SROI PILOT

Hand in Hand International

Village Upliftment Project

Kiboko, Kenya

SROI report compiled by Lind Invest
February 2020

Content

Extended summary

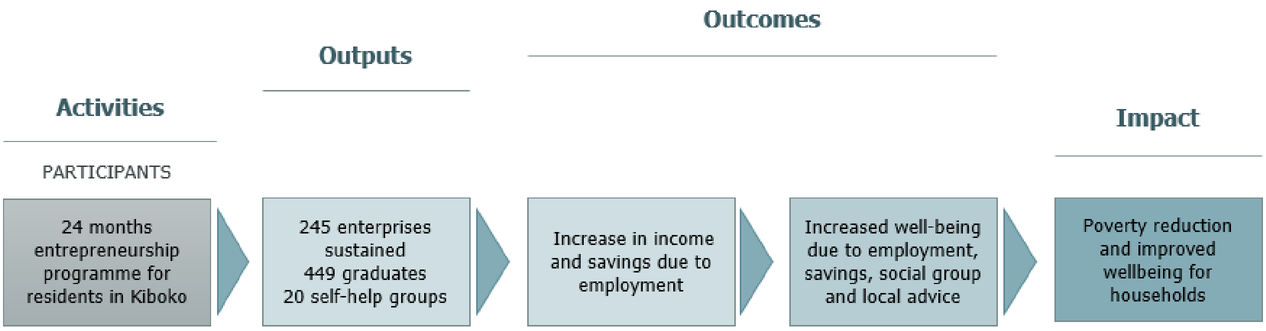
Hand in Hand International is an NGO and international network. Hand in Hand was established in 2003 in Tamil Nadu, India. Now, the organisation is fighting poverty in 14 countries, including Kenya.
The Village Upliftment Programme is worked out with the purpose to improve livelihoods of vulnerable people. The Village Upliftment Programme's help to self-help model consists of the four training phases. After a period of around 30 months, vulnerable people will be empowered to significantly improve living conditions for themselves and their families.

The Kiboko Village Upliftment Programme was implemented for a period of 27 months by Hand in Hand EA Tala branch from September 2015 to November 2017. The aim was support to 450 community members to increase their incomes and contribute towards reduced poverty leaving them in better living conditions. This report is based on the results of the Kiboko Village Upliftment Programme.

CALCULATION AND METHOD
The Social Return on Investment method places a monetary value on social impacts and voluntary work by comparing the investments made in a social context with the value created for the involved stakeholders. The social impact consists of two types of value:

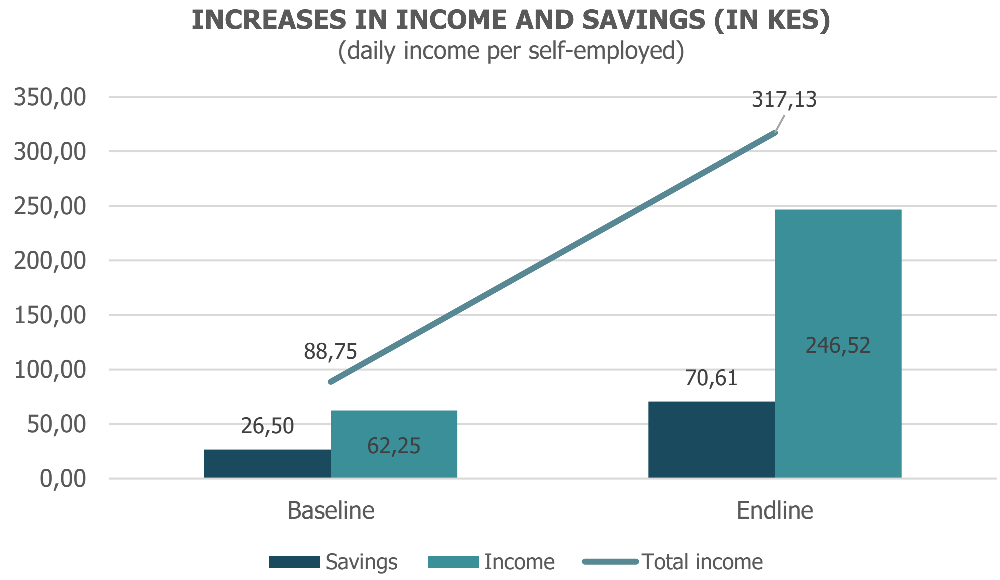
- *Financial value:* consist of the income increase and the increase in savings experienced by the graduates who sustain an enterprise throughout the programme. These increases are based on the results of a survey carried out among the graduates.
- *Social value:* consists of well-being effects. The monetary value of these well-being effects is based on average values from the Social Value Bank[1]. These values reveal the amount of money it requires to increase a person's well-being by the same amount as the particular factor. These values are used to value the participants' increased well-being primarily based on responds from the surveys.

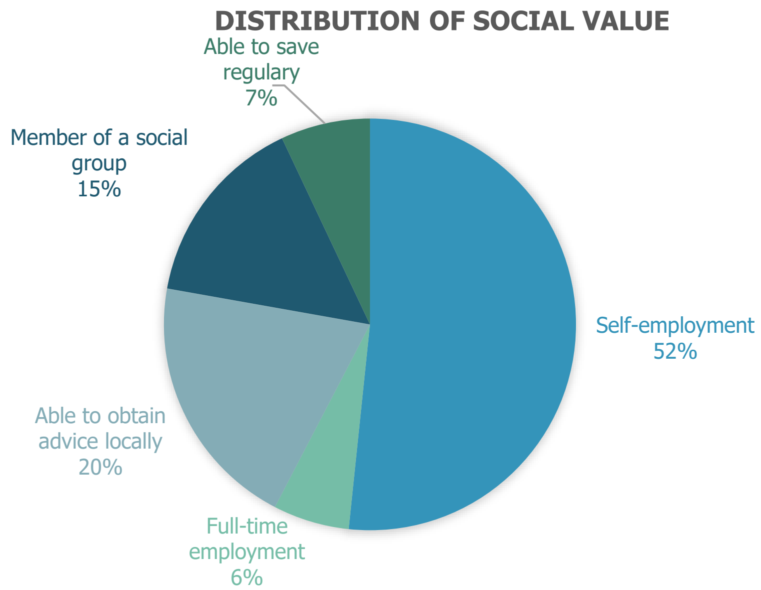
THEORY OF CHANGE



KEY FINDINGS

- 225 businesses established and sustained/225 became self-employed
- 20 existing enterprises enhanced
- 21 residents have found employment in the graduates' enterprises
- 296% increase in income (the 245 who sustain their businesses)
- 166% increase in savings (the 245 who sustain their businesses)
- 164 graduates started saving for the first time
- 414 graduates became member of a social group and can obtain advice locally





RESULTS OF THE ANALYSIS
The total input for Kiboko Village Uplift Programme is all the financial costs spend on the Kiboko Village Uplift Programme.

