for the nutritional committee NEGATIVE	# hours extra work to assist with management of breakfast	No

The Investment

The Tiger Brands Foundation breakfast programme requires some investment specific to each province (supplies and human resources). In addition a proportional cost of the head (national) office needs to be included.

It is therefore possible to calculate the cost per meal and per learner for a year.

The head office costs include all related costs including running costs, operational costs and all supporting activities such as branding and marketing. It also includes a stipend paid to board members (volunteer costs of board members are therefore excluded).

This SROI analysis includes the investment made by TBF (including all investments from donors). Direct contributions to schools were not evident, but where relevant and attributed to other organisations it is considered in this analysis under the SROI filters, which is discussed in following sections.

The investment in time made by the schools and Department of Education was not included as it is assumed to be covered by the salaried time.

TBF: Financial investment

	2016	2017
Provincial costs		
Food	R 1,427,327.00	R 1,075,872.66
Utensils	R 21,096.00	R 0.00
Equipment	R 133,000.00	R 0.00
Kitchens*	R 0.00	R 0.00
Running cost of province		
Salary: Coordinator	R 220,715.28	R 238,372.00
Salaries: Food handlers/Mother helpers	R 228,000.00	R 250,800.00
Total cost of province	R 2,030,138.28	R 1,565,044.66
Beneficiaries	7299	7299
Cost per learner – provincial cost	278.14	214.42
Cost per learner - national cost**	107.24	120.7
Total cost per learner/year	385.38	335.12
Cost per meal	1.96	1.7
Total cost per year	R 2,812,888.62	R 2,446,040.88
Total cost for 2 years	R 5,258,929.50	

*There was no kitchen constructed by TBF in the province during this time period.

**Calculation of national costs in Appendix E.

Outcomes

Period of Benefit

The investment period has been set as a two year period. The majority of the outcomes have been based on one year of impact and social value created. The total (maximum) duration of social impact for the sensitivity analysis is capped at five years which allows for the completion of schooling by learners who are directly or indirectly influenced by the intervention.

Monetisation

The outcomes for the different stakeholder groups can be monetized, i.e. valued as a monetary amount. Of all 70 outcomes identified as results of the TBF breakfast programme, 38 were included in the SROI analysis. Some of the outcomes not included were substantial, but it occurs early in the results chain and including it would result in double counting. The following table displays the full motivation regarding each outcome.

As indicated in the table, a substantial number of outcomes were not monetised (32). One reason is that for some no evidence of substantial change found. These outcomes are still considered important and should be included in future SROI analysis, and in monitoring activities. See the accompanied Excel Impact Map where the outcomes that are considered are monetised. The table further explains the decisions regarding the inclusion or exclusion of each outcome with reference to the motivation and evidence source for each decision. Narratives of how each stakeholder group verbalised the outcomes and the linkages between outcomes are provided in the section on theory of change of each of the group (see previous sections).

Outcome inclusion decisions

Learners

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Learners eating breakfast and therefore not hungry				
Learners who are no longer hungry as a result of the breakfast (41.3%)	Immediate	# learners who eat breakfast at school only and have no other means	Yes	Percentage calculated by taking total percentage of learners reporting eating breakfast only at school and estimating half of those might have had other means in not for TBF (59.8%).
Learners who eat an additional breakfast at school, in addition to eating breakfast at home (43.3%)	Immediate	# Learners reporting that they eat breakfast at school, although they eat breakfast at home too	Yes	This outcome's benefit is included as these learners had a full stomach which has significant impact. This percentage calculated from total reporting eating breakfast at school and at home (21.4%).
Learners who do not eat breakfast	None	# Learners who report not eating breakfast at school	No	These learners are not benefitting from the programme (18.8%). This percentage is also applied to all outcomes as the beneficiaries not benefitting from the programme (e.g. 15.3% of learner numbers).
Psychological and mental effects				
Self confidence improve	Intermediate	# learners who are more confident and assertive	No	This outcome is early in the results chain and leads to improved participation in class and is included in that outcome calculation.
Learners have increased cognitive development	Intermediate	# learners who have improved cognitive development	No	This outcome is important. Testing this for the learners is beyond this study and has not been done in other studies. However, the outcomes of increased concentration and school participation include this outcome. Including this would be double counting.
Learners stay awake in class	Immediate	# learners who do not fall asleep during first 3 periods of school	No	This immediate output is directly linked to the learners having more energy. It leads to other outcomes that are included in the calculation and are monetised, e.g. improved participation in class.
Concentration level in class of learners improve	Intermediate	# learners who report being able to concentrate in class	No	This is an intermediate outcome leading to another outcome (increased participation) that is monetised. Not included to not over-claim.
Learners are able to participate more in lessons	Intermediate	# hours that learners participate more actively in class per year	Yes	The participation of learners is critical for improved academic performance. The outcome is included in the calculation for those learners who participate more, but do not yet show improved performance as this is also a significant achievement. The calculation of this participation is restricted to a half day as only that attributed to breakfast (and not lunch will be included)

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
learners improved academic performance as evident in academic promotion	Long term	% increase of learners promoted to next grade	Yes	Some learners will have increased academic performance. Educators estimated that at least 15% of learners are performing better in class. As the performance also depends on other factors, including the NSNP lunch and teaching methods and efforts, a higher deadweight will be applied.
Time management skills	Intermediate	# learners who are better able to manage their time	No	This is not verified that it is applicable to learners or that the breakfast had a substantial influence.
Learners save in not buying sweets	Intermediate	# learners saving money that they would have spend on sweets and snacks before TBF	Yes	Although this is not a large saving and not for the majority of learners it is a significant shift to make for those learners who might not benefit that much from not eating at home, but now they eat more nutritious food instead of snacks.
Learners learn about the nutritious value of food and to appreciate food	Immediate	# learners who do not waste the breakfast	No	This outcome is included in the eating of the breakfast (different categories) and is also counted in the outcomes related to the left over foods and those groups who benefit from it.
Illness decreased and health improved				
Improved hygiene of learners due to table manners and washing hands before eating	Immediate	# learners washing hands before eating	No	This outcome is early in the results chain and it is counted by the other two health outcomes.
Learners are more healthy at school and do not faint	Immediate	# of learners who used to faint at school who no longer faint	Yes	Learners, including previous beneficiaries reported less fainting. This was collaborated by the principals, SMT and nutritional committee. The learner survey indicated that 4.5% of learners reported fainting. The SMT estimated it to be 5%.
Learners are able to take chronic medication after eating breakfast	Intermediate	# learners able to take their medicine for chronic illnesses on time in the morning	Yes	Learners reported less fainting. This was collaborated by the principals, SMT, nutritional committee, parents and community members.
Physical activity				
Learners feel stronger	Immediate	# learners able to remain physically active during school day	No	This outcome is immediate and the other outcomes are directly linked to it. The effect would therefore be double counted if this early outcome is also monetized.
Improved growth of learners	Long term	% learners who are not overweight	Yes	This is confirmed of the quasi-experimental study conducted by UJ in other provinces.
Increased physical activity due to increased energy and strength	Long term	# learners able to participate in sport due to energy from breakfast	Yes	The learners reported feeling more energised to participate in sport and to play with other learners. This was confirmed by school principles and SMT.
Learners attendance improve				

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Learners are motivated to come to school due to the fact that they receive breakfast	Immediate	# learners are motivated to come to school	No	This is an important outcome, however this outcome is counted under the benefit of eating a breakfast and monetising it here would be double-counting.
Decrease in late-coming for school due to the pull effect of the breakfast	Intermediate	# decrease of learners coming late for school	Yes	Attendance of school includes punctuality. This is nearly exclusively due to the breakfast programme.
Learners stay longer at school and complete more lessons and do not skip classes	Intermediate	# learners who stay longer at school	Yes	Learners stay longer at school and then have an influence in that they also eat the lunch, which adds to the nutritional value
Decrease in drop-outs from school	Long term	% decrease in children who drop-out of school	No	This is an important outcome; it leads to other social behavioral outcomes such as decreased street children and begging. It is therefore included in the social outcomes.
Increase in attendance (decrease in absenteeism)	Long term	% increase in attendance	Yes	This outcome is important. There is a major contribution to this outcome by the benefit of the NSNP.
Social				
Learners learn table manners, responsibility and routine	Intermediate	# learners learn responsibility and routine and are able to replicate this in other situations	No	This outcome is early in the results chain and will be counted with following outcomes such as discipline in class (improved teaching)
Children stay at school and are less likely to work, beg or start living on the streets	Long term	% decrease in street children and begging	Yes	This is an important outcome for this peri-urban area
Learners do not search for food in rubbish bins	Long term	# learners who do not go to rubbish bins to find food anymore	No	This is an important outcome of the breakfast programme, but it is also included in the eating of breakfast and other social results.
Learners are not involved in stealing of lunch boxes or other bully behaviour	Long term	% decrease in bullying at school	Yes	This is a long term outcome of wide influence

Vulnerable learners

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Reduction in vulnerabilities	Immediate	% learners who are not	Yes	One of the challenges is that there is no breakfast (or NSNP) during the holidays.

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
regarding food		wasting during holidays		This affects vulnerable learners as they do not get any food.
Reduction in vulnerabilities regarding abuse and neglect	Long term	# learners who are no longer neglected and abused	Yes	With the decrease in hunger, there is a decrease in abuse and neglect.
Improved self confidence and assertiveness of the vulnerable learners	Intermediate	# learners who are more confident and assertive	Yes	Due to the role model of the educators who also eat the food, vulnerable learners are confident to ask for food and therefore benefit from the food. This outcome is very significant for vulnerable learners. Not only does it lead to improved participation in class, but it also has an effect in their ability to access other food such as the NSNP lunch.

Educators

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Educators can have convenient breakfast	Immediate	% educators not hungry due to having TBF breakfast	Yes	Some educators eat the breakfast as they do not have time to prepare breakfast, or they are living on their own or not always feeling like eating early. It is convenient.
Educators feel motivated by having a choice to eat the breakfast	Immediate	# educator with increased morale	No	This outcome is also part of the outcome regarding ability to teach and performance.
Educators have improved concentration and more energy	Immediate	# educators with improved concentration and more energy	No	Educators reported that they feel energized by the breakfast and are able to concentrate for longer.
Educators now come to school on time	Intermediate	% educators arriving on time for school	No	Punctuality of educators is critical for teaching and learning. Since learners now arrive early for school educators are also motivated to be punctual.
Educators attendance improve	Intermediate	% educators who are attending every day	No	Attendance of educators is critical for teaching and learning. Since learners are not ill at school, educators do not get contract those illnesses. Some educators are also healthier due to better nutrition from the breakfast.
Educator/learner relationships improve	Intermediate	# educators more able to identified learners as vulnerable and receive attention	No	Educators have better interactions with learners. The educators are better able to identify and interact with learners who are needy or have problems at home.
Teaching and learning improve	Long term	# periods able to teach more effectively	Yes	Educators reported that they are starting from the first period and do not have to wait till later to start teaching. They benefitted at least one period a day extra. Educators are better able to teach due to the learners being present, on-time,

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
				energized, participating and not sleeping in class.
Lesson outcomes improve	Intermediate	# educators who perform better on KPAs	No	Although this was reported it seems to be a longer term outcome that will be realized in future. It is partially included in the previous outcomes.
General performance of educators improve as educators are recognized as going the extra mile for learners	Long term	# educators who perform better on IQMS assessments	No	This was reported it seems to be a longer term outcome that will be realized in future. It is partially included in the previous outcomes.
Improved educator results	Long term	# educators reach performance goals	Yes	Although this was reported it seems to be a longer term outcome that will be realized in future.
The educators act as role model to encourage learners to eat breakfast	Intermediate	# educators who are positive role models	No	The educators motivate the learners who are shy to eat or do not trust the value of the food by eating it in front of the children.
Educators have additional tasks NEGATIVE	Immediate	# hours extra work to assist with breakfast	No	Although this is a negative effect, all the educators reported that the benefits of having alert and participating learners outweigh any negative effect. They adjusted fast. The tasks are also included in the normal paid working hours.

