

Social Return on Investment

Report on 2019/2020

WAWCAS

SOCIAL RETURN ON INVESTMENT REPORT

WAWCAS
2019-2020

WAWCAS

SROI report compiled by Lind Invest
January 2021.

LIND INVEST

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SUMMARY

Following pages are a summary of the SROI analysis and the results of it. The summary is followed by the full analysis. The SROI report is carried out on the impact created by WAWCAS in the period 1 July 2019 to 30 June 2020 and the data comes from WAWCAS' data system.

The vision of the WAWCAS Program is to empower women who live in poverty in Nepal to become independent and able to achieve a better life and a better future for their children. WAWCAS has created a training programme that gives underprivileged women the skills needed to establish, operate, and grow a business. Through this process, they become entrepreneurs with an income, and they develop personally as individuals and socially in communities. Furthermore, as a requirement for participating in the programme, their children must go to school.

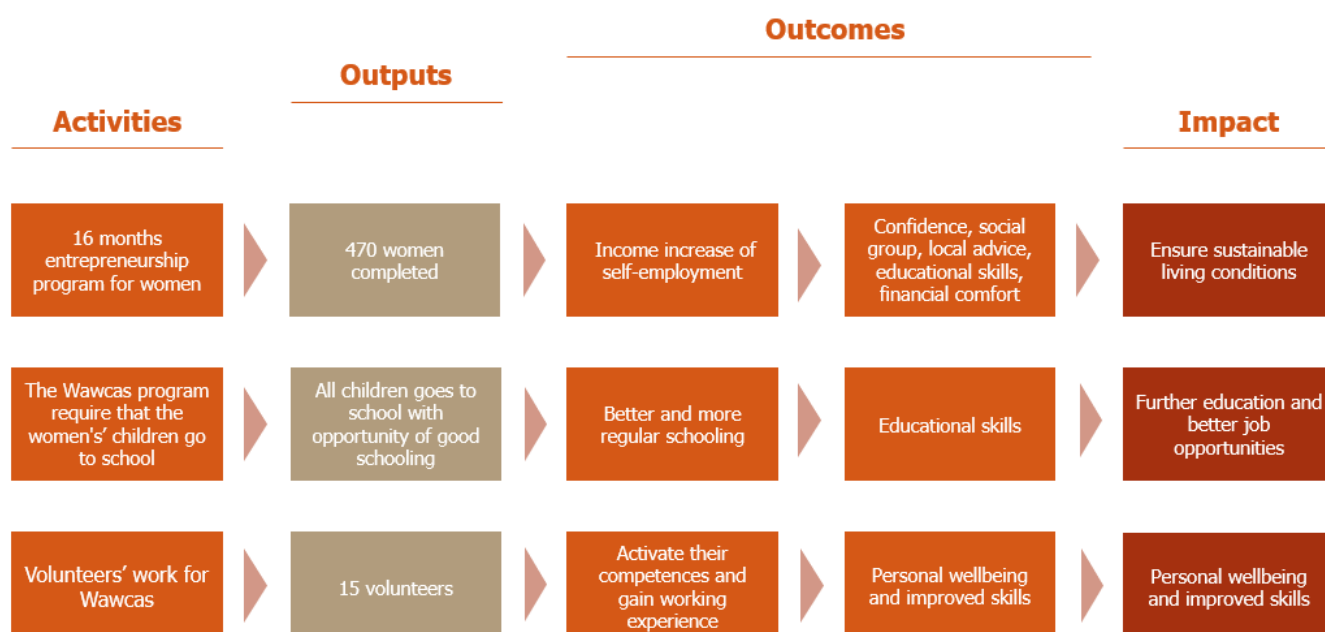
From 1 July 2019 to 30 June 2020, 470 women exited the entrepreneurial training programme. This analysis accounts the value creation of the WAWCAS Program of 470 women who completed the programme after 16 months training.

CALCULATION AND METHOD

The analysis is based on the Social Return on Investment method, that 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 values:

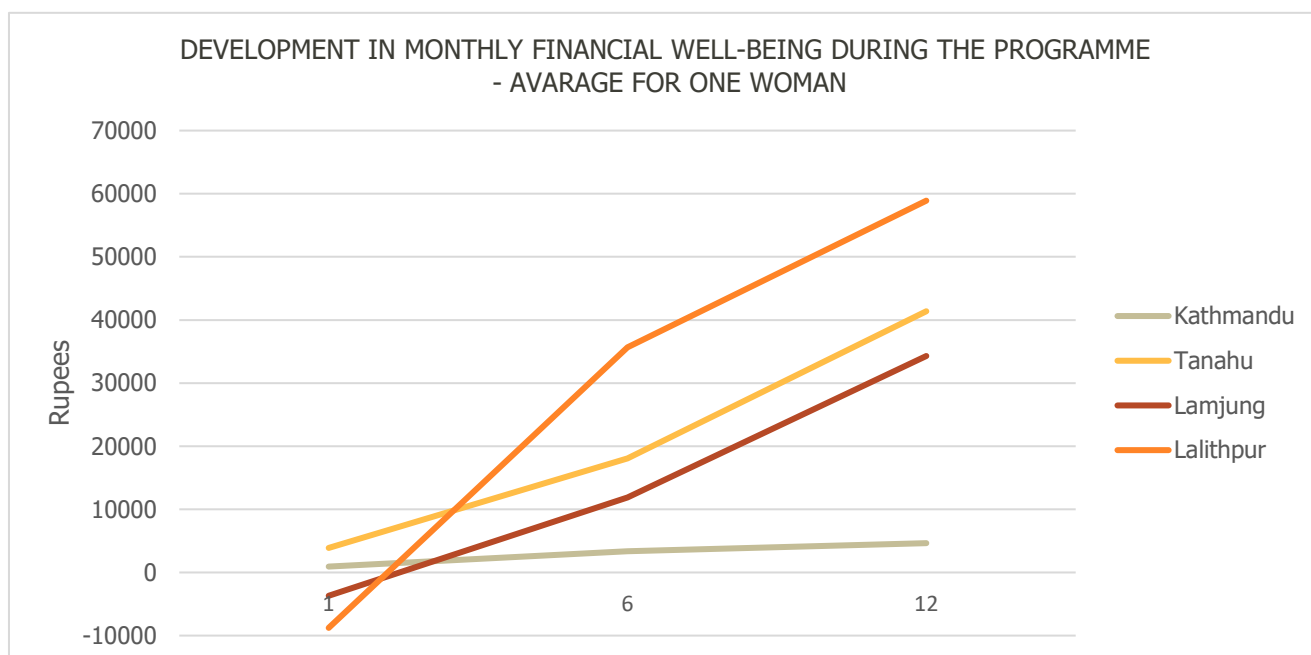
- The financial values: consist mainly of the income increase experienced by the women. In addition, the values consist of reductions in expenditure spend on alcohol and medicine and increases in expenditures on children's education.
- The social values: consist of well-being effects. The monetary value of these well-being effects is based on average values from the Social Value Bank¹. These values are results of a large national survey, 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 women's increased well-being.

THEORY OF CHANGE



KEY FINDINGS

- 470 women completed the programme after 16 months training in 2019/20.
- 557 new women with their 860 children have been enrolled in the WAWCAS Program.
- 540 new businesses started in 2019/2020 of the new enrolled.
(the 470 businesses established by women who have completed the WAWCAS Program in 2019/2020 are used in the analysis).
- All children go to school after six months.
- 2471 DKK increase in monthly income and balance on average per women.
- 5% increase in school expenditures due to all children go to school.
- 23% reduction in medical expenditures due to better living conditions and health.
- 47% reduction in alcohol expenditures due to awareness on reduction in alcohol consumption in households (primarily husbands).



Social well-being effects for the women	Additional effects
<ul style="list-style-type: none"> • Values of self-employment, higher confidence, a feeling of control in life, and financial comfort due to established businesses. • Values of being member of a social group and a place to receive advice locally due to participation in the training programme. • Values of having a good overall health and being able to rely on one's family for a share of the participants due to participation in the program. 	<ul style="list-style-type: none"> • Better education and job opportunities for children due to all children go to school and many of them in very good schools. • Supportive network and relations due to being gathered in supportive groups. • Development of local communities due to the women's established businesses and initiatives. • The women experience less violence and abuse due to increased respect from family members and increased awareness of rights.