Input	Net input
Total input	7,845,696

The total net value created for graduates and residents is calculated as the sum of financial and social value created in the programme.

Outcome	Net effect
Net financial outcome	19,432,484 KES
Net social outcome	238,511,068 KES
Total outcome	**257,978,734**

Calculation of SROI ratio based on financial values, social values, and total value, respectively:

- The financial SROI ratio is found by the calculation of the net financial effects of the programme divided with the net input invested in the programme: $\frac{19{,}432{,}484}{7{,}845{,}696} = 2.48$

- The social SROI ratio is found by the calculation of the net social effects of the programme divided with the net input invested in the programme: $\frac{238{,}511{,}068}{7{,}845{,}696} = 30.40$

- The SROI ratio is found by the calculation of the net effects of the programme divided with the net input invested in the programme: $\frac{257{,}978{,}734}{7{,}845{,}696} = 32.88$

This means that for every 1 Kenyan shilling invested in the Kiboko Village Upliftment Programme, 32.88 Kenyan shilling is created in value for the stakeholders and local community. This accounts for both financial and social value.

Additional value creation

The SROI ratio of 32.88 does not contain all the values created by the Kiboko Village Uplift Programme because not all effects are possible to monitor and measure monetarily. For instance, can the participants' increase in wealth benefit their families because they now can afford medicine, proper housing, school fees, nutritious food and other essentials needed to live decently.

Other effects include that the graduates get a supportive network, that the local community benefits from the established enterprises, and that the programme increases the equality between men and women in the Kiboko area. It is likely that these effects would increase the SROI ratio if they could be monitored and included.

Further discussions on the value creation, that is not included in the report, is in the section "Additional Value Creation".

Purpose

The purpose of the analysis is to evaluate the value creation of Hand in Hand International's Village Upliftment Programme in Kiboko Kenya running from September 2015 to November 2017.

Furthermore, the purpose is to find and show the social impact that is generated for participants of the programme and the local community. By doing this it is also revealed how the organisation works, who the stakeholders are, and how value is created.

The analysis can be used both internally and externally. For internal use, the analysis makes it clear where the value is created and what affects the value creation. The management of the organisation can then use it as inspiration for further development and improvement of current and future projects. Externally, it can e.g. be used to document the value creation to current and future contributors and to support fundraising of the organisation.

It is a central part of Lind Invest's approach to social responsibility to measure and evaluate if there is a reasonable relationship between the input and outcome of the projects in order to benefit the target group as well as society in general.

Introduction

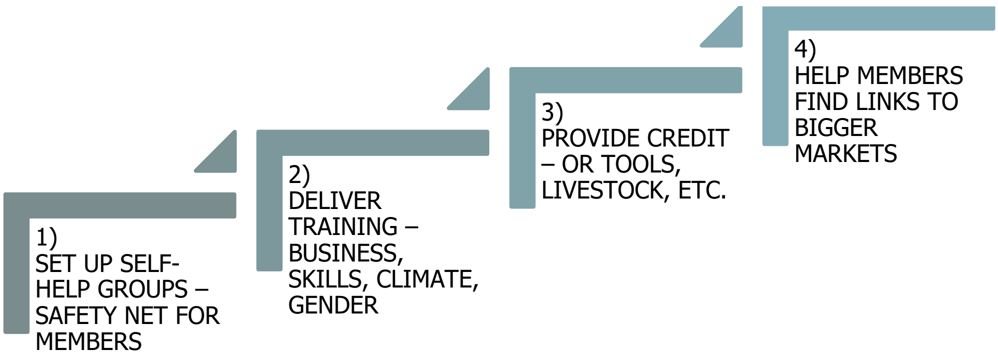
Hand in Hand International is an NGO and international network. Hand in Hand was established in 2003 in Tamil Nadu, India. Now, the organisation is fighting poverty in Afghanistan, India, Cambodia, Myanmar, Kenya, Rwanda, Southern Africa, Tanzania, and Zimbabwe.

Hand in Hand International aims to eradicate poverty in the countries where they operate by empowering the members – particularly women – with an entrepreneurship training programme giving them the tools, knowledge and networks they need to start to improve their own sustainable enterprises and generate their own incomes.

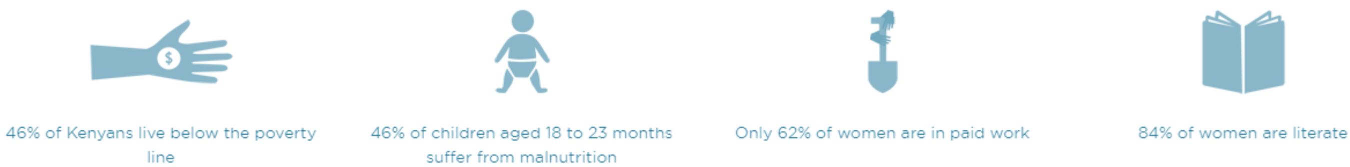
The most efficient way to fight poverty is to create jobs, so people can support themselves. By providing training in entrepreneurship, vocational skills, savings and lending and access to micro-loans, Hand in Hand helps primarily women to start family-based enterprises. In that way, women can improve the living conditions for themselves and their families.

The organisation has Support Offices located in USA, Sweden and UK, and has three operating headquarters located in Eastern Africa, Kenya, in Afghanistan and in India.

Figure 1: The programme – four steps to help people help themselves



HAND IN HAND EASTERN AFRICA
In 2010 Hand in Hand Eastern Africa launched in Nairobi, Kenya. From Nairobi a headquarter of operation covers both Kenya, Rwanda, Tanzania and Zimbabwe.
Kenya typifies the countries that Hand in Hand target for intervention. Unemployment is high, and rates of literacy and financial inclusion are even higher which paves the way for an entrepreneur's revolution.



http://www.handinhandinternational.org/where-we-work/kenya/, marts 2020

In Kenya the primary programme in operation is the Village Upliftment Program.

VILLAGE UPLIFTMENT PROGRAMME
The Village Upliftment Programme is worked out with the purpose to improve livelihoods of vulnerable people. The extreme poverty in Kenya is widespread – almost half of the country's inhabitants lack sufficient food and unemployment rates are high.

The Village Upliftment Programme's help to self-help model consists of the four training phases (see figure 2). After a period of around 30 months, vulnerable people will be empowered to significantly improve living conditions for themselves and their families.

The Village Upliftment Programme follows the entrepreneur core for women in Hand in Hand's approach and is based on the four steps of the entrepreneurial programme, but the Village Upliftment Programme looks at the general needs of a village and how it can be developed by training the residents.

The purpose is to both uplift the individuals as well as the village as a community.
The project plan for the village is set up in cooperation with the local authorities.