Food handlers

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Food handlers eat breakfast	Immediate	# food handlers not hungry due to eating breakfast	Yes	The most immediate benefit for the food handlers was being able to eat the breakfast.
Food handlers appreciate the uniform	Immediate	# food handlers reporting increased confidence due to uniform	Yes	It is critical for the food handlers to have protective clothing and to feel respected in their uniform. Although this might not be seen as an important outcome it contributes to the teamwork and respect of the food handlers and their pride in the job. They see it as an added benefit.
Increase in income for food handlers	Intermediate	# food handlers receiving stipend each month	Yes	The stipend is critical for the food handlers as they have no other income.
Food handlers use their stipends to pay for school uniforms for their children	Immediate	# children of food handlers being able to attend events	No	Some parents are able to buy school uniforms for their children due to the stipend they receive. This outcome is included in the outcome above (stipend).

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Skills development of food handlers including communication and team work	Long term	# food handlers who developed new skills	Yes	The food handlers reported that they learned skills regarding team work and communication
Food handlers gained new knowledge (including nutrition, safety and hygiene)	Long term	# food handlers who gained new knowledge	Yes	Food handlers gained new knowledge on safety and nutrition
Food handlers learn new skill in cooking for large groups (including measurements)	Long term	# food handlers who practically apply their skills outside school	No	This outcome is based on the skills development and is also monetised in the following outcome - employment
Food handlers arrive very early in the morning NEGATIVE	Immediate	# of food handlers arriving earlier in the morning	No	The food handlers were reported to be very punctual and started early in the morning

School based monitors

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
School based monitors eat breakfast	Immediate	# school based monitors not being hungry	Yes	The most immediate benefit for the school based monitors was being able to eat the breakfast.
School based monitors receive a stipend by the DoE	Long term	# school based monitors from beneficiary schools who receive stipends	Yes	The school based monitors eat the TBF breakfast. The stipend of the school based monitors is a benefit through the TBF programme close relationship with the provincial education department that is specific to Limpopo and reflects the ownership the department took in the programme. This level of partnership is unique and contributes significantly to the project. Although the benefit is wider than only the project schools for this study the benefit of stipends will be calculated for the seven project schools only.

Parents/Caregivers

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
---------	----------------	-----------	---------------	-------------------------

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Parents feel relieved that the school provide something to their children to eat	Immediate	# parents who feel relieved that their children are getting something to eat at school	No	Parents have decreased stress and pressure to supply breakfast to their children. This change is not material as it was also argued that some parents might be become dependent on the assistance. The outcome is further captured in the following outcome
Parents save time and money by not having to provide breakfast and they can use the money for other commitments	Immediate	# parents who save time and money by not having to provide breakfast and use the money for other commitments	Yes	Although most parents will save money, not all are using this money for commitments towards their children
Parents feel pressured to provide the same breakfast at home.	Immediate	# parents who have to buy food they cannot afford	No	A few parents might feel this pressure and it is a significant negative effect. However they are not reporting that they are able to buy the food and therefore this outcome is not material.
The parents does not need to spend time to meet with SAPS and principals	Short term	# hours parents saved by not having meetings with SAPS and principals	Yes	Parents in the past had regular meetings with the principal and SAPS due to the children begging on the street and not attending school.

Community

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Learners are more respectful to educators, parents and community	Intermediate	# learners who become more respectful citizens	No	This outcome would be realized in future when learners grow up into adulthood.
Decrease in SAPS time spend on petty crime and negative behaviours of children and youth such as begging	Intermediate	# hours SAPS save by not having meetings with parents and school principal	Yes	The actual outcome of the above mentioned results is the saving in time of SAPS officers who used to have to go to schools regularly to solve these negative behaviours or have to investigate petty crimes.
Overall decrease in poverty level	Long term	% decrease in poverty rate	No	There are food and jobs (food handlers) in the community and although small it assists in decreasing of overall level of poverty. The number of jobs is included in outcomes for food handlers.
Workers and cleaners working outside the school (Community Works Programme) eating left-	Immediate	# of workers and cleaners working outside the school (Community Works	Yes	Although not many, there are community members benefitting directly from eating the breakfast.

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
over breakfast		Programme) eating left-over breakfast		

Schools

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
School employees eating breakfast	Immediate	# supporting staff at school eating breakfast, not hungry	Yes	Administrative and other non-teaching staff at the school (including cleaners, bus drivers and gate security) arrive very early at school and enjoy the breakfast
Improvement in attendance of learners and educators due to receiving breakfast	Intermediate	% increase in school attendance rates	No	These outcomes were included for learners and educators. Although it has a significant effect on teaching and learning it will not be counted again.
Reputation of school increases and more learners want to enroll in school	Long term	# new enrollments	Yes	Due to being part of the TBF programme and the positive outcomes for the school the school reputation improves and the enrolment increases
Decrease in school principals time spend on meeting with parents and SAPS	Intermediate	# hours principals save by not having meetings with parents and SAPS or fetching learners from rubbish dump	Yes	School principals used to spend at least 30 minutes longer outside waiting for latecomers. They also spend time going to fetch children from the rubbish dump or attending to police matters.
Increased knowledge by participating in national conference and networking	Intermediate	Increased experience and sharing opportunity on national level	Yes	The principal attended the TBF conference and it was the first time to fly - opens a new world to the school feeling recognised nationally
NSNP lunch being eaten because learners are at school due to pull effect of breakfast	Long term	# of children who can benefit from the NSNP because the breakfast motivated them to attend school	Yes	Some learners would not have attended school at all and would not have benefitted from the NSNP if they were not motivated to attend school by having a breakfast. This is probably not a widely experienced outcome, yet significant. The TBF breakfast therefore makes an indirect contribution to the effectiveness of the NSNP.
Increased involvement by SGB in school regarding food	Intermediate	# benefits initiated by SGB (firewood, kitchen shelter and monitoring)	Yes	There is increased involvement of the School Governing Body (SGB) at some schools.

Vendors

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
Loss of income due to vendors not selling at schools NEGATIVE	Long term	# vendor income lost	Yes	There was a definite influence on the vendors as they have lost business at the schools. However, the transparent and participatory nature of the decision contributed to the impact being less than expected.

Unions

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
The unions are benefitting from the programme directly and indirectly by reaching their targets	Long term	% targets reached due to the TBF programme	No	The unions appreciate the breakfast as it helps them reach their targets regarding quality through the reduction of late coming. This outcome is removed from the influence of the breakfast, although it possible contributes. The effects would have been included in the outcomes for educators.

Nutritional committee

Outcome	Outcome timing	Indicator	In SROI index	Motivation and evidence
There are additional work and tasks for the nutritional committee NEGATIVE	Immediate	# hours extra work to assist with management of breakfast	No	Although this is a negative effect, all the committee members reported that the benefits of having alert and participating learners outweigh any negative effect. They do the work during their normal working hours' commitment. The benefits outweighed the cost.

Potential negative outcomes

Possible negative outcomes were investigated for the following stakeholders:

- The educators had additional tasks related to the TBF breakfast programme. They are expected to supervise the breakfast and to dish the breakfast to learners. This is not included in the calculation for two reasons: 1) the time is salaried time that they are supposed to be at school and 2) all the educators interviewed expressed a strong feeling that they benefit more from this activity than any negative effect.
- Nutritional committee: The nutritional committee have extra work to assist with management of breakfast. Although this is a possible negative effect, all the committee members reported that the benefits of having alert and participating learners outweigh any negative effect. They do the work during their normal working hours' commitment. The benefits outweighed the cost. The positive outcomes were included in the educators' outcomes.
- There was a negative influence in that the food handlers start work very early. However, this influence was not included as the food handlers receive an additional stipend to cover these tasks. They also reported that they adjusted quickly.
- The change for vendors was negative. There was a definite loss of income for the vendors as they have lost business at the schools. However, the transparent and participatory nature of the decision contributed to the impact being less than expected. This outcome has been included in the calculation as a negative influence of TBF breakfast programme on this stakeholder group.

Outcome quantity and duration

The following table describes the motivation about quantity for each outcome indicator and the duration of each.

Quantity and Duration for each outcome indicator

Outcome	Indicator	Quantity	Rationale	Duration (years)	Rationale
Learners					
Learners who are no longer hungry as a result of the breakfast (41.3%)	# learners who eat breakfast at school only and have no other means	8400	Estimate total percentage of learners eating breakfast at school (59.8%) 14 048 learners	1	The effect is per breakfast
Learners who eat an additional breakfast at school, in addition to eating breakfast at home (43.3%)	# Learners reporting that they eat breakfast at school, although they eat breakfast at home too	3006	Total reporting eating breakfast at school and at home (21.4%)	1	The effect is per breakfast
Learners are able to participate more in lessons	# hours that learners participate more actively in class per year	221 428	Learners' participation for half day, rest of day could possibly be due to lunch. Increase in participation of 35% compared to 27% of non-beneficiaries. 8% of learners (1124) x 1 hours x 197 schooldays per year = hours	1	One year
learners improved academic performance as evident in academic promotion	% increase of learners promoted to next grade	2 810	20% of improvements in results. Influences of lunch and teaching to be included in deadweight adjustment	1	One year
Learners save in not buying sweets	# learners saving money that they would have spend on sweets and snacks before TBF	60 415	10% of learners buy sweets and snacks from vendors per school week	1	One year
Learners are more healthy at school and do not faint	# of learners who used to faint at school who no longer faint	1 124	4.4% of learners reported fainting previously. (The SMT estimated it to be 5%) 4% of learners x 2 times	1	One year
Learners are able to take chronic medication after eating breakfast	# learners able to take their medicine for chronic illnesses on time in the morning	2 810	2% of learners able to use medicine 10 months of year	1	One year
Improved growth of learners	% learners who are not overweight	239	1.7% learners decreased obesity	2	Effects expected to last 2 years
Increased physical activity due to increased energy and strength	# learners able to participate in sport due to energy from breakfast	35	5% of learners reported being more physically active Estimated 5% of these due to breakfast.	1	One year
Decrease in late-coming for school due to the pull effect of the breakfast	# decrease of learners coming late for school	691 864	Reports include increase from 40% to 90%. Average = 36% - used 25%=3512 x 197 days	1	One year
Learners stay longer at school and complete more lessons and do not skip classes	# learners who stay longer at school	1 405	Learners stay longer at school and then have an influence in that they also eat the lunch, which adds to the nutritional value. 10%	1	One year
Increase in attendance (decrease in absenteeism)	% increase in attendance	2 810	The attendance improved from 60/70% to 90%. Use 20% Attribution applies, due to	1	One year

Outcome	Indicator	Quantity	Rationale	Duration (years)	Rationale
			NSNP.		
Children stay at school and are less likely to work, beg or start living on the streets	% decrease in street children and begging	350	Some schools reported the number of learners who used to go to drop-out or truant about 5 per school. 35 learners x 1 session/month	1	One year
Learners are not involved in stealing of lunch boxes or other bully behaviour	% decrease in bullying at school	1 405	Bullying at school is a huge problem. A reduction of 1% will be significant. Session per month for a year	1	One year
Vulnerable learners					
Reduction in vulnerabilities regarding food	% learners who are not wasting during holidays	2808	5% learners (702) receive food parcels or surplus food during the holiday. This provides them with food for 2 months	1	One year
Reduction in vulnerabilities regarding abuse and neglect	# learners who are no longer neglected and abused	140	Poverty and unemployment leads to neglect in a few cases. Breakfast alleviate this. Estimated at 1% of learners.	1	One year
Improved self confidence and assertiveness of the vulnerable learners	# learners who are more confident and assertive	351	Most vulnerable learners estimated at 5, benefit to half of them = 2.5%	1	One year
Educators					
Educators can have convenient breakfast	% educators not hungry due to having TBF breakfast	47	There are diverse reports on how many educators eat the breakfast ranging from 50% to 10%. Using minimum = 10%	1	One year
Teaching and learning improve	# periods able to teach more effectively	4 076	Educators indicated that they at least are able to start teaching at the beginning of school each day. ½ lesson per week for 20% x 43	1	One year
Improved educator results	# educators reach performance goals	24	5% of educators score higher on the IQMS	1	One year
Food handlers					
Food handlers eat breakfast	# food handlers not hungry due to eating breakfast	76	Number of food handler	1	One year
Food handlers appreciate the uniform	# food handlers reporting increased confidence due to uniform	76	Number of food handlers	1	One year
Increase in income for food handlers	# food handlers receiving stipend each month	76	Number of food handlers	1	One year
Skills development of food handlers including communication and team work	# food handlers who developed new skills	76	Estimated that all food handlers learn new soft skill (this exclude cooking skills – for which they are employed)	5	Five years
Food handlers gained new knowledge (including nutrition, safety and hygiene)	# food handlers who gained new knowledge	76	Estimated that all food handlers gain new knowledge	2	Two years
School based monitors					
School based monitors eat breakfast	# school based monitors not being hungry	14	1 SBM x 7 schools x 2 years	1	Year