INPUT AND OUTCOME

Input	Input (DKK)	Input – PPP adjusted (DKK)
Input in 2019/2020*	2,308,943	5,240,298
Input over a 5-year period	2,308,943	5,240,298

**Input includes operating expenses for both Denmark and Nepal for the programme running in 2019/2020. Operating cost spent in Nepal has been multiplied with 3.59 to adjust for price differences between Denmark and Nepal². PPP includes both differences in exchange rates and differences in purchasing power. 3.59 is the difference in purchasing power after differences in exchange rates has been considering.*

Outcome	Value (DKK)
Outcome in 2019/2020	46,750,542
Outcome over a 5-year period	170,427,844

THE SROI RATIO

The ratio for the year of 2019/2020 is calculated by dividing the outcome with the input:

$$\frac{46,750,542}{5,240,298} = 8.92$$

Thus, for every 1 DKK spent on the WAWCAS Program, 8.92 DKK is created in value when the women are in the WAWCAS program.

In addition, the expected SROI ratio forecasted for a 5-year period is calculated as:

$$\frac{170,427,844}{5,240,298} = 32.52$$

This shows that for every 1 DKK spent on the WAWCAS Program, it is expected that 32.52 DKK of value is created over a 5-year period.

ADDITIONAL VALUE CREATION

The SROI ratio of 8.92 and 32.52 respectively does not contain all the values created by the WAWCAS Program because not all effects are possible to monitor and measure monetarily and precisely enough to take them into account. For instance, does the women experience less violence and become more aware of their rights which positively affects their mental health.

Also, all the women's children are required to go to school and the women spend more money on their children's education. This increases the quality of the children's education and their children's job opportunities in the future. In addition, the women have become part of a supportive network that helps them to sustain the positive development in the future. The local environment benefit from the women's businesses due to higher employment and additional sales. The women also arrange activities on their own, which also has a positive impact on the local community.

Further discussions on the value creation are in the section "Additional Value Creation".

SROI ANALYSIS

Purpose

The purpose of the analysis is to evaluate the value creation of the WAWCAS Program in 2019/2020 based on the women entering the programme from 1 July 2019 to 30 June 2020.

Furthermore, the purpose is to find and show the social impact that is generated for participants of the programme, their families, and the local community. By doing this it is also revealed how the organisation works, who the stakeholders are, and how value is created. Moreover, the analysis forecasts the effects five years after the women entered the programme.

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 to benefit the target group as well as society in general.

This report covers the women who exited the WAWCAS program in 2019/2020. The report is like the 2019 report (women participating 2017/2018) in numerous ways: Data have been collected with the same approach and the same data measures are used, as well as the calculation methods are to a great extent the same. However, some changes have been made. In this year's report the drop-off of the effects experienced by the women has been calculated differently because the coronavirus is expected to cause more businesses to close than in previously reports. This change increase makes it impossible to compare the two ratios directly. In addition, fewer women have completed the programme this year due to the outbreak of Covid-19.

This report covers the results of 470 women against 732 women in last year's report, which also makes it impossible to compare this year's ratios with the ratios from last year's report.

Introduction

The vision of the WAWCAS Program is to empower women who live in poverty in Nepal to become independent and able to achieve a better life and a better future for their children. This vision is also expressed in the name of the programme – WAWCAS – that is an acronym for “Women at Work - Children at School”.

WAWCAS has created a 16-month training programme that gives underprivileged women the skills needed to establish, operate, and grow a business. Through this process, they become entrepreneurs with an income, and they develop personally as individuals and socially in communities. Furthermore, as a requirement for participating in the programme, their children must go to school. Since 2008, the WAWCAS Program has grown significantly: By June 2020 4800 women have completed the WAWCAS Program³. WAWCAS has an effective long-term strategy for expanding the programme and to launch new spin-off projects that will add more value for the participants. Overall, the organisation creates a sustainable development and improvement of the living conditions for women in Nepal. The programme is non-profit and is financed entirely by contributions.

From 1 July 2019 to 30 June 2020, 557 women entered the programme and 470 completed the programme. This analysis accounts the value creation of the WAWCAS Program of the 470 women who completed the entrepreneurial training programme after 16 months training.

In this period, the WAWCAS Program operated in four areas of Nepal: Kathmandu, Tanahu, Lalitpur and Lamjung.

- Tanahu: 144 women completed the programme.
- Kathmandu: 71 women completed the programme.
- Lamjung: 235 women completed the programme.
- Lalitpur: 20 women completed the programme.

In total, all 470 women received seed money and established their own businesses.

In 2019/2020 the WAWCAS program was operated by 19 employees in Nepal and 15 volunteers in Denmark.

THE WAWCAS PROGRAM

The WAWCAS Program is an entrepreneurial training programme over 16 months facilitated by certified Local Program Leaders, who have fulfilled a 17-month theoretical and practical WAWCAS Certification Program training. The primary objective of the programme is to empower poor women to become independent by helping them to start their own business and teaching them how to manage a business. The programme is divided into three different phases:

1. PREPARATION PHASE

Duration of 3 months. The Local Program Leaders arrange weekly meetings with women who candidates for the programme. The Local Program Leaders visit the women at home to learn about their economic and social situation. Afterwards, the women are grouped into teams of 20-25 women. The women then start saving and identify their personal challenges. Based on this, a training content plan is developed. In this process, the women become ready to engage in the training and change their lives.

2. IMPLEMENTATION PHASE

Duration of 12 months. In this phase the women get settled in groups and establish their businesses. They organise group activities and roles such as chairman, secretary and treasurer and start to save

money as a group. The savings are used for loans among the women. Based on this formal settlement, they support each other and share the responsibility of developing their co-member's individual business plans both strategically and financially. Furthermore, their children start to attend school regularly during this phase.

When business plan is prepared each woman receives seed money from WAWCAS of maximum NPR 30,000 without any collateral. The seed money helps the women to start their business and earn their own income. The repayment period is 6-12 months, and the repayment rate of the seed money is 92% due to the successful businesses they have created and the close and regular follow-ups by the Local Program Leaders. The repayment rate is usually around 98%, but due to the corona pandemic the repayment rate has fallen to 92% in 2019/2020.

The seed money is paid back to a seed money fund and are afterwards used as seed money for the new women who enters the WAWCAS Program. The women pay no interest on the seed money they receive but the women in the group save money corresponding to the seed money for one new woman who enters the programme. This new woman will eventually repay the loan to the group.

The participating women must set aside money every month for investment in the business, for their everyday life and for their children's education. Twice a month the women get training in business development, market management, financial management as well as social mobilisation training on topics such as children, women's rights, nutrition, gender equality and sanitation. They also get personal training based on their individual challenges to develop personally.

3. EXIT PHASE

Duration of 1 month. The Local Program Leaders and the women evaluate and document the women's progress throughout the training programme in this phase. Some of the key factors they evaluate are economic status, effects on the family and other social change indicators. They help the women create a five-year strategy plan for their businesses and for the groups as well. They help them establish contact to relevant authorities to draw on relevant resources from the groups. The last phase prepares the women to continue the progress with the other women in the groups.