Figure 2: The four steps in the Village Upliftment Programme

1. SOCIAL MOBILISATION	2. TRAINING IN ENTREPRENEURSHIP	3. FINANCING	4. EXPANSION
The self-help groups create a community where people support one another and work towards common goals – a crucial first step for social mobilisation. In self-help groups, the members learn to save and to manage a budget.	The group members receive training in entrepreneurship, financing, marketing and how to run a business. Potential market sectors are analysed, and possible business approaches developed.	If a member needs a loan over and above the group's own savings, HiH put them in touch with institutions that organize micro-loans. These loans may only be used for investment in the business operations, and the repayment rate of the members is over 98%.	Once the company is up and running, HiH's business coaches assist with distribution, quality, packaging and expansion. We help link products and services to new and expanding markets.

KIBOKO

The Kiboko Village Upliftment Programme was implemented for a period of 27 months by Hand in Hand EA Tala branch from September 2015 to November 2017. The aim was support to 450 community members to increase their incomes and contribute towards reduced poverty leaving them in better living conditions.
Poverty in the area was very high with a 51% unemployment rate. Over 60% of the population live below the extreme poverty line of $2 a day.

The typical member was female (80% of participants were women) and the average age of beneficiaries interviewed was 48 years old, with more than half of the respondents older than 47. 82% of the respondents were married, with 11% widowed. This age profile differs from the typical population of Machakos county where 73% population are aged under 35.

The main economic activity practiced in the area is subsistence mixed farming, with some trading of household surplus harvests.
As with other areas across Kenya, Kiboko and its resident farming households have been affected by climate changes which has led to unpredictable rains, drought and flooding. This has had impacts on crop and livestock productivity, negatively affecting both food security and household incomes.
Also, respondents noted another challenge in lack of support from their children as they grew older. The children had migrated to cities and were no longer resident nearby.

Method

With inspiration from traditional economic approaches such as Return on Investment and Cost-Benefit analysis, a modern method has been developed to quantify and valuate effects on target groups and society created by social projects and organisations. The method is called Social Return on Investment (SROI). This Social Return on Investment analysis is based on the method developed by former Office of the Third Sector (OTS) in the Cabinet Office of the UK Government[4]. It has two main strengths: Firstly, it can be used to cover a large part of the complex effects social projects and organisations can have on target groups. Secondly, it can be used to assign a monetary value to "soft" impacts that are often difficult to quantify. The method is however not fully perfect and is still being developed as it is used in practice, and there are also other methods to measure social impact[5]. Some of the challenges of evaluating social projects are the sheer number of possible outcomes on both the participants directly involved in the project, but also indirectly on other stakeholders like family members, friends and the local community. Furthermore, the impact will work differently on the participants depending on their individual personal characteristics, motivation, family situation etc. This makes it impossible to account for all the individual differences and possible outcomes of a project and assign a value to them. However, by using the SROI method it is possible to capture the most important outcomes of a project, assign a value to them and give a realistic picture of the effects social projects have on target groups.

The product of an SROI analysis

In sum, the SROI method can be used to assign a monetary value to "soft" outcomes that are normally difficult to describe with numbers. Examples of soft outcomes are development of new skills, experiences and personal wellbeing for people affected both directly and indirectly by a social project. Furthermore, an SROI analysis can systematise and clarify the process by which the outcomes are created in order to understand how a social project creates value. This means that the SROI analysis is not just a monetary result of the project that year. By identifying the stakeholders and how they are affected, a comprehensive overview of the project's processes is also created. This helps the organisation to understand how they help the stakeholders and where they create most value. For management, it must be considered an important tool for further development of the organisation to benefit the individuals and society even more. The analysis can also be used to communicate the effects of the project to people interested in the project and possible financial donors.

Steps in an SROI analysis

An analysis starts with an identification of the individuals who are affected by the social project. These are referred to as stakeholders. The stakeholders are categorised in groups according to how and by which intensity they are affected by the project. Afterwards, the effects are assessed and given a monetary value based on economic principles. These values can then be added and used to give an indication of the total outcome created by the project. To estimate the SROI ratio (the monetary outcome produced for each 1 value put in the project), the outcome is divided with the total value of inputs, like financial support and volunteers time. Finally, a conclusion of the analysis can be made. The different steps are illustrated in figure 3.

Figure 3: The six steps in the SROI analysis

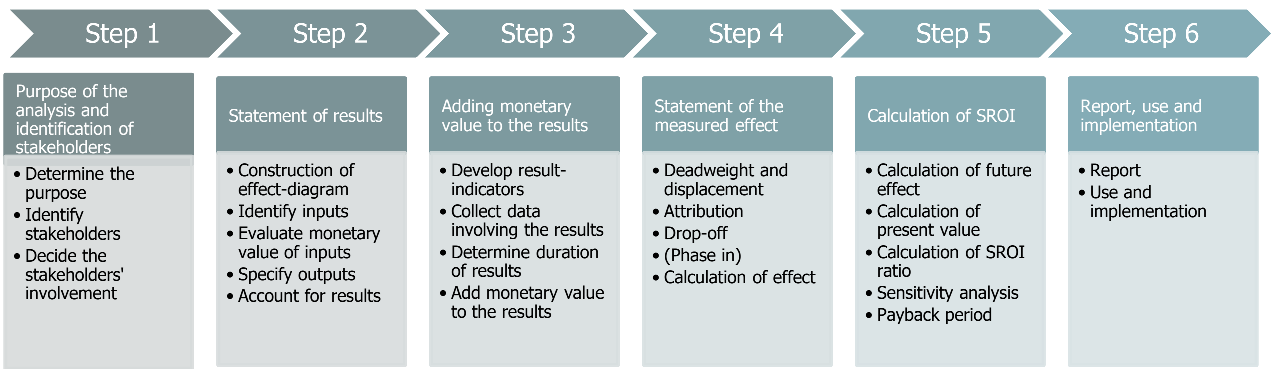


Table 1: Level of analysis and the statistical methods[2]

Level	Design	Statistical method
5	Randomised trials	Evaluations of well-arranged random assignment of treatment to subjects in treatment and control groups
4	Quasi-Experiments	Evaluations that use a naturally occurring event (which makes the treatment assignment as good as random)
3	Matching techniques: Regression analysis	Non-experimental evaluations where treatment and comparison groups are matched on observable characteristics.
2	Simple comparisons	Studies of two groups: a treatment group and comparison group. In this method differences among the groups are not controlled for.
1	Pre- and post-analysis	Studies of outcomes measured pre- and post-treatment. No comparison group is used.

TWO ELEMENTS OF THE SROI ANALYSIS
A SROI report can consists of two assessments - an evaluation and a forecast.
This SROI report is an evaluation as an assessment of the actual achievements during participation in The Village Upliftment Program:

- EVALUATION: The evaluation is based on data collected before (baseline) and after (end line) the training programme with participation of 24 months. The end line data was collected 9 months after the participants ended the programme.
  This indicates the effects that Kiboko Village Upliftment Programme generated for the participants of the programme during the training period and until the nine months after it ended.