Outcome	Indicator	Quantity	Rationale	Duration (years)	Rationale
School based monitors receive a stipend by the DoE	# school based monitors from beneficiary schools who receive stipends	14	1 SBM x 7 schools x 2 years	1	Year
Parents/Caregivers					
Parents save time and money by not having to provide breakfast and they can use the money for other commitments	# parents who save time and money by not having to provide breakfast and use the money for other commitments	702	Although all parents are saving in some way, not all parents are using the savings in a meaningful way. Estimated at 5%	1	6 months and decreases over time as the family gets used to the situation
The parents does not need to spend time to meet with SAPS and principals	# hours parents saved by not having meetings with SAPS and principals	70	Estimated 1 hour per month per school. 7 x 10 months	2	Two years
Community					
Decrease in SAPS time spend on petty crime and negative behaviours of children and youth such as begging	# hours SAPS save by not having meetings with parents and school principal	140	There were reports of up to 70-80% decrease in crimes by children. Most school reported that there were no longer any meetings with SAPS. Estimated at 2 hours of SAPS time per month (x10) saved at each school x 7	2	Two years
Workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	# of workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	28	4 persons x 7 schools	1	One year
Schools					
School employees eating breakfast	# supporting staff at school eating breakfast, not hungry	35	5 staff members x 7 schools	1	One year
Reputation of school increases and more learners want to enroll in school	# new enrollments	141	Average increase of 1% in enrollments	1	Benefit for 1 year
Decrease in school principals time spend on meeting with parents and SAPS	# hours principals save by not having meetings with parents and SAPS or fetching learners from rubbish dump	70	Estimated at 1 hour of principal time per month (x10) saved at each school x 7	2	Two years
Increased knowledge by participating in national conference and networking	Increased experience and sharing opportunity on national level	7	Principals of project schools experience and participate in national conference	2	Two years
NSNP lunch being eaten because learners are at school due to pull effect of breakfast	# of children who can benefit from the NSNP because the breakfast motivated them to attend school	281	20% of learners would not have breakfast. 10% of them estimated that would not have been attending school without breakfast and not benefitting from NSNP (2%)	1	Benefit for 1 year
Increased involvement by SGB in school regarding food	# benefits initiated by SGB (firewood, kitchen shelter and monitoring)	1 379	1 SGB member per school day per school	2	Two years
Vendors					

Outcome	Indicator	Quantity	Rationale	Duration (years)	Rationale
Loss of income due to vendors not selling at schools NEGATIVE	# vendor income lost	4 137	Working on average of 3 vendors for 7 schools x 197 days (after 1 year adapted to new market)	1	One year

Financial proxies

The following table indicates the financial proxies identified and valued for each of the outcome indicators. Verification of the appropriateness of each proxy was done by triangulating sources.

Financial Proxies

Outcome	Indicator	Financial Proxy	Rationale	Value of the change	Rationale	Information source
Learners						
Learners who are no longer hungry as a result of the breakfast (41.3%)	# learners who eat breakfast at school only and have no other means	Cost per breakfast for a year/person (schooldays)	<p>Learners reported: Breakfast cost to the learner as this is nutritious meal that would have cost them</p> <p>Cost of breakfast (retail), average cost of the four different types.</p> <p>This excludes cost of preparation (water, electricity/energy, labor)</p>	R 546 (R 2.77/ portion x 197 days)	<p>Ace R 17.25/kg (R 15.50-19.00) – R 1.73/portion</p> <p>Mabele R 15/kg (R 14-16) – R 1.50/portion</p> <p>Movite R 20.25/kg (R 19-20.50) – R 2.03/portion</p> <p>Jungle oats R 32.25/750g (R 30.50-34) – R 4.30/portion</p> <p>100gr portions, 2xOats/week</p> <p>Average cost: R/packet</p> <p>Average per portion: R 2.77</p>	<p>Pick & Pay, Makro, Dischem</p> <p>Food ration scales DoH</p>
Learners who eat an additional breakfast at school, in addition to eating breakfast at home (43.3%)	# Learners reporting that they eat breakfast at school, although they eat breakfast at home too	Cost of a snack	<p>Learners reported: Average cost of a snack from the street vendors</p>	R 394 (R2/snack x197 days)	R 2,00 per snack (range between R2 – R5)	Vendor information
Learners are able to participate more in lessons	# hours that learners participate more actively in class per year	1 extra lesson	<p>Educator reported: Cost of tutor per hour</p>	R 82	<p>Educator/tutor hourly salary</p> <p>Primary school educator annual salary: R168 000 – R82/hour</p>	Payscale
learners improved academic performance as evident in academic promotion	% increase of learners promoted to next grade	Tablet cost	<p>Learners indicated that they approximate a tablet as a “gift” for being promoted to the next grade</p>	R 800	Cost of a tablet (cheapest)	Jet clothing store (Pricecheck)
Learners save in not buying sweets	# learners saving money that they would have spend on sweets and snacks before TBF	Packet of snacks (repacked from large)	<p>Learners: The cost of one small pack of snacks</p>	R 2	Small packet of Kip-kip	Lorato, Reginah, Surprise
Learners are more healthy at school and do not faint	# of learners who used to faint at school who no longer faint	½ hour educator time	<p>Educator reported: First aid educator, 30 minutes to assist fainted learner</p>	R 41	<p>½ educator hourly salary</p> <p>Primary school educator annual salary: R 168 000 – R 82/hour</p>	Payscale

Outcome	Indicator	Financial Proxy	Rationale	Value of the change	Rationale	Information source
Learners are able to take chronic medication after eating breakfast	# learners able to take their medicine for chronic illnesses on time in the morning	Cost of chronic medication/month	Parents and educators felt that the value is the same as that of the medicine as the learners would have “wasted” the medicine Cost of chronic medication for either diabetes or epilepsy for one month per child	R 290	Chronic medication (cheapest) for diabetes R 193 (R 193.41-R 904.96) and epilepsy R 388 (R 388.12 –R 1280.14) Average cost per month: R 290	www.medicair.co.za
Improved growth of learners	% learners who are not overweight	Cost of multivitamin supplement/Year	Educators and HCW: Malnutrition are alleviated by vitamin and mineral supplements	R 780	Gold Yummy Vites for children R 65/child x 12 months	Dischem
Increased physical activity due to increased energy and strength	# learners able to participate in sport due to energy from breakfast	Cost of gym membership for 10 months	Learners reported: Physical activity as related to membership of a club that enhances physical activity	R 2 200	R 220/month x 10 months	Kathu Fitness Factory
Decrease in late-coming for school due to the pull effect of the breakfast	# decrease of learners coming late for school	½ extra lesson	Educator reported: Cost of tutor/educator per hour	R 41	½ Educator hourly salary Primary school educator annual salary: R 168 000 – R 82/hour	Payscale
Learners stay longer at school and complete more lessons and do not skip classes	# learners who stay longer at school	½ extra lesson	Educator reported: Cost of tutor/educator per hour	R 41	½ Educator hourly salary Primary school educator annual salary: R 168 000 – R 82/hour	Payscale
Increase in attendance (decrease in absenteeism)	% increase in attendance	School fees	Parents and educators: Cost of school fees for 1 year	R 8 000	Government school R 8000 (range R 8000-30000)	Goodthingsguys
Children stay at school and are less likely to work, beg or start living on the streets	% decrease in street children and begging	Cost of counseling session	Professional judgment: One session of counseling by psychologist for rehabilitation purposes	R 900	A counseling session is R 900/45 min session	Healthman PsySSA, 2017

Outcome	Indicator	Financial Proxy	Rationale	Value of the change	Rationale	Information source
Learners are not involved in stealing of lunch boxes or other bully behaviour	% decrease in bullying at school	Cost of counseling session	Professional judgment: One session of counseling by psychology for trauma purposes	R 900	A counseling session is R 900/45 min session	Healthman PsySSA, 2017
Vulnerable learners						
Reduction in vulnerabilities regarding food	% learners who are not wasting during holidays	SASSA social grant/month	Parents: social grant /month	R380	Monthly grant =R380/month	SASSA
Reduction in vulnerabilities regarding abuse and neglect	# learners who are no longer neglected and abused	Cost of psychologist session	Professional judgment: One session of counseling by psychologist for trauma	R900	A counseling session is R900/45 min session	Healthman PsySSA, 2017
Improved self confidence and assertiveness of the vulnerable learners	# learners who are more confident and assertive	Motivational speaker	Professional judgment: The cost of a motivational speaker (per person) to help increase their confidence	R 600	Range from R 29 975 – R 39 950 per 45-75 minutes R 30 000 for 50 people= R 600/person	Speakermotivational.co.za
Educators						
Educators can have convenient breakfast	% educators not hungry due to having TBF breakfast	Cost of breakfast/year/person	Educators: As previously	R 546	As previously	As previously
Teaching and learning improve	# periods able to teach more effectively	Educator hourly rate	Educators: Cost of educator per hour	R82	Educator hourly salary Primary school educator annual salary: R168 000 – R82/hour	Payscale
Improved educator results	# educators reach performance goals	Cost of teaching hours	Educators: Cost of teaching hours	R82	Educator hourly salary Primary school educator annual salary: R168 000 – R82/hour	Payscale
Food handlers						
Food handlers eat breakfast	# food handlers not hungry due to eating breakfast	Cost of breakfast/year/person	Food handlers: As previously	R546	As previously	As previously

Outcome	Indicator	Financial Proxy	Rationale	Value of the change	Rationale	Information source
Food handlers appreciate the uniform	# food handlers reporting increased confidence due to uniform	Cost of uniform	Food handlers: The value of the uniform includes all the other protective clothing	R395	3 piece-cleaner/cook uniform	Azulwear
Increase in income for food handlers	# food handlers receiving stipend each month	TBF stipend value	Food handlers: Value of the additional stipend for the TBF breakfast	R6600	This is the actual value of the stipend received by food handlers R550 x 12 months	Food handlers, confirmed by other stakeholders
Skills development of food handlers including communication and team work	# food handlers who developed new skills	Training session	Professional judgement: The skills development benefit is equal to formal skills development training	R258	Safety course: Range R1 290-R2 690. /person up to 5 people R258 per person	Nosa.co.za
Food handlers gained new knowledge (including nutrition, safety and hygiene)	# food handlers who gained new knowledge	Safety course cost	Professional judgement: The knowledge gained is equal to formal training	R258	Safety course: Range R1 290-R2 690. /person up to 5 people R258 per person	Nosa.co.za
School based monitors						
School based monitors eat breakfast	# breakfasts eaten by school based monitors	Cost of breakfast/year/person	As previously	R 546	As previously	As previously
School based monitors receive a stipend by the DoE	# school based monitors from beneficiary schools who receive stipends	Stipend paid to SBM	The monthly SBM salary/stipend	R 18 000	Stipend by TBF in Gauteng R 1500/month	TBF
Parents/Caregivers						
Parents save time and money by not having to provide breakfast and they can use the money for other commitments	# parents who save time and money by not having to provide breakfast and use the money for other commitments	Cost of breakfast/year/person	Parents reported saving as proxy: As previously	R546	As previously	As previously
The parents does not need to spend time to meet with SAPS and principals	# hours parents saved by not having meetings with SAPS and principals	Minimum wage for 1 hour	Professional judgement: The time the parent spend meeting with the school and SAPS can be valued as working for the	R20	R20/hour	News24