Figure 1 – The WAWCAS Program

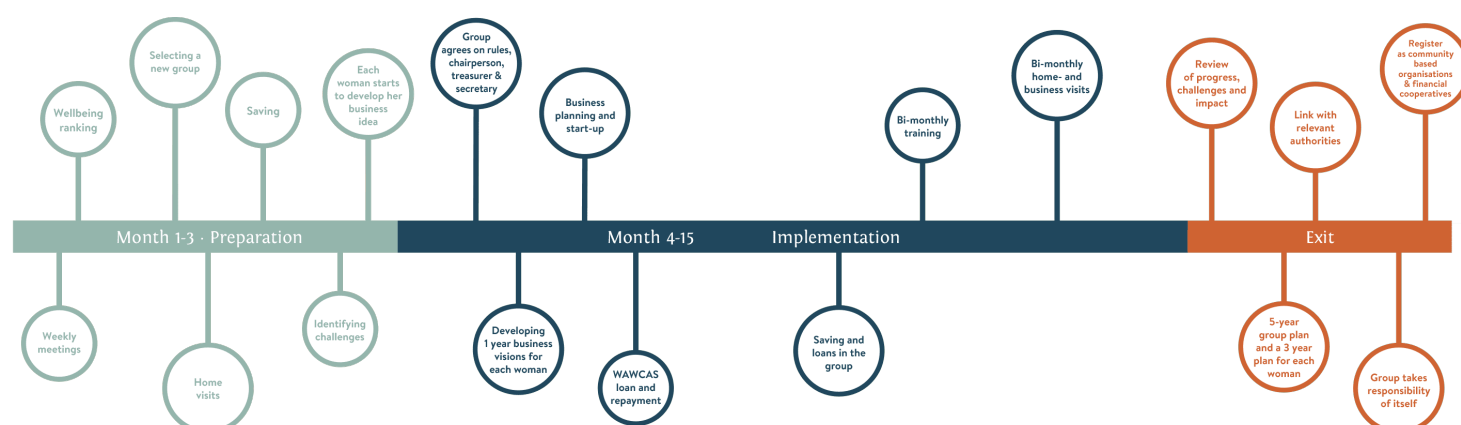
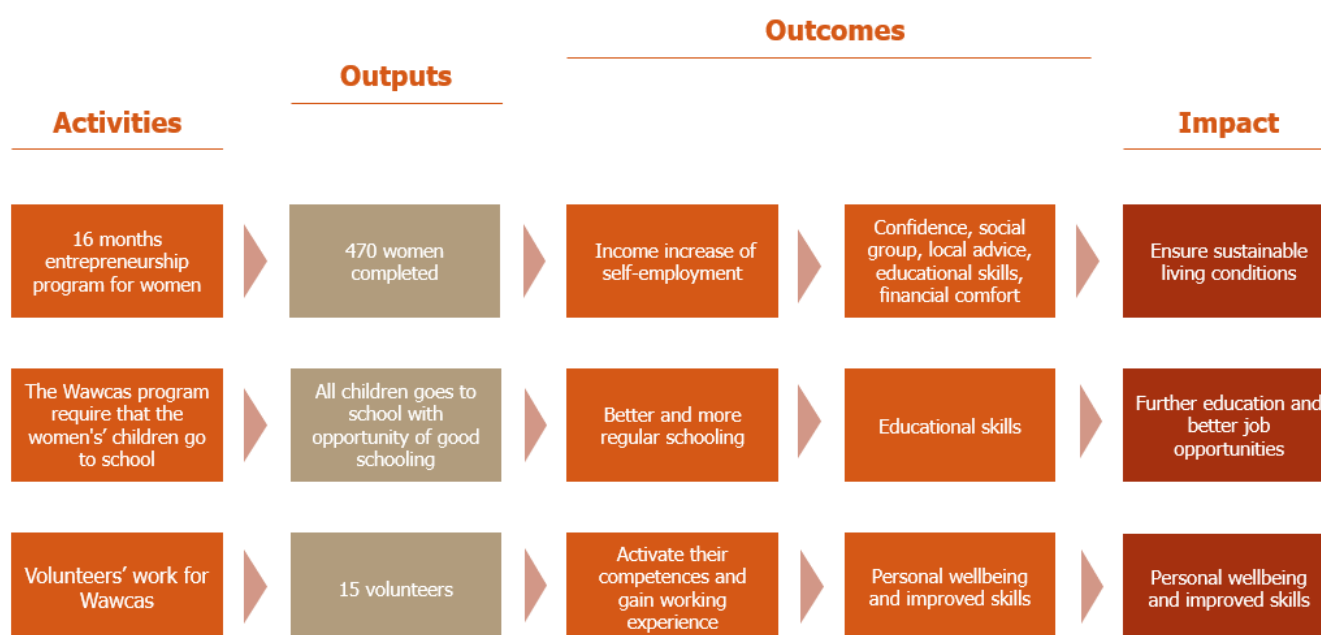


Figure 2 – Theory of change



ORGANISATIONAL OVERVIEW

The WAWCAS Program is implemented in a collaboration between WAWCAS International (Danish independent organisation) and SLISHA (Nepalese NGO). Both are non-political and non-profit organisations, and the WAWCAS Program is neutral in relation to ethnicity, nationality, political ideologies, religion and cast. Figure 3 shows the relationship between the two organisations and how the programme is managed⁴.

Figure 3 – Organisational structure



WAWCAS and Covid-19

CORONAVIRUS IN NEPAL

Due to COVID-19 the Government of Nepal called a national lockdown that started on the 24th of March and ended up lasting 82 days in total. In this period all public movement outside of home except from seek of medical attention or purchase of essential food was prohibited. Since the first lockdown there has been two additional lockdowns during 2019/2020.

EFFECT OF CORONAVIRUS ON THE 2019/2020 PARTICIPANTS

Covid-19 has caused many changes in the implementation of the program. Consequences were fewer new women in the program and that Wawcas did not have the access to visit and train the women in the programme.

The lockdown in Nepal lockdown affected the women in many ways. They had to close their businesses and all training stopped. To stay in contact with the women in the programme WAWCAS sat up a contact system where information on the women's situation was conducted to support them.

Due to COVID-19 the implementation phase of 12 groups could not be completed. Data on these 302 women could not be collected, and therefore, they cannot be a part of this analysis. Furthermore, fewer women have entered the programme in 2019/2020 due to the pandemic – this report covers the results of 470 women against 732 women in last year's report.

COVID-19 is also the primary reason for the 6% fall in repayment rate.

SPECIAL ACTIVITIES DUE TO THE CORONAVIRUS

WAWCAS has developed a help package for WAWCAS women, who have lost their businesses due to the outbreak of coronavirus.

Through campaigning WAWCAS has collected enough funds to support around 2,000 women who have lost their businesses during the pandemic. These funds will be used to help previous participants to re-establish their businesses. The help package was implemented from August 2020, and by the end of February 2021 around 2,000 women are expected to have received help from the WAWCAS Help Package.⁵

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 value 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 Government⁶. It has two main strengths: Firstly, it can be used to cover a large part of the complex effects that 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 impact⁷. 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.

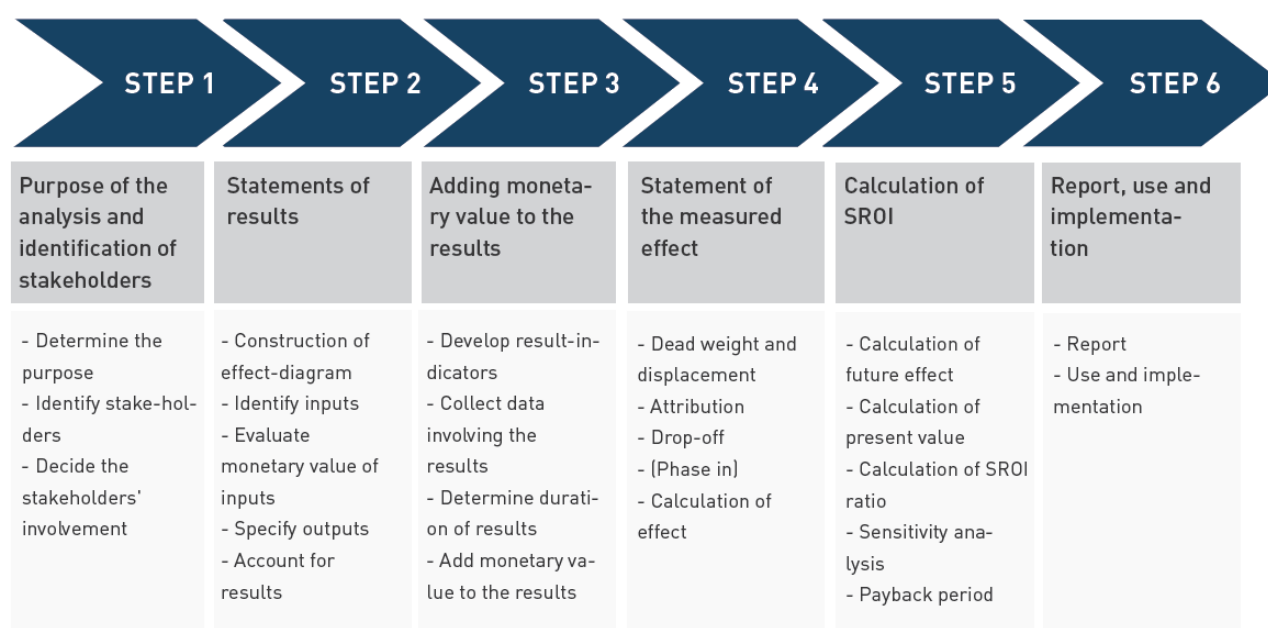
THE PRODUCT OF A SROI ANALYSIS

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 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 A 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 DKK 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 4.