INCREASING THE VALIDITY OF DATA
There are different statistical methods to increase the validity of the results in an analysis[3]. Table 1 shows the levels of analysis and the statistical methods used at each level. Higher levels of analysis result in a stronger cause-effect relationship and more valid results. Results from lower levels analyses are still useful, but the cause-effect relationship is less certain.

Data collected on the participants in the Kiboko Village Upliftment Programme equals a level 1 in the analysis, which is studies of the outcomes measured pre and post the training period.
In this analysis there are no comparison groups. But the changes in the participant's income during the programme has been compared with general facts on the average income for Kenyans living under similar conditions.
An improvement of the validity of data could be a comparison group as in level 2, but it would require resources as well as willingness from others, who will not be part of a training programme, to deliver data on their circumstances.

The participants un the Kiboko Village Upliftment Programme are living in poverty and challenging environments and are without an educational background.
This means that their chances of improving their income and quality of life are low, if they did not joined programme.
However, the programme is not the only contributor to the improvements the participants' experiences.
The programme by Hand in Hand EA facilitates self-help groups, but the advice and support the participants find in their groups is due to the involvement of the other participants. Without this support it would be difficult for them to grow and develop their enterprises. Therefore, the main part of the impact is due to training and activities in the Kiboko Village Upliftment Program.

Stakeholders

The number of stakeholders who are affected by a social project can be many. The people who are involved directly in the organisation's work either as participants or as part of the staff are clearly important stakeholders. Moreover, people around the individuals who are involved can also be stakeholders. This could be family members of both participants and staff, neighbours, friends, the local village or the society as a whole. They can also indirectly experience effects of a program.
We limit the number of stakeholders to the ones who experience the effects of a project directly. In this case the participants in the Kiboko Village Upliftment Programme, the staff and the residents employed in the established enterprises are included. We also include the financial donors on the input side. This makes it possible to capture the effects of the most important stakeholders with relatively high precision instead of including more stakeholders with much higher uncertainty. In this report we define stakeholders as individuals who are affected by the project first-hand and individuals who are affected by the first-hand stakeholders directly. The SROI analysis focuses on the effects we can calculate with a reasonable certainty making this report a conservative estimate of the outcomes of the project.

Table 2: Overview of stakeholders

Stakeholders	Description	Included in analysis
Participants in the Kiboko Village Upliftment Programme	The main stakeholder in the Kiboko Village Upliftment Programme, as it is specifically designed to give them competencies to start their own business thereby increasing their income and wellbeing.	Included. Participants experience the programme at first hand.
Families of the participants	The families are secondary stakeholders, as they are affected by the income increases, and positive wellbeing effects of the participants improve the quality of life for their closest family members.	Not included. Registrations and data on family members has not been compiled.
Management and employees	The Kiboko Village Upliftment Programme is operated by the management and staff of Hand in Hand Eastern Africa (HiH EA). HiH EA is an NGO in Kenya and member of Hand in Hand International.	Indirectly included. The management's and employees' salaries are included in the operating expenses.
Donors	These stakeholders give financial donations to the Kiboko Village Upliftment Programme. These are both companies and private individuals.	Included. Financial donations spent on the operation are counted as input.
Local community	Stakeholders from the local community such as authorities and other businesses benefit from the participants' businesses due to higher employment and additional sales.	Both included and not. The effects on the local community is not included as data has not been registered and it is difficult to measure and compile. Residents employed in the established enterprises are included.

Data

INPUT, OUTPUT, AND OUTCOME

On the input side, the data consists of the total project cost of the Kiboko Village Upliftment Programme. The project costs include all the costs associated with the Kiboko Village Upliftment Programme and consists among others of administration cost, staff cost and evaluation cost. The main data for the output and outcome is based on a survey carried out among the participants entering the programme from September 2015 to November 2017. The end term survey has been carried out 9 months after the programme ended in August 2018. The data collection process and uncertainties are elaborated on later in this section.

The graduates from the Kiboko Village Upliftment Programme experience a wide range of well-being effects as a result of the intervention which are identified in the data collection as well. The monetary value of these well-being effects is based on estimations from the Social Value Bank[4]. These values are results of large national surveys, where the effects of a particular factor are isolated through statistical theory. This approach reveals the amount of money it requires to increase a person's well-being by the same amount as the particular factor. These values are used to value the graduates' increased well-being.

Both input and social well-being effects has been adjusted to the price level in Kenya[5]. Thus, the value of input and outcome has been adjusted for differences in Purchase Power Parity (PPP) in this analysis to account for the price difference – as the input was a donation in US dollars and therefore transferred and spend as Kenyan Shilling (KES).

DATA COLLECTION

The quantitative data used in this report was collected by Hand in Hand Eastern Africa using questionnaires developed together with Hand in Hand International. First the questionnaires were pilot tested, and afterwards adjustments were made. This process enhances the quality of the survey findings. The data was collected digitally using KoBo Collect, a data collection software developed by Harvard University. In addition, enumerators experienced in data collection, were recruited and trained to help the graduates understand the rationale for the data collection and how to use the questionnaire and software correctly.

However, Hand in Hand EA states, that some errors occurred in the data collection process. Approximately 18 respondents did not answer a number of questions due to software problems. Majority of data used for this report has not been affected by these software problems. Hand in Hand EA collected questionnaires from around 100 participants out of 450 responded both the baseline survey and the end term survey. Thus, the participation rate is high, which increases the validity of the survey findings. Hand in Hand EA concludes, that in future, they will invest in tablets for data collection in order to avoid future software problems and ensure that enumerators are trained in the limitations of the data collection software.

An uncertainty in the data collection is that the participants are challenged in their accounting skills when they enter the programme – it is a part of their training.

This means that the data collected at baseline is more uncertain than the data collected at end line: Some participants underestimate their actual income or savings – others overestimate them. However, this uncertainty is still present after the programme has ended. This uncertainty is expressed in the business income reported by the respondents. When asked to give their business income in intervals they reported a significantly lower income, than when they were asked to give their exact business income. The report uses the income given in intervals in order to keep a conservative approach.

Calculation

A detailed description of the calculations for the input, output and outcome for the evaluation period can be seen in the following section. Lastly, the total net input and total net effect is used to calculate the SROI ratio. All values are consistently shown in Kenyan Shilling to make it easier for the reader to compare and comprehend the values.

A full view of inputs, outputs and outcomes as well as financial proxies and deductions can be found in the Impact Map in Appendix 1.

Input

Input is defined as all resources used to operate the organisation and its programmes for a given period – in this case all the financial costs spend on the Kiboko Village Upliftment Programme. The input consists among others of administration cost, staff cost and evaluation cost. The money has been transferred from US dollars to Kenyan Shilling, where the prices of goods and services are only half of the prices in the United States[6]. Thus, the value of the transferred money has been adjusted for Purchase Power Parity (PPP) in this analysis to account for the price difference. The total input of the Kiboko Village Upliftment Programme is presented in table 3.