Outcome	Indicator	Financial Proxy	Rationale	Value of the change	Rationale	Information source
			minimum wage			
Community						
Decrease in SAPS time spend on petty crime and negative behaviours of children and youth such as begging	# hours SAPS save by not having meetings with parents and school principal	SAPS time cost	SAPS: SAPS time	R90	R157 951/annum, - R90/hour	Payscale
Workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	# of workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	Cost of breakfast/year/person	Educators, parents: As previously	R 546	As previously	As previously
Schools						
School employees eating breakfast	# supporting staff at school eating breakfast, not hungry	Cost of breakfast/year/person	Nutritional committee: As previously	R546	As previously	As previously
Reputation of school increases and more learners want to enroll in school	# new enrollments	School fees	Principal, SGB: Cost of school fees for 1 year	R8 000	Government school R8000 (range R8000-30000)	Goodthingsguys
Decrease in school principals time spend on meeting with parents and SAPS	# hours principals save by not having meetings with parents and SAPS or fetching learners from rubbish dump	Hourly rate of school principal	Principal, SGB: Time that the school principal can now spend on other school management tasks	R112	Annual salary: R229 512, R19 126/month, R894/day, R112/hour	Payscale
Increased knowledge by participating in national conference and networking	Increased experience and sharing opportunity on national level	Conference cost	Principal: Includes registration, flight from Kathu to Johannesburg, accommodation	R11 000	Registration - R4500, Flight (Kathu/Jhb) – R4500, Accommodation – R2000 (3days) /person	PAPU, Flysaa, Emperors
NSNP lunch being eaten because learners are at school due to pull effect of breakfast	# of children who can benefit from the NSNP because the breakfast motivated them to attend school	Average cost of NSNP lunch	Nutritional committee: NSNP allocated budget per learner. This excludes cost of preparation (water,	R3.60/portion	The NSNP allocates R3.60 per learner per day	School principal at Gamagara Secondary school

Outcome	Indicator	Financial Proxy	Rationale	Value of the change	Rationale	Information source
			electricity/energy, labor)			
Increased involvement by SGB in school regarding food	# benefits initiated by SGB (firewood, kitchen shelter and monitoring)	Packet of wood	SGB chairperson indicated that each SGB member contribution value at about a pack of wood	R 30	Packet of wood cost between R 20 and R 40. Average used	Spar
Vendors						
Loss of income due to vendors not selling at schools NEGATIVE	# vendor income lost	Income per school day	Vendor estimated at the income for one day per vendor	R 30	R 25-30/day average Use maximum = R 30 for morning only	Vendor at Harry Gwala primary school, Tsepisong

The SROI Filters

Not all of the social value added (SVA) can be solely attributed to the programme. Some benefits may be a consequence of other initiatives by other organisations. A number of key filters were applied to ensure a realistic view of the social benefits created by the programme. These filters were applied generously to ensure that the SROI ratio is rather an underestimate and absolute minimum. In addition to the filters being strict, the number of beneficiaries for each outcome was also calculated as the minimum. A list of the filters applied to each outcome is presented in the table.

Deadweight

Deadweight is an estimation of what would have happened anyway if the Tiger Brands Foundation programme had never been implemented. Most of the outcomes for the schools or learners would not have happened if not for this intervention as this is a very poor school with very limited resources and opportunities. The influence was calculated using the differences between the beneficiary schools and non-beneficiary school surveys. These are crude calculations as the school was not a primary school, but it can confidently assume that the estimates are rather under estimates than over-claiming.

Attribution

Attribution accounts for the percentage of outcomes caused by other organisations or people. The TBF breakfast programme is unlikely to be solely responsible for the value creation calculated. The NSNP lunch and other factors such as improved teaching and learning due to motivational factors probably contributed.

Small contributions (unrelated intervention) were made by:

- Indian community donated borehole (This alleviated water problems – previously when the water truck was late could not cook)
- Church – sanitary ware for girls, school shoes and uniforms; renovations to school
- NGOs – school uniforms
- Change for Bela-Bela – donations, pots to cook due to increased enrolments

Displacement

Displacement is an assessment of how much of the activity displaced other outcomes or other activities. Stakeholders were explicitly asked in the interviews (as evident in the instruments used) to highlight any activities that could have been displaced. No activities or outcomes were reported to be displaced.

Drop-off

Drop-off is a measure which recognises that outcomes could tend to reduce over time. The impact of the programme will be sustained by TBF continuing the breakfast programmes in these schools. Most of the outcomes were not considered to continue for longer than a year, and drop-off was only applied for the longer term effect of growth of learners.

Discounted rate

The discounted rate was set at 5.75% based on data from the Central bank discount rate for South Africa (31 December 2014).

List of filters applied

Outcome	Indicator	Dead-weight	Displacement	Attribution	Drop-off	Reasons
Learners						
Learners who are no longer hungry as a result of the breakfast (41.3%)	# learners who eat breakfast at school only and have no other means					Learners, nutritionist, previous research, The effect is for this specific group only. Minimum % of learners included.
Learners who eat an additional breakfast at school, in addition to eating breakfast at home (43.3%)	# Learners reporting that they eat breakfast at school, although they eat breakfast at home too	50% 70%				Learners, nutritionist, and previous research: Learners ate an additional meal. The breakfast they eat at home would probably be sufficient.
Learners are able to participate more in lessons	# hours that learners participate more actively in class per year	50%				Educators: The educators might be more motivated to teach.
learners improved academic performance as evident in academic promotion	% increase of learners promoted to next grade	50%				Educators: The improved performance could have been due to other factors. The lunch and teaching contribute to the performance.
Learners save in not buying sweets	# learners saving money that they would have spend on sweets and snacks before TBF	10%			50%	Learners: Some learners would not be saving. Even if they were saving there would be a drop-off after a year
Learners are more healthy at school and do not faint	# of learners who used to faint at school who no longer faint					This effect is due to breakfast according to all stakeholders
Learners are able to take chronic medication after eating breakfast	# learners able to take their medicine for chronic illnesses on time in the morning	50%				Educators: Some of the learners might have taken other steps to ensure they can take their medicine. There could be other contributing factors, such as decreased shyness.
Improved growth of learners	% learners who are not overweight				50%	Nutritional expert Some effects of the stunting and wasting probably drop-off over time. It is unlikely that the growth effects will continue longer than a year after the nutritional support is stopped (e.g. when the learner moves to secondary school). Stunting and wasting will in long run be replaced by indicators such as overweight.
Increased physical activity due to increased energy and strength	# learners able to participate in sport due to energy from breakfast	60%				Learners: The increased participation in sport might be due to other factors such as motivation.
Decrease in late-coming for school due to the pull effect	# decrease of learners coming late for school	10%				Educators, learners: If the decreased late coming could be attributed to other factors, not

Outcome	Indicator	Dea d- wei ght	Dis plac eme nt	Attri butio n	Dro p- off	Reasons
of the breakfast						lunch
Learners stay longer at school and complete more lessons and do not skip classes	# learners who stay longer at school	50%				Educators, Nutritional committee: The learners probably also stay due to the lunch and other factors.
Increase in attendance (decrease in absenteeism)	% increase in attendance	60% 80%		60% 80%		SMT, Educators: Unlike the decrease in late-coming that is most probably due to the breakfast, the improved attendance could also be attributed to lunch.
Children stay at school and are less likely to work, beg or start living on the streets	% decrease in street children and begging			40%		Educators, Parents: Some children are reached through church actions
Learners are not involved in stealing of lunch boxes or other bully behaviour	% decrease in bullying at school	20%				Educators: Some bully behavior might be decreasing (especially during some seasons such as summer)
Vulnerable learners						
Reduction in vulnerabilities regarding food	% learners who are not wasting during holidays					This effect is due to breakfast according to all stakeholders
Reduction in vulnerabilities regarding abuse and neglect	# learners who are no longer neglected and abused	40%				Educators, learners: This outcomes might have partially been realized in itself
Improved self confidence and assertiveness of the vulnerable learners	# learners who are more confident and assertive					Educators: TBF through allowing educators to eat developed role models, learners feel free to eat and are more confident to ask for more
Educators						
Educators can have convenient breakfast	% educators not hungry due to having TBF breakfast	80%				Educators, food handlers: Most educators only eat the breakfast as it is convenient and without it would have made another plan.
Teaching and learning improve	# periods able to teach more effectively	50%				Educators: Other motivating factors contribute to improved teaching
Improved educator results	# educators reach performance goals	30%				Educators: Other motivating factors contribute to reaching goals
Food handlers						
Food handlers eat breakfast	# food handlers not hungry due to eating breakfast	50%				Food handlers, Nutritional committee: Some of the food handlers might have eaten breakfast at home.
Food handlers appreciate the uniform	# food handlers reporting increased confidence due to uniform					Food handlers, Nutritional committee: TBF only supply uniform and safety equipment and clothes
Increase in income for food handlers	# food handlers receiving stipend each month					Food handlers, Nutritional committee: TBF stipend only
Skills development of food handlers including communication and team work	# food handlers who developed new skills			20%		Food handlers, Nutritional committee, NSNP officers: The NSNP also contributed.

Outcome	Indicator	Dead-weight	Displacement	Attribution	Drop-off	Reasons
Food handlers gained new knowledge (including nutrition, safety and hygiene)	# food handlers who gained new knowledge			20%		Food handlers, Nutritional committee, NSNP officers: The NSNP also contributed.
School based monitors						
School based monitors eat breakfast	# breakfasts eaten by school based monitors	50%				SBM, Nutritional committee: Some of the SBM might have eaten breakfast at home.
School based monitors receive a stipend by the DoE	# school based monitors from beneficiary schools who receive stipends			40%		SBM: The DoE contributes the stipend, due to partnership
Parents/Caregivers						
Parents save time and money by not having to provide breakfast and they can use the money for other commitments	# parents who save time and money by not having to provide breakfast and use the money for other commitments	70%				Professional judgment: Some parents are more prone to save.
The parents does not need to spend time to meet with SAPS and principals	# hours parents saved by not having meetings with SAPS and principals					Parents, SAPS: TBF breakfast programme make impact, no other factors identified
Community						
Decrease in SAPS time spend on petty crime and negative behaviours of children and youth such as begging	# hours SAPS save by not having meetings with parents and school principal					SAPS, Professional judgment: No other contributions, outcome attributed to TBF for this small subgroup. This is not a general outcome, but only related to a small subgroup of learners.
Workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast	# of workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast					SGB: This is a small group and small valued outcome, no other contribution and the outcome would not be evident for any other means.
School						
School employees eating breakfast	# supporting staff at school eating breakfast, not hungry					Nutritional committee: Small subgroup, no other discounted factors
Reputation of school increases and more learners want to enroll in school	# new enrollments	50%				SMT: The new enrollments could happen partially as there are more learners. Other factors could contribute to the reputation of the school.
Decrease in school principals time spend on meeting with parents and SAPS	# hours principals save by not having meetings with parents and SAPS or fetching learners from rubbish dump					Parents, SAPS: TBF breakfast programme make impact, no other factors identified
Increased knowledge by participating in national conference	Increased experience and sharing opportunity on national level					Principals, TBF: This was the first and only national event for the principals

Outcome	Indicator	Dead-weight	Displacement	Attribution	Drop-off	Reasons
and networking						
NSNP lunch being eaten because learners are at school due to pull effect of breakfast	# of children who can benefit from the NSNP because the breakfast motivated them to attend school	40%				All stakeholders: This is a significant influence that needs further research.
Increased involvement by SGB in school regarding food	# benefits initiated by SGB (firewood, kitchen shelter and monitoring)					SGB: Contributions are only related to TBF and kitchen
Vendors						
Loss of income due to vendors not selling at schools NEGATIVE	# vendor income lost					Vendors, principals: No other discounted factors. TBF responsible for vendors not being at schools.

Ensuring stakeholders and outcomes are relevant and significant (material)

The following methods were employed to make sure that the relevant stakeholders were included initially:

An extensive list was made of all possible stakeholders from the document and literature review. These were categorised and presented to the participants of the initial meeting during which the stakeholder groups were discussed and additional stakeholder groups were included.

During the SROI process four stakeholder groups were combined (different sex/age groups of learners). This was done when it became clear that there were no significant differences in the groups that could not be adjusted for in the calculation of the beneficiaries. An additional subgroup of most vulnerable learners who had additional unique outcomes was included.