Figure 4 – The six steps in the SROI analysis



TWO ELEMENTS OF THE SROI ANALYSIS

EVALUATION: An assessment of the actual achievements during program participation

The evaluation is based on data collected before, during, and after the training programme with participation of 16 months. This indicates the effects that WAWCAS has tracked while the women were still a part of the programme. However, some of the effects do not appear this early in the process – they develop over time as the women continue to develop their businesses and skills after they have left the WAWCAS Program. These effects over time are calculated in the forecast.

FORECAST: The predicted effects after 5 years

The final SROI ratio is calculated from the predicted effects 5 years after the women joined WAWCAS. This is done because the effects of the project (implementation and development of businesses and skills) evolve over time.

It is uncertain how long and by which intensity the effects documented in the evaluation will last. This uncertainty is handled by estimating risks and calculating deadweight to make sure that the forecast gives a realistic and conservative estimate of the effects of WAWCAS on the stakeholders in the future. A sensitivity analysis will also show how our assumptions affect the SROI ratio.

INCREASING THE VALIDITY OF DATA

There are different statistical methods to increase the validity of the results in an analysis⁸. 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. In this analysis it is possible to establish a control group based on a household survey in Nepal made by the United Nations Development Programme⁹. Statistics from this analysis contain typical household income and expenditures for poor people living in rural areas in Nepal – in other words people who are similar to the women participating in the programme. By comparing the typical statistics for people living under conditions similar to the women and the participants, it is possible to estimate the isolated effect of

the WAWCAS Program by deducting the “normal” development from the development the stakeholders have experienced. This results in a level 3 analysis, where the estimation of the effect WAWCAS had on the women can be estimated with relatively high certainty.

Table 1 - Level of analysis and the statistical methods ¹⁰

LEVEL	DESIGN	STATISTICAL METHOD
5	Randomized 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.

The women participating in the WAWCAS Program are all poor, illiterate, exposed to violence and have low self-confidence when they join the programme. This means that their chances of improving their income and quality of life are low, had they not joined the WAWCAS Program. However, WAWCAS is not the only contributor to the improvements the women experiences. WAWCAS facilitates the group and group meetings, but the advice and support the women finds in their groups is due to the involvement of the other women. Without this support it would be difficult for the women to go through with the lifechanging choice of starting their own businesses. Some of the impact is also due to the respect the women experience from their family and the local community. The women would not have met their groups or gained respect from the local community, through opening businesses, if they had not followed the WAWCAS Program. Therefore, a big part of the impact is due to WAWCAS’ activities, but some of the impact is due to other stakeholders.

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. But what about the people around the individuals who are involved directly in the project? This could be family members of both participants and staff, neighbours, friends, the local village or society. These stakeholders do not experience the effects of a project first-hand, but second hand as a product of the development the first-hand stakeholders go through. We are interested in capturing all relevant effects and evaluate them as precisely as possible. This represents a trade-off: As the number of potential second-hand stakeholders increase, so do the uncertainties and the risk of not making a precise valuation of the effects.

We limit the number of stakeholders to the ones who experience the effects of a project directly. In this case the women participating in the WAWCAS Program, the staff and the volunteers are included. We also include the financial donors (on the input side) and the women's families because we have data on the latter that makes it possible to reduce the uncertainties of the effects they experience significantly. This makes it possible for us to capture the effects of the most important stakeholders with relatively high precision instead of including more stakeholders with much higher uncertainty. Thus, 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. By doing this we exclude friends, neighbours, the village, and society because the effects on these stakeholders would be highly uncertain. This does not mean that they do not experience any effects in the real world - our analysis focuses on the effects we can estimate with a reasonable certainty making this report a conservative estimate of the outcomes of the project.

Table 2 – An overview of the stakeholders

Stakeholders	Description	Included in evaluation?	Included in forecast?
The women participating in the WAWCAS Program	The main stakeholder since the WAWCAS Program is specifically designed to give them competencies to start their own business thereby increasing their income and wellbeing.	Yes. <i>They are the main stakeholders and experience the programme first-hand.</i>	Yes. <i>The women's continued development over a 5-year period is calculated.</i>
Families of the participants	The families are mainly affected in two ways: Firstly, it's a requirement that the women's children attend school during the programme. Secondly, the income increases, and positive wellbeing effects of the women improve the quality of life for their closest family members.	Yes. <i>They experience effects of the WAWCAS Program second hand. The children attend school, the family spend less money on alcohol and their financial situation is improved.</i>	Yes. <i>Some of the wellbeing effects of having a mother/wife who has a job are accounted for in the forecast.</i>
Volunteers	A large part of the organisational work is done by volunteers in Denmark. They mainly do administrative tasks, fundraising and develop the data framework.	Yes. <i>The time they spent as a volunteer for WAWCAS count as input. Other than helping the organisation they also gain personal experiences and wellbeing effects as an outcome.</i>	No. <i>The women no longer receive direct help from WAWCAS after the 16 months of programme participation has ended. At this time, they can sustain their own development through their business, new skills and the help of co-participants from the WAWCAS Program. This means that the volunteers no longer effect the women.</i>
Management	WAWCAS is operated by 19 employees in 2019/2020. They are directly involved the operations of WAWCAS and the training of the women.	Indirectly. <i>The salaries are included in the operating expenses (money from financial donations).</i>	No. <i>As mentioned, the women end the programme after 16 months and sustain their own development from this point.</i>
Donors	These stakeholders give financial donations to WAWCAS. These are both companies and private individuals.	Yes. <i>Their financial donations spent on the operation are counted as input.</i>	No. <i>They do not receive any output over time – their involvement has an influence during the programme.</i>
Local community	Stakeholders from the local community such as authorities and other businesses benefit from the women's businesses due to higher employment and additional sales.	No. <i>The effects on the local community are not included because the impact on the local community is complex to estimate.</i>	No. <i>There is no value to make a forecast for because no effect is included in the evaluation.</i>

Characteristics

THE CHARACTERISTICS OF A WOMAN IN THE WAWCAS PROGRAM

- SHE IS LIVING IN POVERTY AND IS OFTEN ILLITERATE
- HER CHILDREN GO TO VERY BAD SCHOOLS - IF THEY GO TO SCHOOL AT ALL
- SHE IS EXPOSED TO VIOLENCE (MENTAL AND PHYSICAL)
- HER ROLE IN THE FAMILY IS LIMITED TO HOUSEHOLD WORK
- SHE WORKS HARD AS A POORLY PAID LABORER OR CONSTRUCTION WORKER FOR 10 HOURS A DAY
- SHE IS LONELY AND TREATED POORLY BY HER FAMILY AND THE COMMUNITY
- SHE HAS LOW SELF-CONFIDENCE



Data

An SROI analysis has three data entry points: Input, output and outcome. An overview of the data used for the calculations can be seen in the calculation section.

INPUT

On the input side, the data consists of the total operating expenses from the financial statement of the financial year 2019/2020 plus additional a third of the total operating expenses in this period to allow for that the programme last 16 months.

The total number of hours volunteers have spent on the project is estimated and then multiplied by an hourly rate, which depends on each volunteer's educational level. The hourly rate used for students and people with short or no education is 121 DKK per hour¹¹. For educated volunteers the hourly rate is 198 DKK per hour¹². Educational level thus works as a proxy for the value each volunteer can give to the project.

OUTPUT OG OUTCOME

The main data for the output and outcome is based on surveys of the women entering the programme from 1 July 2019 to 30 June 2020. Surveys have been carried out in all four areas in which WAWCAS operated in this period: Tanahu, Lamjung, Kathmandu, Lalitpur and are carried out several times during the training programme. Data collected during the preparation phase and in the beginning of the implementation phase is treated as baseline data. The data collected in the middle of the implementation phase show the women's development during the first half of the programme. Data collected at the end of the implementation phase are treated as end line. Hereby data reveals the changes that the women experience due to their participation in the WAWCAS program.