Table 3: Financial cost of the Kiboko Village Upliftment Programme

Financial input	KES	KES (PPP adjusted)
Staff Cost	2,909,370 KES	5,810,634 KES
Community Outreach and promotions	85,593 KES	170,947 KES
Field Travel and training Expenses	510,157 KES	1,018,893 KES
Group Leaders Capacity Building Expenses	69,500 KES	138,806 KES
Office Administration expenses	126,511 KES	252,670 KES
Monitoring & Evaluation	70,589 KES	140,982 KES
Assets acquisition	156,600 KES	312,764 KES
Total	3,928,320 KES	**7,845,696 KES**

Nb. Numbers has been rounded off.

Output

The output is a quantitative statement of the number of activities and people directly involved in the Kiboko Village Upliftment Programme and the number of residents that have found jobs due to the enterprises created in the programme. The total output of the Kiboko Village Upliftment Programme is presented in table 4. The output is based on numbers from Hand in Hand EA and the questionnaire carried out among the graduates.

Table 4: Output of the Kiboko Village Upliftment Programme

Number of established and sustained enterprises	225
Number of existing enterprises enhanced and sustained	20
Participants who graduated from the programme	449
Number of jobs created and sustained throughout the programme	21
Share of graduates who still saves regularly	80%
Share of self-help groups that still operates	92%
Share of the enterprises that existed before the program began	8%
Share of survey respondents that did not save at the beginning of the programme	46%

Nb. Numbers has been rounded off.

Outcome

The outcome is the substantial effect the project has had on the stakeholders. This is where a monetary value is assigned to the output. These valuations are decomposed into two parts:

- The financial values: consist of the income development and the development in savings experienced by the people who creates and sustain an enterprise throughout the programme. These developments are based on the results of two questionnaires carried out among the graduates.
- The social values: consist of well-being effects. The monetary value of these well-being effects is based on average values from the Social Value Bank[7]. These values are results of a large national survey in the United Kingdom, where the effects of a particular factor are isolated through statistical theory. This approach reveals the amount of money it requires to increase a person's well-being by the same amount as the particular factor. We consider these values to account for all nationalities, therefore, they are used to value the participants' increased well-being converted from GBP to KES.

Last step in the calculation of the net value creation is risk adjustments. The SROI method has four types of risk adjustments which are used to isolate the effect of a project:

- *Deadweight:* States how large a share of the total effects, that would have taken place without the project. This is deducted, since it can't be assigned to the project's effort.
- *Displacement:* States how much of the effects that has replaced other effects.
- *Attribution:* States how much of the effect that is due to efforts from other projects, organisations or people. This must be deducted to isolate the effect of a project.
- *Drop off:* States how much of the effect that devaluates over time.

These adjustments are used to consider the effect of the Kiboko Village Upliftment Programme that might have occurred on its own or due to other factors outside the programme.

Financial values

During the programme the participants were helped to establish their own enterprises. These enterprises have caused a substantial increase in participants financial well-being. The financial improvements experienced by the participants are presented in table 5.

Table 5: Financial outcomes of the Kiboko Village Upliftment Programme

Financial values experienced by the graduates who sustain an enterprise
• Increase in income due to self-employment (after savings) • Increase in savings due to self-employment (exclusive income)

The increase in savings and the increase in income is calculated separately, because savings have been deducted from the income stated in the survey. The increase in income and savings is only calculated for the 245 graduates who still has a running enterprise after the programme has ended. The increases in income and savings experienced by the graduates without a business, is not necessarily caused by the the Kiboko Village Upliftment Programme.
Most of the enterprises were established in the 4th month of the programme and the programme are running in 24 months. Therefore, are the increases in financial well-being calculated for the remaining 20 months. The results of the calculations are presented in table 6.

Table 6: Gross financial values created in the Kiboko Village Upliftment Programme

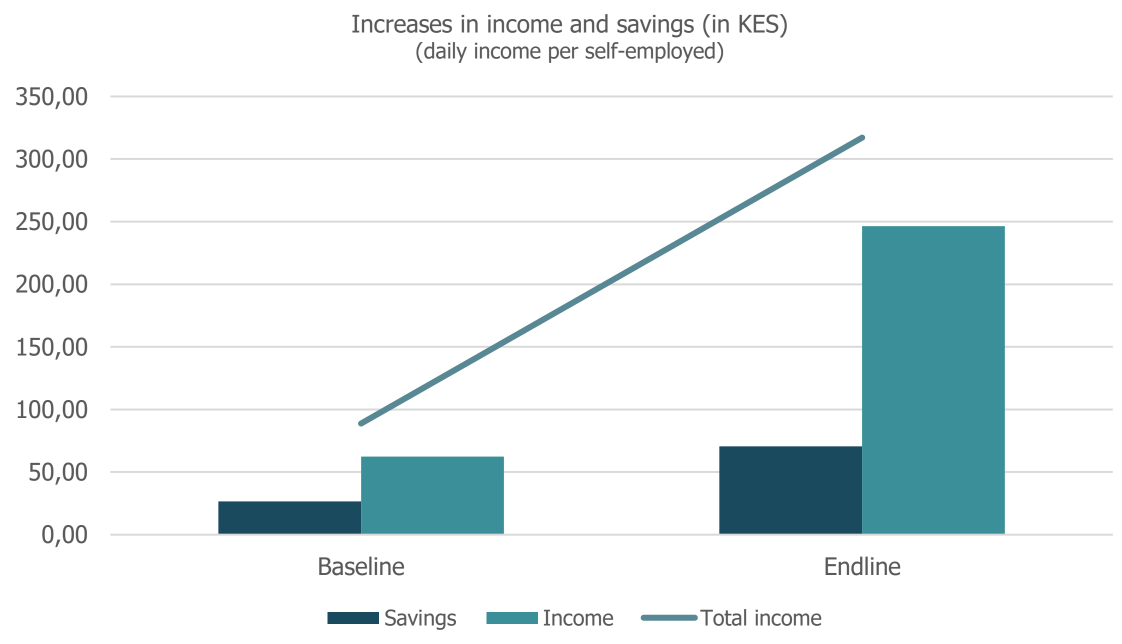
Financial value:	Number who experience the effect	Increase per year	Gross value
Increase in income	245	47,910 KES	19,563,224 KES
Increase in saving	245	11,469 KES	4,682,986 KES
Total value			**24,246,210 KES**

Nb. Numbers has been rounded off.

The gross financial value created by the Kiboko Village Upliftment Programme is 24,246,210 KES

If compared, the increase in business income is substantially larger than the increase in saving. This could imply that the participants have either increased their consumption or reinvested the income in their businesses. The increases in savings and business income per day are illustrated in figure 4.

Figure 4: Illustration of the increases in savings and business income daily per self-employed participant



Social values

In addition to the increase in income and savings, the graduates also gain personal well-being effects by participating in the programme. The graduates that establish their own enterprises experience a well-being effect when they become self-employed after being unemployed.