Outcomes and indicators for each were developed in collaboration with the stakeholder groups during engagements with each group as presented earlier in the report. These were refined and evidence investigated for each. Some indicators were not evidenced (significant) and although certain stakeholders expected these it was clear that these were not to be included. It was not considered a negative finding as these expected outcomes, that were not evident at present, were included in the recommended monitoring indicators to be followed in future activities

Some outcomes were combined and others deleted due to the fact that the outcomes were early in the results chain and the outcomes further in the chain were accounted for and valued as part of the analysis. If these were included it might have led to double counting. For example: For learners “having more energy” was not included as the energy led to other outcomes such as ability to play or focus in class, outcomes realising further in the results chain.

Some outcomes were included for the future sensitivity analysis, but there were no evidence that they were realised at the time of the analysis. The outcomes were retained (but not valued) as the report also served to guide future monitoring activities (and these outcomes are expected to realise in future).

Stakeholders were therefore involved in initial discussions on relevance of inclusion of stakeholders, indicators and outcomes for each group.

Avoiding the risks of over claiming

It is with confidence that the values in this report can be deemed rather being undervalued than overestimates. The following strategies were used to ensure that the minimum values were calculated and to avoid over claiming.

- Direct engagement with stakeholder groups
- Including only material change
- Include only what can be directly linked to TBF breakfast
- Maximum investment (including branding, gifts, etc.)
- Verifying outcomes and amount of change
- Using minimum amount of outcome
- Using minimum number of beneficiaries
- Researching financial proxies at local level
- Applying filters (deadweight, displacement, attribution and drop-off) at the highest percentage for each stakeholder
- Applying sensitivity analysis to test:
 - assumptions of highest valued outcomes
 - total value with no breakfast consumption for any stakeholder group
 - including all negative outcomes even if evidenced that there was no negative effect for the stakeholder group

The Social Return on Investment Results

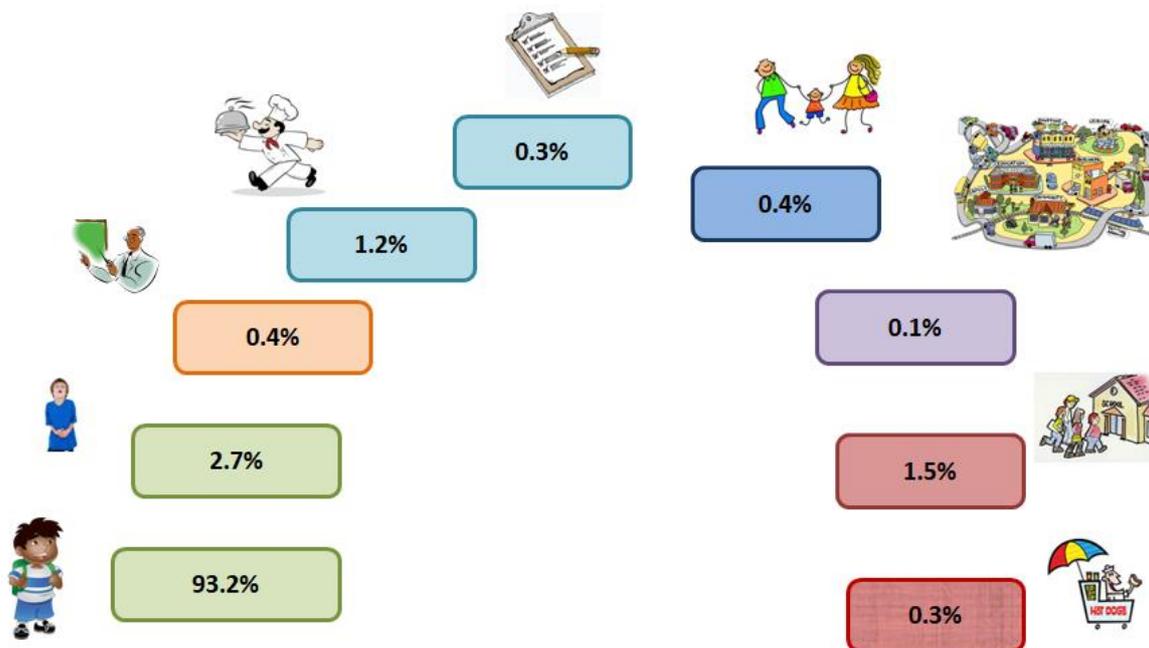
Overview of Social Value

The calculated values (for the two years and annual average) of various outcomes for the specified stakeholders are outlined below.

Social Investment overview per stakeholder group

Stakeholder group	Value created for 2015 + 2016	Annual average value created	%
Learners	R 44,700,905.50	R22,350,452.75	93.2
Most vulnerable learners	R 1,311,120.00	R655,560.00	2.7
Educators	R 173,626.00	R86,813.00	0.4
Mother helpers/Food handlers	R 583,740.80	R291,870.40	1.2
School based monitors	R 155,022.00	R77,511.00	0.3
Parents	R 193,046.00	R96,523.00	0.4
Community	R 27,888.00	R13,944.00	0.1
School	R 709,926.96	R354,963.48	1.5
Vendors	R 124,110.00	R62,055.00	0.3
Total Present Value (PV)	R 47,979,385.26	R23,989,692.63	
Investment	R5,258,929.50	R2,629,464.75	
Net Present Value (PV minus the investment)	R42,720,455.76	R21,360,227.88	

Contributions per stakeholder group



Outcomes with highest values

The outcomes with the highest values were all for learners (as the main beneficiary group). The top five outcomes accounts for 92.1% of the total value.

Outcome	Value	%
Decrease in late-coming for school due to the pull effect of the breakfast	R25,529,781.60	53.2
Learners are able to participate more in lessons	R7,262,838.40	15.1
Learners who are no longer hungry as a result of the breakfast (41.3%)	R4,586,400.00	9.6
Increase in attendance (decrease in absenteeism)	R3,596,800.00	7.5
learners improved academic performance as evident in academic promotion	R1,124,000.00	2.3
Reduction in vulnerabilities regarding food	R1,067,040.00	2.2
Learners are not involved in stealing of lunch boxes or other bully behaviour	R1,011,600.00	2.1

SROI Return Ratios

The SROI result for the TBF breakfast programme in the Limpopo province is presented in the table below:

SROI Return Ratio

Social Value	Investment	Ratio
R 47,979,385.26	R 5,258,929.50	8.68:1

The SROI figures above indicated that the Tiger Brands Foundation breakfast programme in Limpopo delivers an SROI of 8:68:1. That is, for every R1 invested approximately R 8.68 of social value is created.

Sensitivity Analysis

The SROI ratio calculated is contingent on several assumptions and it is necessary to test the effect of changing these assumptions on the ratio. In doing so, we challenge the robustness of our assumptions to determine whether we can still be confident that TBF will create value through the breakfast programme. In addition, this helps understand what the key drivers of value creation are, and how they can be leveraged to create more value. A conservative approach to monetizing outcomes has been adopted, while an attempt has been made to retain the different types of outcomes that occur at the different levels.

Filters

The following adjusted has been made to test the assumptions regarding the assignment of different discount factors. There is little difference when including the higher values for discount factors, change from 8.68:1 to 8.14:1. The factors that were applied stricter include:

Stakeholder group	Outcome	Factor	Original value	Adjusted value
Learners	Learners who eat an additional breakfast at school	Deadweight	50%	70%
	Increase in attendance	Deadweight	60%	80%
		Attribution	60%	80%
Parents	Saving money for not buying breakfast	Deadweight	50%	70%
SROI value			8.68:1	8.14:1

Outcome with highest value: late-coming

A sensitivity analysis was included to test some of the assumptions made during this analysis. This sensitivity analysis tested the robustness of the current analysis regarding the outcomes for the learners regarding arriving on time for school. It tested the assumption that the current SROI analysis was an overestimate regarding this influence.

Decreased late-coming was the outcome with the highest created value. The information gathered indicated that most learners are motivated to come to school earlier to eat the breakfast. The original calculation estimated that learners are able to attend ½ hour each school day more.

Reports about the decreased in late-coming varied from decrease from 40% to 20%. Others estimated 30% decreased to 10%. For the calculation 20% was used for 197 school days.

The following adjustment was made:

- The outcome was considered to happen only once a week (43 weeks) for 20% of learners)

Testing the late coming outcome

	Beneficiary numbers	Hours of benefit	Quantity	Change	Ratio
SROI	3512 (25%)	197 (½ hour per day)	691 864	/day	8.68:1
Conservative	3512 (25%)	43 (½ hour/ school week)	150 930	/week	5.09:1

Even if the late-coming effect is reduced to happen only once a week for 20% of learners (with ½ hour duration) the total SROI value remains high at R 5.09 return for each Rand invested.

Outcome with 2nd highest value: Participation

A sensitivity analysis was included to test some of the assumptions made during this analysis. The second sensitivity analysis tested the robustness of the current analysis regarding the outcomes for the learners regarding participation in class. It tested the assumption that the current SROI analysis was an overestimated regarding the influence on participation by the learners.

Increased participation in class was the outcome with the highest created value. The information gathered indicated that most learners are more able to concentrate during the first 3 hours of the day (till lunch is served). The calculation used 1 hour each school day (2 hours every second school day).

In the surveys 35% of the beneficiary learners indicated that they participated in every class, while 27% of the non-beneficiaries reported participating in every class. The SROI calculation included a difference for 8% of learners.

If we assume that the NSNP lunch is served in other schools at 10:00 it leaves at least two hours that learners do not have the benefit of increased participation. Using one day is therefore very conservative and already dilutes the outcome by half.

However to test this assumption the following adjustment was made:

- The time influence was further halved (half an hour each school day extra participation for 8% of learners)

Testing the participation outcome

	Beneficiary numbers	Hours of benefit	Quantity	Change	Ratio
1124 (8%)	197 (1 hour/school day)	221 428		1124 (8%)	8.68:1
1124 (8%)	98.5 (½ hour/school day)	110 714	Half	1124 (8%)	8.03:1

Participation in class remains the highest value benefit (except for the effect of having a full stomach for a portion of the learners). Even if the effect is halved the total SROI value remains high at R 8.03 return for each Rand invested.

This calculation would therefore also imply what the benefit would be to make the NSNP lunch earlier in the day. However the optimal would still be to have two meals to ensure the effect remains optimal throughout the day. There is however a drop-off in the effect after a few hours (3 to 4 hours).

Full stomach and hunger

Another sensitivity analysis tested the robustness of the current analysis regarding the attribution allocated to the eating of food. It tested the assumption that the current SROI analysis allocated a value to different stakeholders being able to eat the breakfast.

Although the eating of food might seem like an output rather than an outcome it was found to be more than a simple contribution as a meal. The benefit of the food itself without the

further effects was significant. To ensure that the attribution of this benefit is really for those in extreme need were included and filters were applied to all these stakeholders as a further measure to ensure no double counting is taking place. The learner stakeholder group was divided.

- Learners who would have no other food (this outcome has a direct effect on hunger).
- Learners who might have had other sources, but now rely only on the TBF breakfast
- Those who have the TBF breakfast as an extra meal
- Those who reported not eating breakfast

Other groups having direct benefits from the food that were also excluded from the calculation were:

- Educators
- Food handlers
- School based monitors
- Employees at school (support and admin staff)
- Workers and cleaners working outside the school (Community Works Programme) eating left-over breakfast
- Outside people (community members) receiving left-over breakfast

The ratio changed very little to 9.66:1. This indicates that even removing the direct effect of the food does not influence the value created to a large extent.

Removing direct food benefit

	Ratio
With food benefit	8.68:1
Without food benefit for any stakeholder group	7.74:1

Verification and dissemination of results

Stakeholders provided information on the Theory of Change for their outcomes, the amount of change and duration. Buy-in meetings took place twice, once with provincial stakeholders and secondly with school principals and SGB members of all schools. The financial proxies were verified and additional information provided by the TBF National Operations Manager and Project Support Officer.