DATA COLLECTION

WAWCAS has focused a lot on data collection since the beginning of the programme and has developed a digital data system, which has increased the validity of the data significantly for several reasons. Firstly, data has been collected individually for each woman participating. This means that it is possible to track the income increase, school and alcohol expenditure, their husband's attitude, and their medical expenditure with relatively high precision. Secondly, each Local Program Leader (LPL, the trainers), the Team Leaders and the Finance Officer have received training on how to collect the data and ensure that the women understand the questions the same way. This reduces the risk of mis-interpretations and increases the quality of the data since each LPL fill in data on approximately 100 women using the same interpretations and methods. For instance, when measuring the level of violence, each woman would have a different understanding of exactly how much violence "sometimes" means if she answered herself. When the LPL collects the data, he/she explains what "sometimes" means thereby increasing the validity of the data significantly. WAWCAS has increased the focus on correct registration of data and understanding the terms used in the data system. The WAWCAS team has received training in these aspects, and this increases the validity of the data further. It does not mean that the collected data is perfect. There are still uncertainty factors like "social desirability bias", which occur when respondents give answers that are considered more desirable, because of norms and a natural wish to demonstrate personal success. This becomes relevant when the effects are based on survey answers. For instance, the number of women who have become healthier during the programme is based on survey answers regarding sanitation, nutrition, and household expenditures on alcohol. This measure of health is affected by previously mentioned bias.

There are also uncertainties relating to the way each LPL fill in the data. The introduction and education have been the same for all trainers. However, how data is filled in may vary among the trainers and thereby uncertainty can arise. WAWCAS works continuously on this to ongoing strengthening the quality and validity of the data.

The survey answers regarding nutrition and sanitation, and financial data on medical expenditures are an extension of the data used in the report in 2019. These data are used as indicators for the development in the women's health. In this report, the available data is also to a greater extent used to point out which women experience the various effects. Therefore, is it not possible to directly compare this report to the 2019 report.

ECONOMICAL CHANGES

The data on the women's economics has not been collected in the same way in the four operating areas. The women's economics is registered in their household's monthly balance between income and expenses. These do not include their WAWCAS businesses. Therefore, the women also register their economics in their business. The women from Lamjung, Lalitpur, and Tanahu are asked to state the net income of their businesses, which is expenses of the business subtracted from the income of the business.

The net income is important to include in the measure, because the overall goal of the programme is to make the women self-supporting, and if their business cannot generate a profit, then the programme has been unsuccessful. The net income from the WAWCAS businesses is added to the household balance to find an overall measure of the women's financial well-being. The increase in the overall financial well-being is accounted for as income increase. This approach is used to calculate the income increase of the women from the areas Lamjung, Lalitpur, and Tanahu.

The women from Kathmandu have businesses, such as restaurants, where they have a hard time distinguish their personal finance from the finance of their businesses, because their consumption of foods is not divided in private and in business. The finance of their business is therefore so close related with their personal finance, that the proper measure of their over-all financial being is the household balance. Therefore, the balance alone makes up the overall-financial well-being of the women from Kathmandu and thereby their income increase. The calculation of the income increase is quite conservative because it does not account for the full income increase. But since it has not been possible to determine the income of the WAWCAS businesses, it has not been possible to determine the full income increase for the women.

An uncertainty in the data collection is that the women do not have good accounting skills when they enter the programme – it is something they learn in the programme. This means that the data collected before participation is more uncertain than the data collected after they have left the programme: Some women underestimate their actual income or expenses – others overestimate them. However, by training the LPLs to be as objective as possible in the data collection, this bias is smaller than if the women (most of whom have never answered a survey) had to answer by themselves. Thus, the validity of the data is considered high for this type of respondents, since many of the women cannot read and have little or no access to computers where they could report anonymously. However, an uncertainty regarding the women's income and expenditures is still present at the end of the programme. The women are asked to report their household expenditures on alcohol, school expenses, and medicine. This is also very difficult for them in the beginning and the numbers stated by the women are therefore subject to uncertainty.

Another uncertainty is that the women from Tanahu, Lalitpur and Lamjung are asked to report their personal finance and their business finance separately. This is especially difficult for them in the beginning of the programme, so there is risk that the women include some income twice both in their

personal finance and in the statement of their business. But throughout the programme the women receive training in budgeting and accounting and therefore learn how to separate their business from their personal finance. This element of uncertainty decreases during the programme, but it will not disappear.

WELLBEING EFFECTS

The women also experience a wide range of well-being effects as a result of the programme 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 Bank¹³. 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 women's increased well-being.

Calculations

Social Return on Investment

A detailed description of the calculations for the input, output and outcome for the evaluation and forecast can be seen in the following section. All values are consistently shown in DKK to make it easier for the reader to compare and comprehend the values. The values listed on the input side have not been converted from Nepalese Rupees (NPR), since the donations were given in DKK and the volunteers were Danish. On the outcome side however, the women's income increase, school- and alcohol expenditure has been converted from NPR to DKK using the same exchange rate of 17.26 (100 NPR = 5.46 DKK) which was the exchange rate at the last day in the period covered by the financial statements 30-06-2020¹⁴.

Input

Input is defined as all resources used to operate the organisation and its programmes for a given period – in this case 2019/2020. Concrete inputs consist of financial donations (these include salaries for employees, administration costs and other operating expenses) and time invested by volunteers. As noted earlier are the numbers based on data from 2019/2020, and expenditures and volunteers time corresponding to four months are added because the programme is 16 months long.

The volunteers time is based on a survey of the current volunteers. They spend on average 8 hours a month volunteering for WAWCAS corresponding to a total of 1,920 hours over 16 months. The hourly value in DKK of voluntary work is based on educational level.

Table 3 – Input in 2019/2020

Type of input	Input (DKK)	Input – PPP adjusted* (DKK)
Financial donations spent in Denmark over 16 months	808,000	808,000
Financial donations spent in Nepal over 16 months (PPP adjusted) *	1,130,667	4,062,022
Volunteers' time	370,276	370,276
Total input	2,308,943	5,240,298

**Operating cost spent in Nepal has been multiplied with 3.59 to adjust for price differences between Denmark and Nepal¹⁵. PPP includes both differences in exchange rates and differences in purchasing power. The three times is the difference in purchasing power after differences in exchange rates has been considering.*

Output

The output is a quantitative statement of the number of activities and people directly involved in WAWCAS in 2019/2020. In this analysis, the volunteers and the women make up the output. Other stakeholders like the women's children and their families also experience effects. These are accounted for as increases in school expenditure, reduction in alcohol expenditure and reduction in medical expenditure and they have an influence on the women's well-being. In the section "Other value creation", these effects are described. The total output of the WAWCAS Program is described in table 4.

Table 4 – Output of the WAWCAS Programme in 2019/2020

Output 2019/2020	
Number of women who completed the programme during 2019/2020	470
Number of businesses created	470
Number of volunteers	15

Outcome

The outcome is the substantial effect the program has had on the stakeholders. This is where a monetary value is assigned to the output. In this analysis, the outcome falls in two parts as mentioned earlier: An evaluation, where the development of each woman has been tracked individually and a forecast of the estimated outcome 5 years after they entered the programme. All the effects are monetarily valued, and these valuations are decomposed into two parts:

- The financial values: consist mainly of the income increase experienced by the women. In addition, does the values consist of reductions in expenditures used on alcohol and medicine and increases in expenditures used on children's education.
- 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 Bank¹⁶. These values are results of a large national survey, 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 women's increased well-being.

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, which would have taken place without the project. This is deducted since it cannot be assigned to the programme'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 WAWCAS program that might have occurred on its own or due to other factors outside the programme.

Outcome for the women

Due to their participation in the WAWCAS Program the women experience a variety of different effects. This section describes the financial and social values experienced by the women who entered the WAWCAS program in 2019/2020.

FINANCIAL OUTCOME

The financial values experienced by the women in the programme are listed in table 5.

Table 5 – Financial outcomes experienced by the women

Values experienced by the women which can be monitored monetarily
<ul style="list-style-type: none">• Increase in income.• Reduction in alcohol expenditures.• Reduction in medical expenditures.• Increase in expenditures spend on their children's education.

The calculation of the women's income increase is based on the increase in the women's household monthly balance, which are the household's total expenses deducted from the household's total income. The calculation of the household balance does not include the WAWCAS businesses. Therefore, the women from Lamjung, Tanahu, and Lalitpur have been asked to state the net income of their businesses, which is the expenses of a business subtracted from the income of a business. The net income from the WAWCAS businesses is added to the household balance to find an overall measure of the women's financial well-being. The increase in the overall financial well-being is used as an approximation for the women's income increase.

The women from Kathmandu have businesses, such as restaurants, where they have a hard time distinguish their personal finance from the finance of their businesses, because their consumption of foods is not divided in private and in business. The finance of their business is therefore so close related with their personal finance, that the proper measure of their overall financial being is the household balance. Therefore, the balance alone makes up the overall financial well-being of the women from Kathmandu and thereby their income increase.