From the very beginning of the programme, the participants start saving small amounts. Those that did not save regularly before entering the programme experience a positive well-being effect from this new habit. Furthermore, some of the enterprises employ other residents and they experience a well-being effect of finding employment.

In addition, the participants in the programme are mobilised in self-helped groups that support, advice and guide each other. To have this opportunity is a positive effect for the participants, because it is difficult to find similar help in the area.

The social values experienced by the graduates are presented in table 7.

Table 7: Social outcomes of the Kiboko Village Upliftment Programme for the graduates and other residents.

Social values of the Kiboko Village Upliftment Programme
• Value of becoming self-employed
• Value of finding full-time employment
• Value of being able to obtain advice locally
• Value of being member of a social group
• Value of being able to save regularly

The social values for the Kiboko Village Upliftment Programme consist of well-being effects, these effects are uncovered by using financial indicators from the Social Value Bank[8]. It is assumed that the effects are experienced the same way by any person assuming that the preferences are the same, therefore, the social values can be used on any person. The only variation is the purchasing power of the persons. This means that the values should be adjusted to the purchasing power of citizens in Kenya using the Purchasing Power Parity (PPP)[9]. The social values are only calculated for one year, because the programme is regarded as one period and because it is uncertain to establish when the values occur.

The value of self-employment is calculated for the 225 graduates that have established their enterprises during the programme and sustained their enterprises until after the programme has ended. These enterprises and the enterprises that already existed before the programme have employed 21 people in total at the time of the end-term questionnaire. These employees experience the value of finding full-time employment.
The values of being member of a social group and able to obtain advice locally is tied to the self-help groups. Therefore, these values are calculated for the 414 graduates whose self-help groups still operate after the end of the programme. In addition, the value of being able to save regularly is calculated for the 164 graduates, who did not save before they entered the programme and still are saving regularly after the programme has ended. The results of the calculations are presented in table 8.

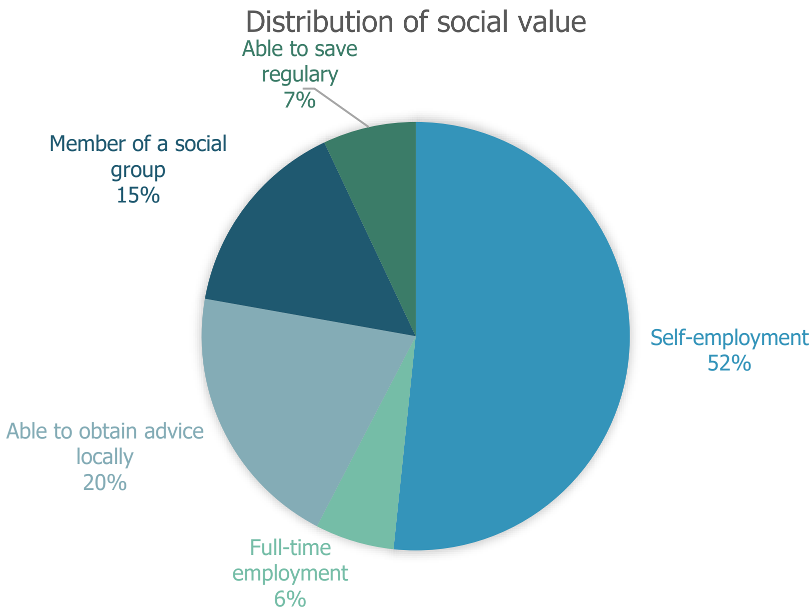
Table 8: Gross social values created in the Kiboko Village Upliftment Programme

Financial value	Number who experience the effect	Increase per year in KES (PPP adjusted)	Gross value in KES
Social value: Self-employment	225	727,856 KES	163,702,158 KES
Social value: Full-time employment	21	906,573 KES	18,960,639 KES
Social value: Able to obtain advice locally	414	154,340 KES	63,916,228 KES
Social value: Member of a social group	414	116,179 KES	48,112,755 KES
Social value: Able to save regularly	164	135,364 KES	22,257,814 KES
Total value			**316,949,594 KES**

Nb. Numbers has been rounded off.

The gross social value created by the Kiboko Village Upliftment Programme is 316,949,594 KES. The distribution of the social values is illustrated in figure 5.

Figure 5: Distribution of social values



Deductions

Last step in the calculation of the net value creation is risk adjustments. These adjustments are used to consider the effects of the Kiboko Village Upliftment Programme that might have occurred on its own or due to other factors outside the programme. An overview of the different deductions and what they are based on is presented in table 9.

Table 9: Overview of deductions

Values	Deductions	Based on
Financial value: increase in income	Deadweight: 1%	Share of Kenyan population that have risen above the poverty line on average over a two-year period in the years 2005-2015[10].
	Attribution: 17%	Share of graduates who have received training in entrepreneurship at other organisations.
Financial value: increase in savings	Deadweight: 14%	Share of graduates who occasionally saves when their income allows it.
	Attribution: 17%	Share of graduates who have received training in financial management at other organisations.
Social value: Self-employment	Deadweight: 8%	The share of the enterprises that existed before the programme began.
	Attribution: 17%	Share of graduates who have received training in entrepreneurship at other organisations.
Social value: Full-time employment	Deadweight: 49%	Employment rate in the area.
	Attribution: 17%	Share of graduates who have received training in entrepreneurship at other organisations.
	Drop off: 13%	Share of jobs created by the programme that disappeared again.
	Deadweight: 7%	Share of survey respondents who had a poor attendance rate to self-help group meetings.

Social value: Able to obtain advice locally	Attribution: 10%	That other organisations exist in the area and has been used by some respondents.
	Drop off: 4%	Respondents who do not participate in their self-help group anymore.
Social value: Member of a social group	Deadweight: 7%	Share of survey respondents who had a poor attendance rate to the self-help group meetings.
	Attribution: 10%	That other organisations exist in the area and has been used by some graduates.
	Drop off: 4%	Respondents who do not participate in their self-help group anymore.
Social value: Able to save regularly	Deadweight: 14%	Share of respondents who occasionally saves when their income allows it.
	Attribution: 17%	Share of respondents who have received training in financial management at other organisations.

In order to calculate the net value created by the Kiboko Village Upliftment Programme the deadweights, attributions, and drop offs are deducted from the gross values. The results of these deductions are shown in table 10.

Table 10: Net values created in the Kiboko Village Upliftment Programme

Value	Persons who experience the effect	Gross value (KES)	Dead-weight	Displace-ment	Attribution	Drop off	Net value (KES)
Financial value: increase in income	245	19,563,224 KES	1%		17%		16,108,929
Financial value: increase in savings	245	4,682,986 KES	14%		17%		3,323,556
Social value: Self-employment	225	163,702,158 KES	8%		17%		125,475,320
Social value: Full-time employment	21	18,960,639 KES	49%		17%	13%	7,024,309
Social value: Able to obtain advice locally	414	63,916,228 KES	7%		10%	4%	51,470,560
Social value: Member of a social group	414	48,112,755 KES	7%		10%	4%	38,744,314
Social value: Able to save regularly	164	22,307,386 KES	14%		17%		15,831,747
Total		341,245,376 KES					**257,978,734**

Nb. Numbers has been rounded off.