The initial outcomes were presented at the TBF and UJ learning forum. The final results were shared with TBF national office staff for verification at two further events. These meetings further ensured that the results and sensitivity analysis could be shared to a larger audience such as the TBF board and Tiger Brands. These stakeholders were satisfied with the report and a shorter PowerPoint version for use by TBF in their own communication strategies

Two presentations to the Board of Tiger Brands Foundation and Tiger Brands will be done to disseminate the results and ensure that the report can be optimally used. The results will

further be presented in an academic journal article and presented at an international conference.

Recommendations

Programme/intervention

Some recommendations to strengthen the intervention as highlighted through the study include:

- Placing emphases/attention on other groups, e.g. Educators. This includes encouragement to eat the breakfast, but also recognising the important role they play in the programme.
- Human resource (recruitment and capacity development of staff should include different leadership styles and the influence of individuals (school principals, DoE, e.g.) on programme implementation and results.
- A possible award for most influential educator or emphasis on the role of the IQMS could enhance motivation of educators.
- Education and skills development of vendors so that they can improve their own understanding of nutrition and widen their markets.
- Water is a critical factor for any nutritional scheme or programme. It might be a topic of discussion or investigation to empower schools (and SGBs) to source local sponsorship to alleviate challenges in water



(Photo Madri Jansen van Rensburg)

- The lack of kitchens is problematic for some schools. For example in the rainy season the wood for the open fires gets wet, making cooking impossible. TBF can in collaboration with other investors work on longer term solutions, keeping in mind that this is a large investment that should have input from the local community and SGB for optimal impact.

NSNP and other stakeholders and investors

The benefit specific to the early breakfast was evident in this study. The effect of combined breakfast and lunch further illustrates the need for collaboration to ensure learners eat

regularly and early. Collaboration between stakeholders is necessary and ensuring that in the schools with no breakfast the NSNP meal is consumed as early as possible.

Monitoring and further evaluations

The study highlighted important aspects for further monitoring of the TBF programme and further research.

Monitoring (Mobenzi and SBM)

Some recommendations for monitoring include possible inclusion in the Mobenzi application and the monitoring by the School Based Monitors.

- Other indicators can be added: participation, late coming
- Information on groups can be gathered to inform programme interventions such as capacity development and motivation, e.g. Educators

Further research/SROI studies

The following suggestions are made for further research and impact evaluations:

- Repeat SROI in the province after 2 years.
- Include other provinces with different contexts (social economic, geographical, political) and different timelines/stages of development.
- Investigate the outcomes that can be generalised in new strategies for other provinces, e.g. educator influence and results such as improved attendance and punctuality.
- A SROI study on the schools with the NSNP (no TBF programme) will further enhance the understanding of the timing and added benefit of breakfast for optimal implementation.
- Investigate the differences between the initial set-up costs and cost of rolling out the programme and cascading the implementation to a wider beneficiary reach.
- Include qualitative research or a qualitative component to research studies (including in growth and anthropometric research) to aid the understanding the “why” of the changes documented.

TBF as thought leader

There are important lessons to be shared with the wider community with similar interest and target beneficiaries.

- Sharing the information and evidence on the importance of an early meal (breakfast) on punctuality of learners and educators and participation.
- The dissemination of the results of the study and the SROI ratio and value generated for different stakeholder groups including other foundations and corporate social responsibility projects. This will greatly increase the benefits and ultimate impact of these types of investments in social development.

Conclusions

The Limpopo province and specifically the area where the TBF breakfast programme is implemented is a poor peri-urban and rural area. The TBF programme is still in early stages with more investment and closer relationships (networking and partnerships) with schools, principals and learners.

The SROI indicated that the targeting is correct and that the programme has a wide influence on various stakeholders including the community. The impact was much wider than a specific group (e.g. learners) and a specific outcome (e.g. growth).

It will be importance in future to focus on some stakeholder groups with the potential to have a higher return on investment (e.g. educators) in programme interventions, but also in measuring change. Other groups with potential to influence the outcomes include principals School Governing Bodies members.

An important aspect that contributed to the high SROI ratio is the savings in costs. This is an important aspect of the investment and includes aspects such as procurement of food at cost price and having systems in place, e.g. transport.

Sustainability of interventions of this nature that targets basic needs (such as food) depends on continued inputs/investments. Close partnerships (and shared management) with the Department of Education in the province and the national Department of Basic Education contributes to the sustainability. It would also be important to add other investors (national and local small businesses).

The benefit for Tiger Brands in being able to illustrate the impact of the Foundation makes them a leader in this intervention. The SROI study also further illustrates the thought leadership of the Tiger Brands Foundation.

Accompanying documents

Impact Map (Excel format)

Methodology and tools manual

References

Department of Basic Education. (2017). National School Nutrition Programme. <http://www.education.gov.za/Programmes/NSNP/tabid/632/Default.aspx>. Retrieved 3 August 2017

Department of Basic Education & JET Education Services. (2016). Presentation to NSNP Inter-Provincial meeting: 31 October 2016

SROI Network. (2009). A Guide to Social Return on Investment, Society Media

SROI Network. (2012). Supplementary Guidance on Materiality

SROI Network. (2013a). Supplementary Guidance on Using SROI, Hall Aitken

SROI Network. (2013b). Supplementary Guidance on Stakeholder Involvement

SROI Network. (2014). Guidance on Starting Out on SROI

StatsSA. (2012). Census 2011: Census in brief. Pretoria: Statistics South Africa. Retrieved 3 August 2017.

Tiger Brands Foundation. (2017). <http://www.thetigerbrandsfoundation.com/>. Retrieved 3 August 2017.

Tiger Brands Foundation. (2016). Annual Report 2016

University of Johannesburg: Centre for Social Development in Africa. (2015). Evaluation of the Tiger Brands Foundation in-school breakfast nutrition programme and the National School Nutrition Programme.

University of Johannesburg: Centre for Social Development in Africa. (2013). Evaluation of the Tiger Brands Foundation's Pilot In-School Breakfast Feeding Programme

Appendix A: SROI Principles

This SROI analysis was guided by the following principles:

Principle	Definition	How this manifested in this process
Involve stakeholders	Stakeholders should be involved to inform what is measured, how it is measured and valued	Primary stakeholders were involved in interviews and/or focus groups.
Understand what changes	Articulate how change is created and evaluate this through evidence gathered, recognising positive and negative changes as well as those that are intended and unintended	Incorporated into the interview schedule and focus group guide and was assigned the greatest time allocation in these processes.
Value the things that matter	Use financial proxies in order that the value of the outcomes can be recognised	This was used for both tangible and intangible elements.
Only include what is material	Determine what information and evidence must be included in the report to give a true and fair reflection, such that stakeholders can draw reasonable conclusions about impact.	An attempt was made to provide context for understanding the programme and the people involved through background information. Evidence included in the impact map. Interview schedules included.
Do not over claim	Only claim the value that the organisation is responsible for creating	Stakeholders were questioned about other contributors. Filters were applied. A conservative approach to valuing outcomes was used which often translated to the value of services that might have achieved similar outcomes rather than the likely full extent of the social impact.
Be transparent	Demonstrate the basis upon which the analysis may be considered accurate and honest and indicate that it will be reported to and discussed with stakeholders.	Impact map included together with reference to source information.
Verify the results	Ensure appropriate independent verification of the report.	Final report shared with stakeholders for verification. Guidance offered throughout process by independent SROI practitioner.

Appendix B: Learners survey results: Limpopo

A short survey was conducted with a sample of children from each grade at the beneficiary schools (n=344) and a small sample from a non-beneficiary school (n=45). The non-beneficiary school was contextually same (in close proximity to one of the beneficiary schools). It was a primary school and included the same age and sex groups (grades 1 to 7) as the main beneficiary schools. The non-beneficiary school does not represent a control, but rather explains the counter-factual.

Differences between beneficiary and non-beneficiary participants were analysed using a t-test. An ANOVA was used to test for differences between age/sex groups.

The samples were not randomly selected although effort was made to get a representative sample stratified (proportional) according to grades.

School beneficiaries and participants in the surveys (2017)

School	Number of Participants	Number of learner beneficiaries	Number of educators	Number of food handlers
Project schools				
Modimolle primary	59	1143	41	6
Dagbreek primary	60	1179	41	6
Hector Peterson primary	45	1086	32	6
Maokeng primary	45	1434	46	7
Lekkerbreek primary	45	1056	38	6
Ulando combined	45	487	19	3
Khabele primary	45	639	20	4
Non-project school				
Blaauwbosch primary	45			

Seven schools are benefitting from the Tiger Brands Foundation breakfast programme in Limpopo. They were all included. Another primary school was included to explain the counterfactual (what would have happened without the breakfast programme). This school does not receive breakfast, but is part of the NSNP, and therefore learners receive lunch.

The learners were divided into age and sex groups. This included:

- Young boys including grade 1 to 5
- Older boys including grade 6 and 7
- Young girls including grade 1 to 5
- Older girls including grade 6 and 7

Sex and age groups

School	Young boys	Older boys	Young girls	Older girls	Total
Project schools	88	81	90	85	344
Modimolle primary	20	7	23	9	59
Dagbreek primary	15	14	15	16	60
Hector Peterson primary	10	12	11	12	45
Maokeng primary	10	12	11	12	45
Lekkerbreek primary	10	12	11	12	45
Ulando combined	12	12	9	12	45
Khabele primary	11	12	10	12	45
Non-project school					
Blaauwbosch primary	11	12	10	12	45

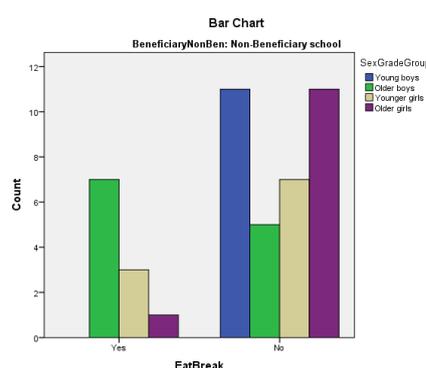
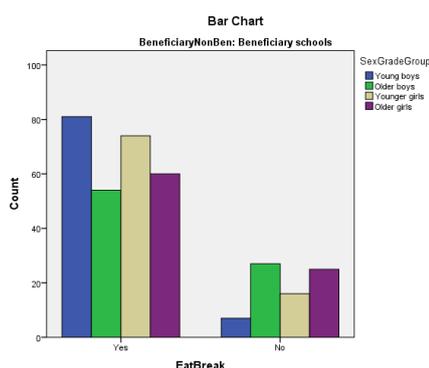
Eating breakfast

The majority of the respondents in the project schools (78.2%) reported having eaten breakfast the morning of the survey compared to 24.4% of the non-beneficiaries. This was statistically significant different ($t=-8.152, p=0.000$).

For the beneficiary schools the younger boys reported the most frequently that they ate breakfast the morning, with the older learners reporting less frequently that they ate breakfast. The difference between the beneficiary groups of the project schools was significantly different ($F=6.980, p=0.000$).

Eaten breakfast today

	Project schools								Non-project school							
Yes	269 (78.2%)								11 (24.4%)							
No	75 (21.8%)								34 (75.6%)							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Yes	81	92	54	67	74	82	60	71	0		7	58	3	30	1	8
No	7	8	27	33	16	18	25	29	11	100	5	42	7	70	11	92



Eaten breakfast: beneficiaries and non-beneficiaries per age/sex group

Where usually eating breakfast

The majority of the beneficiary participants (81.2%) reported that they eat breakfast at school, of which 59.8% only eat breakfast at school and the other 21.4% eat both at school and home. The non-beneficiary school only ate breakfast at home.

Boys and girls seemed to eat at breakfast mostly at school. Older girls seemed less likely to eat breakfast. The difference was not statistically significant (F=0.131, p=0.942).