As the women begin to earn money, they earn more respect from their husband and learn how to keep record of unnecessary spending. This reduces alcohol expenditure significantly, thus the reduction in alcohol expenditure is calculated as a positive outcome created by WAWCAS in this analysis. In addition, the reduction in medical expenditures is converted to a positive income because it indicates that the women's health has been improved.

Table 6 – Financial outcome for the women

Value	Number of women	Annual value per woman (DKK)	Total value for 16 months (DKK)
Income increase	470	27,132	13,935,321
Reduction in alcohol expenses	470	285	133,936
Reduction in medical expenses	470	244	114,447
Increase in school expenses	470	96	45,070
Total financial value			14,228,773

SOCIAL OUTCOME

In addition to the income increase, the women also gain personal well-being effects by participating in the programme. These effects have been identified through interviews with some of the women and the data collected on all the women before and after participation in the programme. The monetary value of the well-being effects is based on estimations from the Social Value Bank¹⁷. The values used from Social Value Bank in the analysis are presented in table 7. In addition, table 7 shows which women who is assumed to experience the different social values.

Table 7 – Overview over social well-beings experienced by the women

Social value	Based on
Self-employment	Number of women who sustain their businesses
Employed parent for children (11-15)	Number of women who sustain their businesses
Able to obtain advice locally	The women who complete the programme
High confidence	Number of women who sustain their businesses
Good overall health	An average of the women who have lowered their medical expenses, the women who have lowered their alcohol expenses, and the women who have good nutrition and sanitation habits at the end of the programme.
Feel in control in life	Number of women who sustain their businesses
Can rely on family	Number of women who states that their husbands are either "supportive" or "participating" at the end of the programme
Financial comfort	Number of women who sustain their businesses
Member of social group	The women who complete the programme

The values from table 7 have been PPP adjusted in the same manner as the financial input. Here it is assumed that Denmark and United Kingdom have the same purchasing power. The calculations of the gross social values experienced by the women are presented in table 8. The value is calculated for 12 months, since the effects do not occur immediately after the women have entered the programme.

Table 8 – Social outcome for the women

Value	Number of women	Annual value (GBP)	Annual value PPP adjusted (DKK)	Total value created for 16 months (DKK)
<i>Self-employment</i>	470	11,588	26,463	12,437,829
<i>Employed parent for children (11-15)</i>	470	1,700	3,882	1,824,642
<i>Able to obtain advice locally</i>	470	2,457	5,612	2,637,408
<i>High confidence</i>	470	13,080	29,872	14,040,013
<i>Good overall health</i>	376	20,141	45,996	17,286,716
<i>Feel in control in life</i>	470	15,894	36,297	17,059,763
<i>Can rely on family</i>	393	6,784	15,493	6,088,880
<i>Financial comfort</i>	470	8,917	20,364	9,571,073
<i>Member of social group</i>	470	1,850	4,224	1,985,301
Total		82,411	188,205	82,931,627

Note: The women included in the data from 2019/20 all have a business.

DEDUCTIONS

Last step in the calculation of the net value creation is risk adjustments. These adjustments are used to consider the effects of the WAWCAS programme that might have occurred on its own or due to other factors outside the programme. The following is an evaluation of 2019/2020, thus there is no drop-off here. In general, deadweight on 50% is used, because the chance for these women to find help like the one they have received at WAWCAS is quite low. The 50% is deducted because it is likely some women will experience only a part of the well-being effects and some might not experience them at all.

However, a few of the values have been assigned a different deadweight based on the survey data collected throughout the programme. The deadweight and what they are based on is presented in table 9.

Table 9 – Deadweight for specific values and what they are based on.

Value	Deadweight	Based on
Income increase	6%	The increase in household expenditures for the poorest 20% of the population in Nepal, living in rural areas ¹⁸ .
Reduction in alcohol expenses	0%	There has been no deadweight deducted because it is not likely that there would have been any reduction in alcohol expenditures if WAWCAS had not existed.
Reduction in medical expenses	0%	No deadweight because it is not likely that there would have been any reduction in medical expenditures if WAWCAS had not existed.
Increase in school expenses	0%	No deadweight has been assigned to this value because it is not likely that the women would have increased their school expenditures if WAWCAS had not existed.
Self-employment	50%	50% is an estimate that Lind Invest has taking into account according to a prudence concept, whenever Lind Invest is not able to find data and facts to substantiate the experience. It is likely some women will experience only a part of the well-being effects and some might not experience them at all.
Employed parent for children (11-15)		
Able to obtain advice locally		
High confidence		
Feel in control in life		
Financial comfort	57%	An average of the share of women, who had no alcohol expenditures at the first measure – four months in the programme, the share of women who had good sanitation four months in the programme, and the share of women who had good nutrition four months in the programme*
Good overall health		
Can rely on family	80%	The share of women who reported that their husband was either supportive or participating at the beginning of the programme.

**The surveys and measures on alcohol expenditure, good sanitation and good nutrition has not be collected at the beginning of the programme. The first surveys on these matters have been collected by WAWCAS at Milestone 3 equalling four months into the 16-month long programme. Therefore, the measures a quite conservative and do not include all impact, as a lot of the impact on the women appears in the first four months in the preparation phase.*

All the values in the evaluation have been deducted with 10% as attribution. This is because the Nepalese women are still under influence from their surroundings, when they participate in the programme. Therefore, some of the changes can be due to other people and organisations than WAWCAS. But the amount contributed by others is likely to be quite small due to their previously poor living conditions.

As shown in table 10, the net outcome value created in the WAWCAS programme during the 16 months is DKK 46,686,570.

Table 10 – Calculation of net outcome

Value	Number of women	Gross value	Dead-weight	Attribution	Net value created in DKK (16 months)
Income increase	470	13,935,321	6%	10%	11,788,913
Reduction in alcohol expenses	470	133,936	0%	10%	120,542
Reduction in medical expenses	470	114,447	0%	10%	103,002
Increase in school expenses	470	45,070	0%	10%	40,563
Self-employment	470	12,437,829	50%	10%	5,597,023
Employed parent for children (11-15)	470	1,824,642	50%	10%	821,089
Able to obtain advice locally	470	2,637,408	50%	10%	1,186,834
High confidence	470	14,040,013	50%	10%	6,318,006
Good overall health	376	17,286,716	57%	10%	6,725,678
Feel in control in life	470	17,059,763	50%	10%	7,676,893
Can rely on family	393	6,088,880	80%	10%	1,107,658
Financial comfort	470	9,571,073	50%	10%	4,306,983
Member of social group	470	1,985,301	50%	10%	893,386
Total					46,686,570

NB: The 50% deadweight and 10% attribution are estimates that Lind Invest has taking into account according to a prudence concept, whenever Lind Invest is not able to find data and facts to substantiate the changes.

In the following diagrams, the changes the Wawcas women has achieved in the programme are compared with a control group. The control group is based on a report from United Nations Development Programme from 2016-2017¹⁹, where data has been extrapolated to 2019-2020, because no new report has been published. The UNDP data covers only “before” and “after”, therefore the graphs on control groups are linear.

Figure 5 - Changes in annual school expenditure (total for one woman (NPR))