The total net value created by the Kiboko Village Upliftment Programme is 257,978,734 KES

Calculating the SROI ratio

In this section, the SROI ratio is calculated. The net input and net effects are calculated in the previous sections and included here. First is the SROI ratio calculated based only on financial values and social values respectively. Afterwards the final SROI ratio calculated. A complete overview of the effects contained in the final SROI ratio appears in "Appendix 1: Impact Map".

Financial SROI ratio

The financial SROI ratio is found by the calculation of the net financial effects of the programme divided with the net input invested in the programme. The net input has been calculated to be 7,845,696 KES and the net financial effect has been calculated to be 19,432,484 KES.

Calculation of SROI ratio: $\frac{19{,}432{,}484}{7{,}845{,}696} = 2.48$

This means that for every 1 shilling invested in the Kiboko Village Upliftment Programme, 2.48 shilling is created in financial value for the stakeholders.

Social SROI ratio

The social SROI ratio is found by the calculation of the net social effects of the programme divided with the net input invested in the programme. The net input has been calculated to be 7,845,696 KES and the net social effect has been calculated to be 238,511,068 KES.

Calculation of SROI ratio: $\frac{238{,}511{,}068}{7{,}845{,}696} = 30.40$

This means that for every 1 shilling invested in the Kiboko Village Upliftment Programme, 30.40 shilling is created in social value for the stakeholders and local community.

SROI ratio

The SROI ratio is found by the calculation of the total net effects of the programme divided with the net input invested in the programme. The net input has been calculated to be 7,845,696 KES and the net effect has been calculated to be 257,978,734 KES.

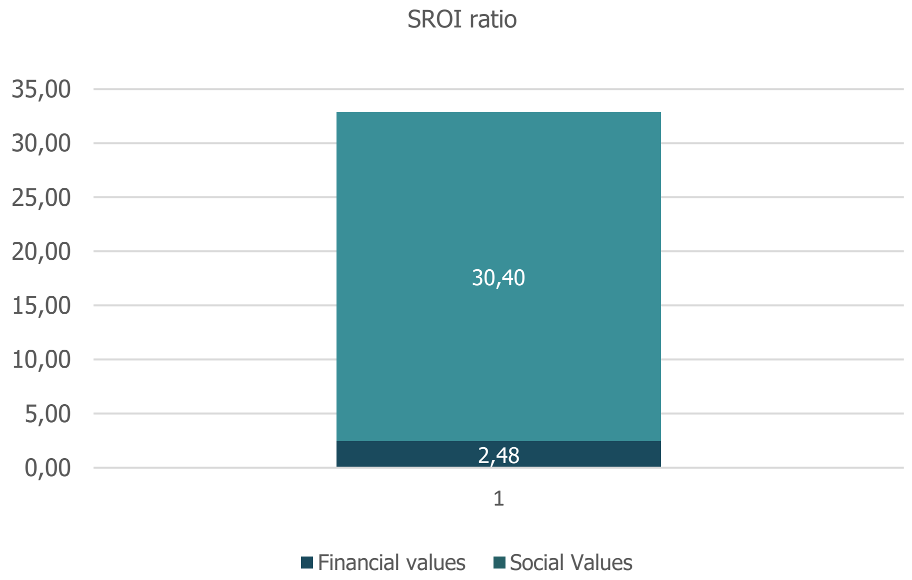
Calculation of SROI ratio: $\frac{257{,}978{,}734}{7{,}845{,}696} = 32.88$

This means that for every 1 Kenyan shilling invested in the Kiboko Village Upliftment Programme, 32.88 Kenyan shilling is created in value for the stakeholders and local community. This accounts for both financial and social value.

Type of value

Social value covers outcomes of well-being effects that are not valued directly monetary, whereas financial value covers outcomes that is measured directly monetary. The social values are therefore more uncertain than the financial values, because it is assumed that the effects are experienced the same way by Kenyan citizens and citizens in United Kingdom. If this assumption turns out to be wrong, then the calculation of the social values is wrong as well. However, the majority of the ratio consist of social values as illustrated in figure 6.

Figure 6: SROI ratio divided between social and financial values



Sensitivity analysis

Several parameters are used in the analysis to calculate the SROI ratio of the Kiboko Village Upliftment Programme. The parameters with the greatest influence on the SROI ratio are the social values, because these values constitute the largest part of the values created. All parameters are based on data, which might be affected by statistical uncertainty and therefore, some uncertainties might occur. Also, some of the parameters are modified based on assumptions and may be over- or underestimated. Therefore, a sensitivity analysis is made on the parameters to show how the SROI ratio is affected by uncertainty in each parameter and in total. The sensitivity analysis shows how the SROI ratio is affected when the parameters are reduced by 50 % or increased by 50 %. If all parameters are reduced to 50% of their original values, then the SROI ratio is reduced to 16.44. If all values are increased to 150 % of the original value, the SROI ratio increases to 49.32 as presented in table 11.

Financial values

The financial indicators consist of the increases in income and savings experienced by the participants. These numbers are based on data registered by the participants, which means that some statistical uncertainty can occur. Out of these two financial values the income increase affects the SROI ratio the most. A reduction in all financial values to 50 % will reduce the financial SROI ratio to 1.02. If all financial values are increased to 150 %, this results in a financial SROI ratio of 3.94 as presented in table 11.

Social values

For the social values, there are uncertainties in the modification of social values for citizens in United Kingdom to social values for Kenyan citizens. The modification is based on differences in purchasing power, where it is assumed that individuals in general experience the well-being effects the same way and thus, that social values are the same for all. A reduction of all social values to 50 % of the original value reduces the social SROI ratio to 15.20. If the social values are increased to 150 % of the original value, the social SROI ratio increases to 45.60. This shows that social values affect the SROI ratio much more than the changes in income and savings do, as seen in table 11.

Table 11: Sensitivity analysis

Financial SROI ratio	50%	75%	100%	125%	150%
Savings	2,27	2,37	2,48	2,58	2,69
Business income	1,23	1,85	2,48	3,10	3,72
All financial values	1,02	1,75	2,48	3,21	3,94
Social SROI ratio	50%	75%	100%	125%	150%
All social values	15,20	22,80	30,40	38,00	45,60
Total SROI ratio	50%	75%	100%	125%	150%
All values	16,44	24,66	32,88	41,10	49,32

Other value creation

Throughout the analysis it has become clear that the Kiboko Village Upliftment Programme creates more value than included in the analysis. It has not been included, because it is not possible to measure all the outcomes and assign a monetary value to them precisely enough to take them into account. These values are elaborated on in this section.