Where eating breakfast

	Project schools								Non-project school							
Home	64 (18.8%)								24 (100%)							
School	204 (59.8%)															
Home and School	73 (21.4%)															
No response									20							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	N	%	n	%	n	%	n	%	n	%
Home	11	13	15	19	17	19	21	25								
School	61	69	48	61	53	59	42	50								
Home and School	16	18	16	20	20	22	21	25								
No response									8		2		4		6	

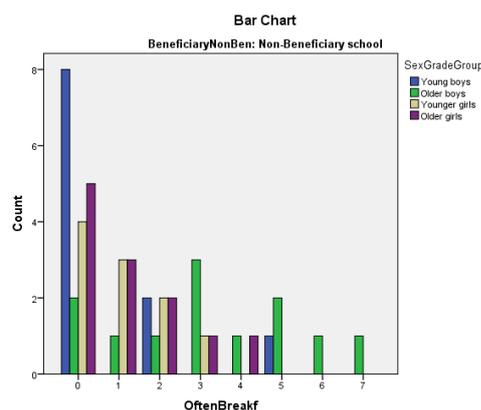
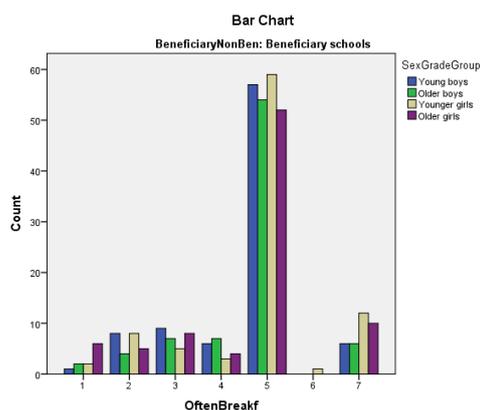
How often eat breakfast per week

The beneficiaries on average ate breakfast 4.63 times per week while the non-beneficiaries ate 1.6 times a week. There were more beneficiaries who reported eating breakfast five or more times a week (74.4%) than non-beneficiaries (11.1%). The difference was statistically significant (t=10.405, p=0.000).

The difference between the groups of the beneficiaries was not statistically significant (F=0.603, p=0.613) with the majority of learners from each group reporting eating breakfast 5 times a week.

Days per week eaten breakfast

	Project schools								Non-project school							
0									19 (42.2%)							
1	11 (3.2%)								7 (15.6%)							
2	25 (7.3%)								7 (15.6%)							
3	29 (8.5%)								5 (11.1%)							
4	20 (5.8%)								2 (4.4%)							
5	222 (64.9%)								3 (6.7%)							
6	1 (0.3%)								1 (2.2%)							
7	34 (9.9%)								1 (2.2%)							
Average	4.63								1.6							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0									8	73	2	17	4	40	5	42
1	1	1	2	3	2	2	6	7	0	0	1	8	3	30	3	25
2	8	9	4	5	8	9	5	6	2	18	1	8	2	20	2	17
3	9	10	7	9	5	6	8	9	0	0	3	25	1	10	1	8
4	6	7	7	9	3	3	4	5	0	0	1	8	0	0	1	8
5	57	66	54	68	59	66	52	61	1	9	2	17	0	0	0	0
6	0	0	0	0	1	1	0	0	0	0	1	8	0	0	0	0
7	6	7	6	8	12	13	10	12	0	0	1	8	0	0	0	0
Average	4.54		4.64		4.78		4.54		0.82		3.25		1.00		1.17	



Frequency of eating breakfast: beneficiaries and non-beneficiaries per age/sex group

Main benefit of breakfast

Learners were asked what the benefits of having breakfast were for them (not necessarily the TBF breakfast). The frequencies of answers for the different groups are illustrated in the following table (darker shades=more frequent answers).

The main benefit of breakfast for beneficiary and non-beneficiary (mostly older boys) respondents were the fact that they gained energy and this allowed them to concentrate and focus in class. There Breakfast made the learners feel happy and strong. Learners Younger boys mentioned that it allows them to play as they have more energy. The non-beneficiaries reported the influence of breakfast on their ability to do school work less often. Most of them reported that breakfast has no benefit.

Benefits of breakfast

	Project schools				Non-project			
	Young boys	Older boys	Young girls	Older girls	Young boys	Older boys	Young girls	Older girls
Energy	13	14	21	38	1	5		2
Able to concentrate	13	11	9	10	2	3		1
Class room and school work	5	7	4	3		3	1	1
Happy	12	10	22	18				
Strong	13	10	12	4				
Play/socialize	8	2	2		1	1	1	
Sport	2					1		
Able to do home chores		3						
Not hungry	1				1	1	2	1
Not dizzy					1			1
Healthy						1	2	
None					7	2	3	5

How often eat lunch per week

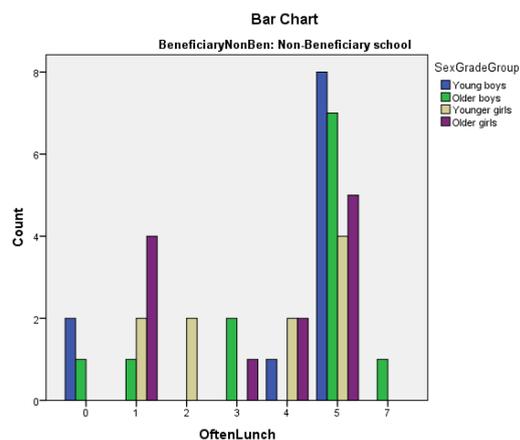
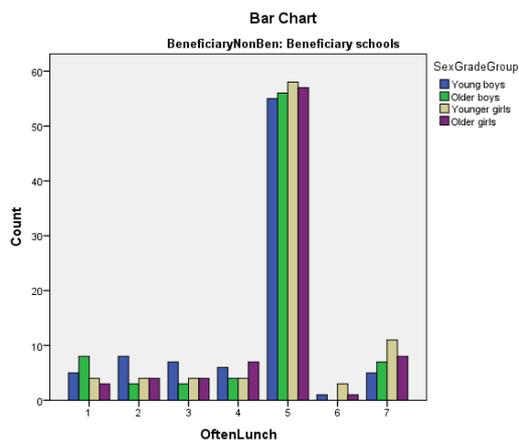
The majority of beneficiaries from the project schools and the non-beneficiaries showed similar trends in how frequently they eaten lunch. On average the beneficiaries ate lunch 4.63 times a week while the non-beneficiaries ate lunch 3.71 times. It seems like the beneficiaries were more likely to eat the lunch although both groups were provided the NSNP lunch. For beneficiaries 77.1% and for non-beneficiaries 55.5% reported eating lunch

five or more times a week. There were, however, many non-beneficiaries reporting that they ate breakfast once or less per week (22.3%). The difference was statistically significant ($t=3.191, p=0.002$).

Beneficiaries mostly ate lunch five times. Girls also reported eating lunch on weekends. Older boys reported higher frequencies of not eating lunch more than once a week. This difference was not statistically significant ($F=1.720, p=0.163$).

Days per week eating lunch

	Project schools								Non-project school							
0									3 (6.7%)							
1	20 (5.9%)								7 (15.6%)							
2	19 (5.6%)								2 (4.4%)							
3	18 (5.3%)								3 (6.7%)							
4	21 (6.2%)								5 (11.1%)							
5	226 (66.5%)								24 (53.3%)							
6	5 (1.5%)								0 (0%)							
7	31 (9.1%)								1 (2.2)							
Average	4.63								3.71							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0									2	18	1	8	0	0	0	0
1	5	6	8	10	4	5	3	4	0	0	1	8	2	20	4	33
2	8	9	3	4	4	5	4	5	0	0	0	0	2	20	0	0
3	7	8	3	4	4	5	4	5	0	0	2	17	0	0	1	8
4	6	7	4	5	4	5	7	8	1	9	0	0	2	20	2	17
5	55	63	56	69	58	65	57	68	8	73	7	58	4	40	5	42
6	1	1	0	0	3	3	1	1	0	0	0	0	0	0	0	0
7	5	6	7	9	11	12	8	10	0	0	1	8	0	0	0	0
Average	4.39		4.54		4.83		4.74		4.00		4.08		3.40		3.33	



Frequency of eating lunch: beneficiaries and non-beneficiaries per age/sex group

Main benefit of lunch

Learners were asked what the benefits of having lunch were for them. The frequencies of answers for the different groups are illustrated in the following table (darker shades=more frequent answers).

The main benefits of eating lunch for beneficiaries was similar to breakfast and included energy, concentration to enhance class work. They were also happy and stronger and could

play and socialise due to the lunch. Non-beneficiary respondents did not report many benefits of lunch; some commented that it gave them energy.

Benefits of lunch

	Project schools				Non-project			
	Young boys	Older boys	Young girls	Older girls	Young boys	Older boys	Young girls	Older girls
Energy	14	13	9	20	3	4	1	3
Concentrate	11	10	14	12		1		1
Classroom work	5	7	5	7	2	1		2
Happy	15	12	18	9				2
Stronger	11	6	9	4	1	1	1	1
Play/socialize	12	5	8	4	2	2	4	1
Sport	4	5						
Home work/chores	1		1	3				
Healthy					1			1
Not hungry	1				1		1	1
None						1		2

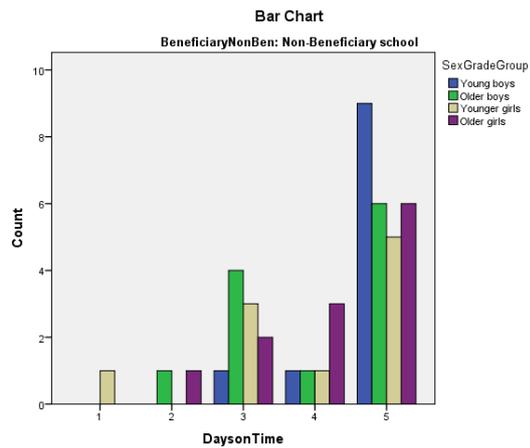
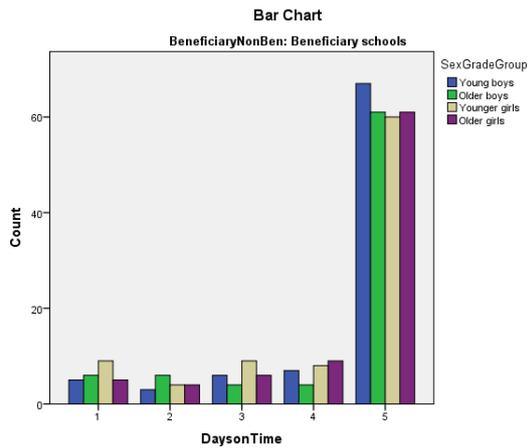
How many days on time for school

There were more learners from the beneficiary schools reporting being on time at school each day of the week (72%) compared to non-beneficiaries (58%). This was, however, not significantly different ($t=0.692$, $p=0.489$).

The trends were similar for the different groups of learners, with younger girls being slightly less likely to be on time every school day of the week ($F=0.783$, $p=0.504$). For both the beneficiary and non-beneficiary schools the younger boys were on time for school most often of all the groups.

Days on time for school

	Project schools								Non-project school							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1	5	6	6	7	9	10	5	6	0	0	0	0	1	10	0	0
2	3	3	6	7	4	4	4	5	0	0	1	8	0	0	1	8
3	6	7	4	5	9	10	6	7	1	9	4	33	3	30	2	17
4	7	8	4	5	8	9	9	11	1	9	1	8	1	10	3	25
5	67	76	61	75	60	67	61	72	9	82	6	50	5	50	6	50
Average	4.45		4.33		4.18		4.38		4.73		4.00		3.90		4.17	



Days per week on time: beneficiaries and non-beneficiaries per age/sex group

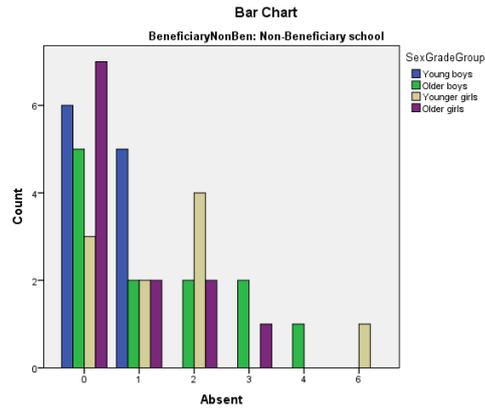
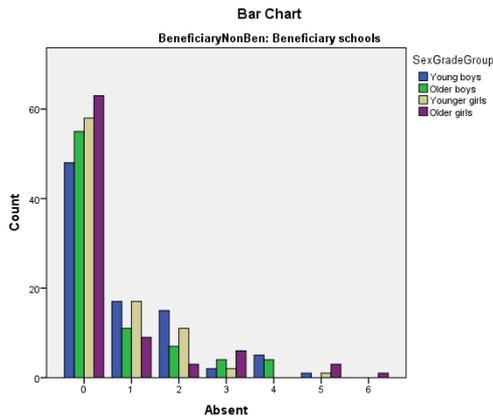
Absenteeism

On average the learners from the beneficiary schools were only 0.69 days absent a month. The non-beneficiary schools had lower attendance rates with learners being absent on average for 1.02 days a month. When comparing the frequency of the number of days per month that each learner was absent (self reported) there was not a statistically significant difference between the beneficiary and non-beneficiary participants ($t=-1.793, p=0.074$). Beneficiaries reported being one or less days absent (81%), compared to 71% of the non-beneficiaries.