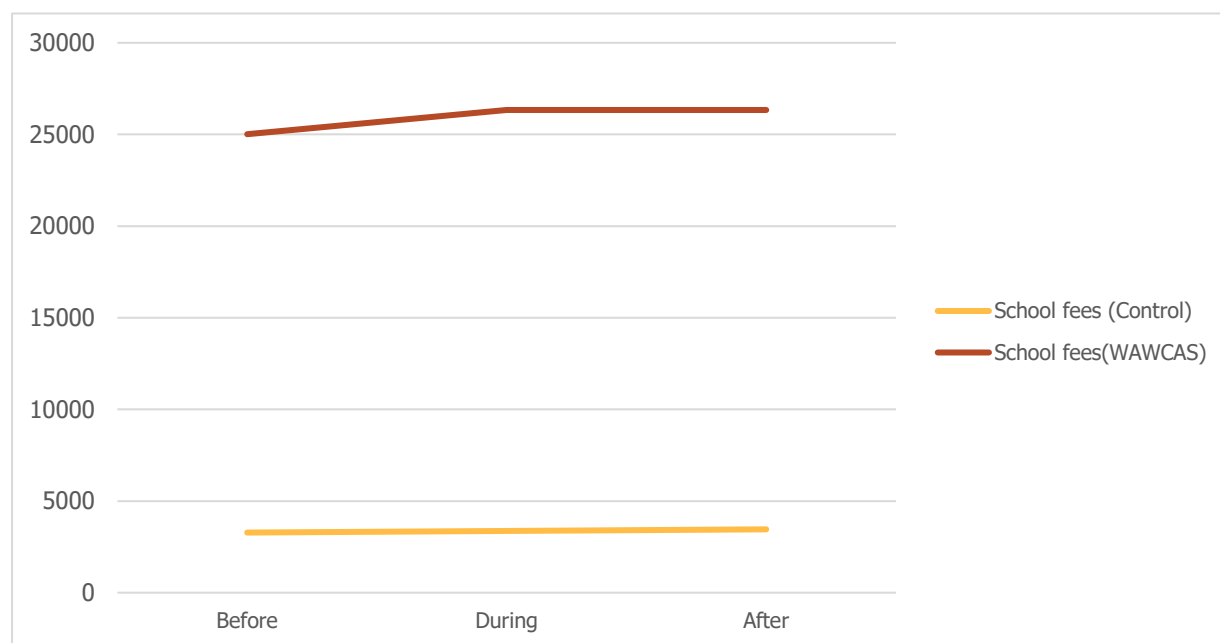


Figure 6 - Changes in annual medicine expenditure (total for one woman (NPR))

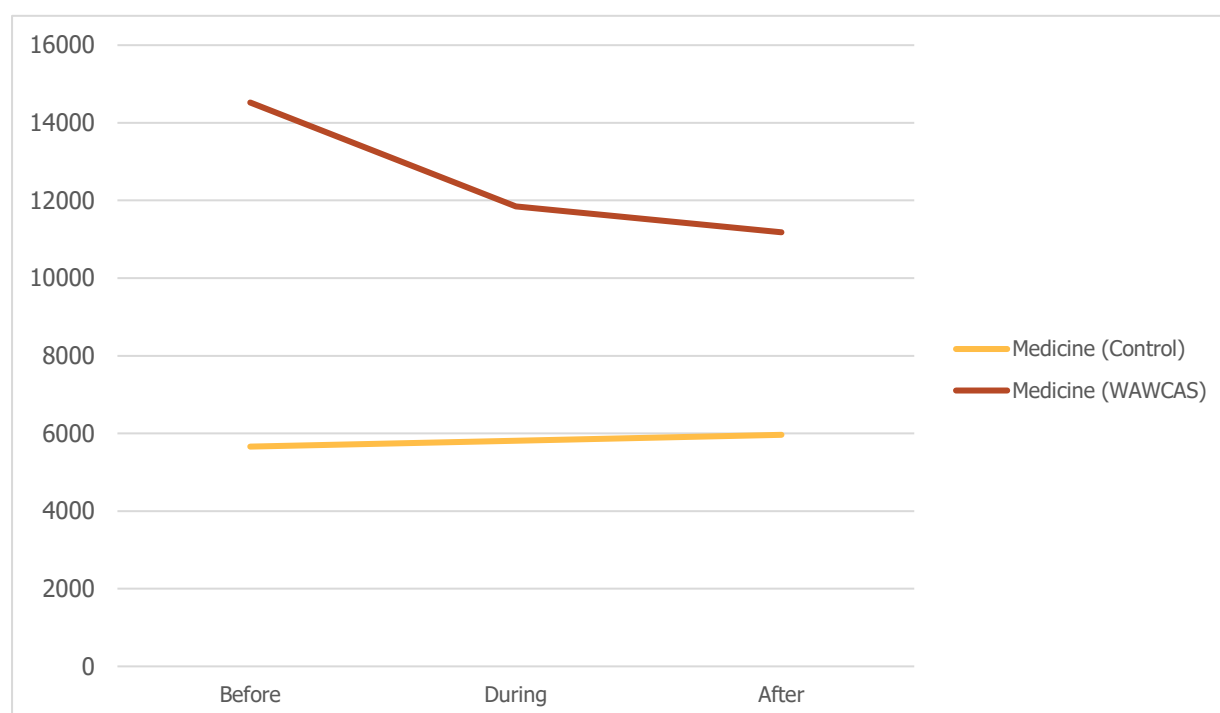


Figure 7 - Changes in annual alcohol expenditure ((total for one woman (NPR))

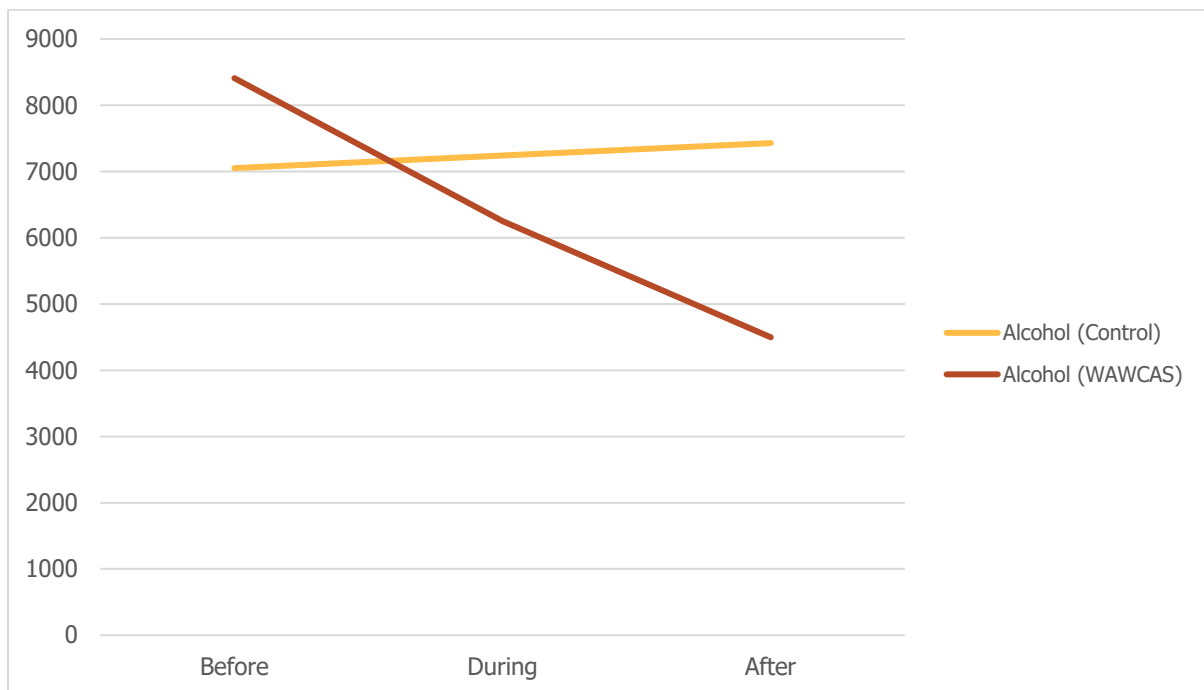
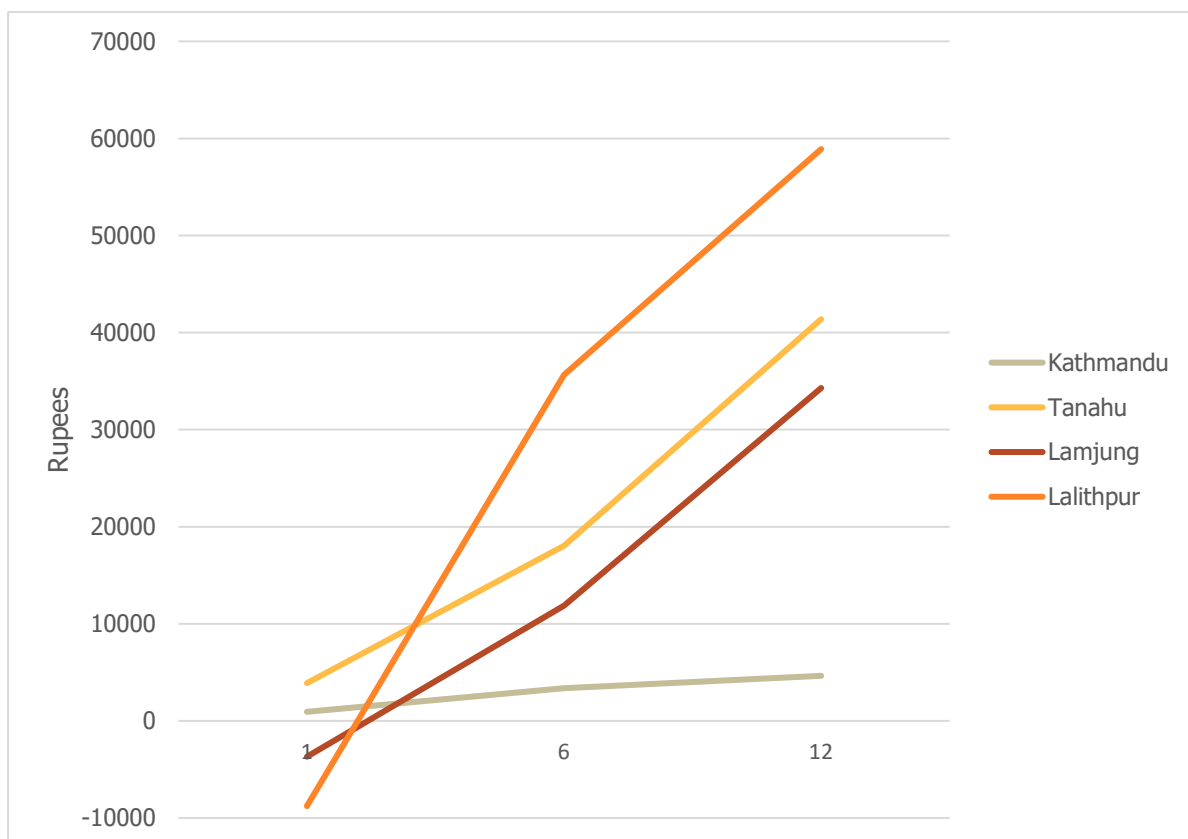