Families

Families to the graduates do experience positive effects as the graduates get income increases and develop new skills. The family can get help to problems directly from the graduates, and the family situation improves as more wealth enters the family due to the created enterprises. The increase in wealth makes the graduates capable of paying school fees so their children can go to school instead of having to work. This is likely to increases the children's opportunities and income in the future. In addition, the increase in wealth makes the graduates able to afford medicine, proper housing, nutritious food and other essentials needed to live decently. This is likely to have a positive impact on the health and wellbeing of the participants and their families. However, it is difficult to measure these effects on the families and asses the value of the outcomes created.

Supportive network

The self-help groups create a strong community where the graduates continue to support each other and help each other with the development of the remaining enterprises. Most importantly, most of the self-help groups continue to exist after the graduates has left the programme and this helps them to sustain the positive development in the future. They can work together and learn to support each other in struggles. This is assumed to affect the graduates' businesses positively. Some of these effects have been estimated financially by using the Social Value Bank. However, it is very likely that there are other positive wellbeing effects and future increases in business income that are not accounted for.

Community-Based Organisation Formation

The Community-Based Organisations (CBOs) were created as part of the programme and their aim is to provide its members with market information, access to cheaper inputs, and access to new markets. 56% of the participants reported in the questionnaire that they were member of a CBO. In addition, 14% of the CBO members reported that they had accessed new market or value chains through their CBO. The CBO has improved the market linkage for these enterprises, and it is likely that this market linkage has helped these members to expand their production and increase their income. However, it is not possible to calculate the effect of the CBOs, and it not possible to determine how much these groups can help its members increase their business income in the future.

Local community

The local community such as authorities and other businesses benefit from the graduates' businesses due to higher employment and additional sales. Furthermore, when the graduates' income increase they can afford to buy more. This leads to additional trade in the area and that might create a positive spiral where production, employment, income, and wealth in the area increases. But, a lot of other factors influence the local community, so it would be nearly impossible to document whether the effects are due to the Kiboko Village Upliftment Programme or due to other factors. The SROI ratio would be higher, if these effects could be estimated.

Greater equality and involvement

Around 80% of the participants in the Kiboko Village Upliftment Programme was women. When these women start to earn their own income, they gain a more equal role relatively to men. This means that equality increases both in the women's families an in society in general. In addition, the new status as self-employed and the ability to provide for themselves and their families, boost the participants' self-esteem. This increase in self-esteem lays the foundation for people to demand their democratic and human rights from the decision makers. In the long run these changes can have a positive impact on the equality and the civil rights in Kenya. However, these effects are very complex to estimate, very uncertain due to the time horizon, and it would be nearly impossible to document whether the effects are due to the Kiboko Village Upliftment Programme or due to other factors. Thus, it is not possible to measure these effects.

Conclusion

The analysis of the Kiboko Village Upliftment Programme has shown that significant value is created through outcomes for the participants in the programme. This is seen from the value created in the programme, which benefits many participants and helps them to get improvements in their lives.

The outcomes created are both of financial and social value. Financial value covers outcomes where value is measured directly monetarily. This covers the total value of increases in income and savings for the participants who has sustained their enterprises.

Social value covers the outcomes where value is not measured directly monetary. This covers the total value of self-employment, full-time employment, being able to save regularly, being a member of a social group and the outcome of being able to obtain advice locally.

If the SROI ratio is based only on the financial values created a SROI ratio of 2.48 is obtained. If the ratio instead is based only on the social values created, then a SROI ratio of 30.40 is obtained. The SROI ratio based on all values created is calculated to be 32.88.

This means that for every 1 Shilling invested in the Kiboko Village Upliftment Programme, 32.88 Shilling are created in value for the stakeholders and society.

Throughout the analysis process, it has become clear that the Kiboko Village Upliftment Programme creates additional values that are not accounted for in financial terms. These effects count better social and economic conditions for the families, education for graduates' children, positive development of the local community, CBOs that can help the graduates expand their businesses in the future, improvements in equality, and a supportive network among the graduates that helps them sustain their positive development.

It is also important to consider the sheer number of beneficiaries who has participated. Due to the Kiboko Village Upliftment Programme 245 enterprises have been created or enhanced in the area and provided its creators with a significant improvement in their standard of living and overall quality of life. Furthermore, 414 graduates of the programme have experienced various improvement in their social well-being due to their participation in the programme. An overview of the social and financial value created in the Kiboko Village Upliftment Programme is presented in table 12.

The calculations are influenced by numerous assumptions and uncertainties. These are challenged in the section "Sensitivity analyses" and elaborated on in appendix 2 "Assumptions and measurement uncertainties".

Table 12: Overview of social and financial values created in the Kiboko Village Upliftment Programme

Stakeholder group	Social values created	Total social value created	Financial value created	Total Financial value created
The graduates	- Self-employment - Able to obtain advise locally - Member of a social group - Able to save regularly	231,486,759 KES	- Increase in income - Increase in savings	19,432,484 KES
Other residents in Kiboko	- Full-time employment	7,024,309 KES	None	0 KES

Nb. Numbers has been rounded off.

Appendixes

Impact map

See attached document

Assumptions and uncertainty

The analysis is based on many assumptions that affect the conclusion. In addition to this, uncertainties are attached to both measurements and data collection. This table describes these assumptions and explains how they affect the results of the analysis.

Negative effects	Positive effects
Data collection It has been assumed that data represents the true values due to high participation rate. However, errors occurred during the data collection process which might have led to over-or underestimations. If the effects reported in the report are overestimated, the outcome and the SROI ratio will be lower than reported.	**Data collection** Some errors occurred during the data collection process which might have led to over- or underestimations. If the effects reported in the report are underestimated, the outcome and the SROI ratio will be higher than reported.
Deductions Most of the deductions are based on survey answers. If these answers are not representative for the graduates, then the deductions have led to over-or underestimations of the value created. If the deductions are underestimated, then the net outcome and the SROI ratio will be lower than reported.	**Deductions** If the deductions are overestimated, then the net outcome and the SROI ratio will be higher than reported.
Missing baseline The calculation assumes that all the graduates experience the social effects related to the self-help groups due to missing baseline. If some of the graduates already experienced these effects before entering the programme, the SROI ratio will decrease.	**Other value creation** If it becomes possible to estimate some of the positive effects that has not been accounted for in financial terms in the future, the SROI ratio will increase.
Social Value Bank The calculation of the social values assumes that Kenyan citizens experience the same increases in social wellbeing as British citizens adjusted for differences in purchasing power. If Kenyan citizens turns out to experience a lower social wellbeing from the included effects than British citizens, then the SROI ratio will be lower than reported.	**Social Value Bank** If Kenyan citizens turns out to experience a higher social wellbeing from the included effects than British citizens, then the SROI ratio will be higher than reported.

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