There was no difference in the patterns of absenteeism for boys and girls or younger and older learners. Non-beneficiary school younger boys and older girls were those attending school better. These differences were not significant ($F=1.271, p=0.284$).

Days per month not attended school

	Project schools								Non-project school							
	224 (65%)								21 (47%)							
0	54 (16%)								11 (24%)							
1	36 (11%)								8 (18%)							
2	14 (4%)								3 (7%)							
3	9 (3%)								1 (2%)							
4	5 (1.5%)								0							
5	1 (0.3%)								1 (2%)							
6	0.69								1.02							
Average	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
0	48	55	55	68	58	65	63	74	6	55	5	42	3	30	7	58
1	17	19	11	14	17	19	9	11	5	46	2	17	2	20	2	17
2	15	17	7	9	11	12	3	4	0	0	2	17	4	40	2	17
3	2	2	4	5	2	2	6	7	0	0	2	17	0	0	1	8
4	5	6	4	5	0	0	0	0	0	0	1	8	0	0	0	0
5	1	1	0	0	1	1	3	4	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	1	1	0	0	0	0	1	10	0	0
Average	0.89		0.65		0.56		0.64		0.45		1.33		1.60		0.75	



Days absent per month: beneficiaries and non-beneficiaries per age/sex group

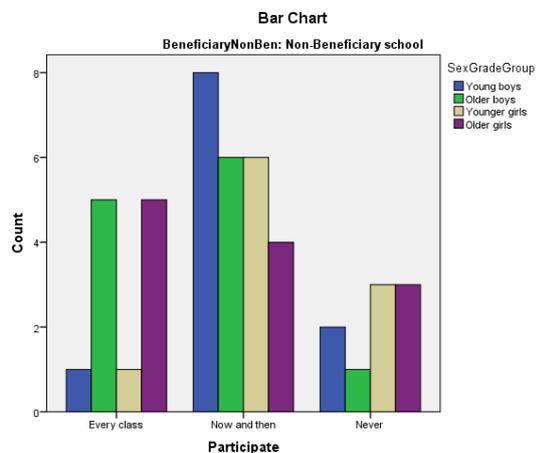
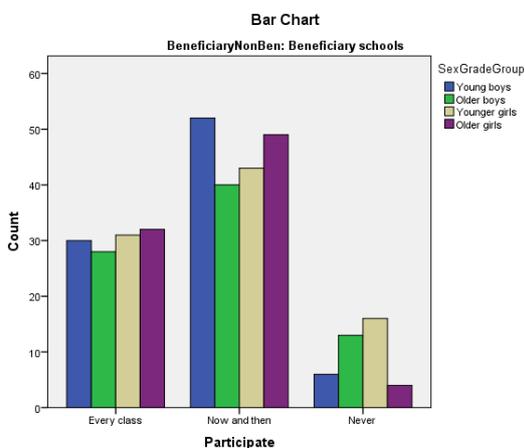
Participation in class

The beneficiaries reported being more active in class (35%) compared to the non-beneficiaries (27%). The difference between the beneficiaries or non-beneficiaries was not statistically significant ($t=-1.678, p=0.094$).

There was also not a significant difference between the different beneficiary groups ($F=1.224, p=0.301$). Younger children were more likely to ask questions in every class.

Frequency of asking questions in class

	Project schools								Non-project school							
Every class	121 (35%)								12 (27%)							
Now and then	184 (54%)								24 (53%)							
Never	39 (11%)								9 (20%)							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Every class	30	34	28	35	31	34	32	38	1	9	5	42	1	10	5	42
Now and then	52	59	40	49	43	48	49	58	8	73	6	50	6	60	4	33
Never	6	7	13	16	16	18	4	5	2	18	1	8	3	30	3	25



Participation in class: beneficiaries and non-beneficiaries per age/sex group

Participate in sport at school or outside school

The non-beneficiary participants were slightly less active in participating in sport (74%) compared to the beneficiaries (80%). This was not statistically significantly different ($t=0.840$, $p=0.401$).

Boys were more frequently participating in sport. This trend was also observed for non-beneficiary boys. These differences between beneficiary boys and girls was statistically significant ($F=6.558$, $p=0.000$).

Participation in sport

	Project schools								Non-project school							
Yes	253 (74%)								36 (80%)							
No	91 (26%)								9 (20%)							
	Young boys		Older boys		Young girls		Older girls		Young boys		Older boys		Young girls		Older girls	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Yes	76	86	65	80	57	63	55	65	10	91	12	100	7	70	7	58
No	12	14	16	20	33	37	30	35	1	9	0	0	3	30	5	42

Appendix C: Vendor survey results: Limpopo

A short survey was conducted with available vendors at beneficiary schools (n=19). The sample is not representative, but rather reflects those vendors available at the school at the time of the data collection for the SROI study.

There were mostly female vendors (n=18) interviewed, and only one male vendor.

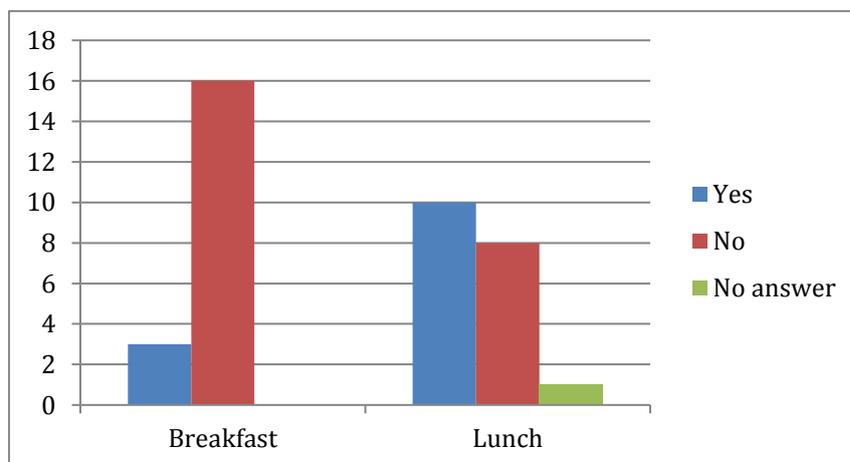
The main products sold at the schools were:

- Snacks (n=14)
- Vetkoek (n=10)
- Sweets (n=7)
- Achar (n=6)
- Soup (n=6)
- Biscuits (n=5)
- Russians/viennas (n=4)
- Simba chips (n=3)
- Bread with polony (n=3)
- “Slap” chips (n=2)
- Pop corn (n=1)
- Ice blocks (n=1)

The clients are mostly learners (n=18), educators (n=6) and food handlers/mother helpers (n=1).

All the vendors knew that the school provides breakfast to the learners (n=19). All the vendors knew that the school provides lunch to the learners (n=19).

The following figure illustrates the responses of the vendors whether they felt the school breakfast had an influence on their business.



Three vendors felt that the breakfast provided by the school negatively influenced their business. The main reason for the negative influence of the breakfast was that the vendors were not allowed to sell to the learners till after 10:00.

We are no longer allowed selling in the morning as per the school instruction. So that learners can eat the TBF breakfast before buying from us (Vendor)

I feel negative that they stopped us selling in the morning, but the school doesn't stop the other small businesses (Vendor)

We cannot sell till 10:00, but now the teachers sell in their classrooms (Vendor)

It seems that lunch had a much larger influence on the vendors' business than breakfast (n=10). The majority of the vendors felt the lunch (NSNP) had a negative influence (n=6), while four vendors felt there was a positive effect.

The positive influence was related to additional sales such as achar that learners eat with the lunch. They also reported selling snacks after lunch. There was a feeling that the needy learners benefit from the lunch and that this does not influence their business.

Needy learners benefit from the schools lunch, which is very helpful (Vendor)

Some of our items such as achar do sell because learners mix it with their daily meal (Vendor)

Learners enjoy their meals with achar and little snack after lunch meal which gives me opportunity (Vendor)

Learners buy sweets and snacks after their lunch which gives a boost to our business to earn a cent (Vendor)

The negative aspects included a loss of profit and the restriction in the time they have to sell their goods.

We have to wait for the learners to eat before they can come and buy from us (Vendor)

Because I ran at a loss because I start my business after 10:00 and it is already late to making a profit (Vendor)

It effects the business because they refuse me to come and sell early in the morning while the teachers are busy opening business inside school (Vendor)

We are not making enough money which is a problem (Vendor)

We sell just little of stock because learner's stomachs are full, but we have adapted to that (Vendor)

They don't have enough time to buy because they have to eat first (Vendor)

Appendix D: Scoping meeting participants

Name	Designation	Organisation
H S Sisulu	Chairperson TBF	TBF Board
Eugene Absolom	Executive Director	TBF
Karl Muller	National Operations Manager	TBF
Mfana Mokhachane	Project Coordinator: North West	TBF
Sylvia Ledwaba	Project Coordinator: Gauteng	TBF
Carina Muller	Nutritionist	DBE
Madri Jansen van Rensburg	External Evaluator	Resilience Analysis
Mpho Sesing	External Researcher	Resilience Analysis

Appendix E: TBF: Head office running cost

Cost of head office	2016	2017
Salaries	R 1,950,242.38	R 2,132,472.91
Brand development	R 709,364.21	R 713,864.21
Market Research	R 0.00	R 340,089.71
Promotional Advertising	R 0.00	R 0.00
Admin Share Fee - Corporate	R 120,000.00	R 80,000.00
Admin Share Fee - Payroll	R 32,691.49	R 21,794.00
Admin Share Fee - IT	R 120,000.00	R 120,000.00
Admin Share Fee - HR	R 0.00	R 0.00
Audit Fees External	R 56,623.00	R 60,623.00
Bank Charges	R 941.96	R 628.00
Communication	R 92,105.25	R 73,746.40
Communication Internal	R 4,500.00	R 5,736.00
Communication External	R 0.00	R 0.00
Communication Cell phone	R 62,683.33	R 94,025.00
Communication Telephone	R 9,217.26	R 6,144.84
Consultant Fee	R 230,313.00	R 1,236,054.80
Courier Charges	R 2,625.45	R 328.00
Depreciation Computer Equipment	R 35,441.06	R 33,088.00
Donations - Other	R 948,399.18	R 0.00
Legal Costs Deductable	R 684.50	R 456.66
Rent Buildings Offices	R 225,468.00	R 150,312.00
Stationery & Printing	R 46,747.07	R 31,165.00
Subscriptions	R 0.00	R 0.00
Staff Costs Gifts & Flowers	R 0.00	R 0.00
Staff Costs Meals & Refreshments	R 37,884.01	R 22,680.00
Conferences & Seminars	R 1,177,059.03	R 1,177,059.03
Staff Recruitment	R 346.68	R 3,280.00
Staff Training	R 12,000.00	R 1,021,741.80
Penalties - SARS	R 0.00	R 0.00
T & E Local Transport	R 123,949.43	R 219,314.77
T & E Local Transport - Project Co-ordinator	R 141,472.75	R 180,461.19
T & E Local Transport - Board Meetings	R 0.00	R 0.00
T & E overseas	R 75,913.21	R 73,361.69
Board cost	R 174,000.00	R 90,000.00
Mobenzi	R 73,746.40	R 49,164.27
Protective clothing	R 0.00	R 60,606.40
Total	R 6,464,418.65	R 7,998,197.68
Beneficiaries	60 281	66 265
Cost per beneficiary per year	107.24	120.70
% increase per year	5.7%	12.6%