Figure 8 - Development in monthly financial well-being in the four areas (average for one woman (NPR))



Outcome for the volunteers

Volunteers experience positive well-being effects of doing voluntary work. Data is based on Social Value Bank's²⁰ value estimation of doing voluntary work for at least a month.

Table 11 – Outcome for volunteers

Value	Number of volunteers	Value (GBP)	Value (DKK)	Total value (DKK)
Regular volunteering	15	3,249	26,655	399,826

DEDUCTIONS

Because 80% of the respondents say that they would have volunteered for another organisation if WAWCAS had not existed, this share of the value has been deducted as deadweight, because it would have happened anyway. Furthermore 20% was volunteering in another organisation at the same time as they volunteered for WAWCAS. Therefore, further 20% is deducted as attribution from the value remaining after the deadweight has been deducted.

Value	Number of volunteers	Gross value	Deadweight	Attribution	Net value created (16 months)
Regular volunteering	15	399,826	80%	20%	63,972

Changes to the women's spending pattern

WAWCAS collects thoroughly data on the development in the women's spending pattern. During the programme, Local Programme Leaders collect data five times on the participating women by surveying them. Table 13 shows the changes in the overall spending pattern from the first month of the implementation phase (month 4) of the programme and until the last month of the implementation phase (month 15). The development in spending on alcohol, school, and medicine was previously described in the calculations. The rest of the changes in spending pattern is elaborated on in this section.

Unnecessary spending

During the programme WAWCAS educates the women in financial management and how to keep record of unnecessary spending. In this process the women become more aware of how they spend their money. They learn how to balance their spending with their needs, so they do not buy more than they need. This new awareness of their personal economy leads to many of the decreases in expenditures in table 13. The table also shows an increase in the category 'purchase', which accounts for the money the women spend on buying things and inventory for their businesses. This is positive because it shows that the women invest more money in their businesses.

Nutrition

WAWCAS educates the women in many subjects including nutrition. They learn about the benefits of using seasonal foods and consume home cooked food instead of eating out. This causes the decreases in the women's expenditures on food and meat during the programme. In addition, the women learn about how to consume a balanced diet, which explains the increase in spending on fruits.

Covid-19

Due to the outbreak of coronavirus, it has not been possible to organise festivals, which can explain the large decrease in spending on festivals. The virus may also have affected some of the other categories because during lockdowns all public movement outside of home except from seek of medical attention or purchase of essential food was prohibited.

Table 13 - Development in the women's spending pattern

Category	Percentual change
Alcohol / tobacco	- 47%
Clothes	- 25%
Cosmetics	- 30%
Educational/School Expenditure	5%
Entertainment	- 47%
Festivals	- 42%
Food	- 11%
Fruits	14%
Guest expenses	- 30%
Meat	- 5%
Medicine	- 23%
Others	- 39%
Purchase	33%
Rent	- 13%
Telephone	- 40%
Transportation	- 18%
Utilities	0%

Forecast

A forecast is an attempt to project all the outcomes achieved in the evaluation into the future. This means that a forecast is based on assumptions, which makes the result more uncertain than the results from the evaluation. In this analysis it is assumed that the women will sustain their business for minimum four years after the programme has ended which also means that they will experience some of the effects four years after the programme.

When calculating the effects of a programme, it is also important to consider potential factors that can decrease the value of the outcome in the following years. In the previous reports this effect has been based on surveys carried out among women who completed the WAWCAS Program in 2012-2013. However, due to coronavirus it is not likely that the women completing the programme in 2019/20 will have the same development due to lockdowns and other things. Therefore, this year the number of women who is part of WAWCAS' help package is used as an approximation for the share of women who will not maintain the effects of the programme. This share is called drop-off. The number of women from 2019/20 who is part of the help package corresponds to 12% of the women who completed the programme, and this share is used as drop-off. Deadweight and attribution remain the same as in the evaluation period.

When the drop-offs are added to the calculation the net value creation ends up as presented in table 14.

Table 14 – Forecast values

Value	Number of women	Gross value (12 months)	Dead-weight	Attribution	Drop-off	Net value created in DKK (12 months)
Income increase	470	10,278,864	6%	10%	12%	7,769,395
Reduction in alcohol expenses	470	100,452	0%	10%		90,407
Reduction in medical expenses	470	85,835	0%	10%		77,252
Increase in school expenses	470	33,802	0%	10%		30,422
Self-employment	470	9,328,372	50%	10%	12%	3,688,676
Employed parent for children (11-15)	470	1,368,482	50%	10%	12%	541,133
Able to obtain advice locally	470	1,978,056	50%	10%	12%	782,174
High confidence	470	10,530,010	50%	10%	12%	4,163,835
Good overall health	376	12,965,037	57%	10%	12%	4,432,508
Feel in control in life	470	12,794,822	50%	10%	12%	5,059,399
Can rely on family	393	4,566,660	80%	10%	12%	729,994
Financial comfort	470	7,178,305	50%	10%	12%	2,838,485
Member of social group	470	1,488,976	50%	10%	12%	588,779
Total		72,870,300				30,792,459

The value creation presented in table 14 is measured for a period of 12 months. The value created for one year corresponds to DKK 30,792,459.

See table 9 for what the deadweight are based on. It is estimated that the women in the following years will experience 44% of the income increase that they experienced during the first year, when they were in the WAWCAS Program. This is because it is not realistic to assume that the women will experience an equally large income increase in the years after the programme has ended, since they in the first year went from no business to establish and develop one. The number is based on a similar programme in Nepal²¹. Therefore, it is assumed, that it is more likely that their income will

have a slower growth in the following years. The estimated income increase is 44% of the increase in the evaluation period deducted 6%. Every year this income increase is deducted an additional 6%, because it is assumed that the control groups' income grows with this percentage every year²².

Table 15 – Additional income increase in the years after the program

Year	Additional income increase
Year 2	3,337,447
Year 3	3,137,102
Year 4	2,948,784
Year 5	2,771,770

The value of these income increases is added to the forecast value per year presented in table 14.



Calculating the SROI ratio

The SROI ratio is a metric that shows how much value is generated in DKK for every 1 DKK of value put into the project. The ratio falls in two parts: One for the evaluation, where the ratio shows the immediate value that has been created when the women finish the training programme, and one for the forecast which estimates the value creation 5 years after the women began the WAWCAS Program.

CALCULATION OF THE EVALUATION

The total input spent on the women in the evaluation part (the programme period) is DKK 5,240,298 and the outcomes are DKK 46,750,542.

Calculation of SROI ratio in the evaluation: $\frac{46,750,542}{5,240,298} = 8.92$

CALCULATION OF FORECAST 5 YEARS AHEAD

As shown above in the calculations, the total input is still DKK 5,240,298, since no input is spent on the women after they leave the WAWCAS Program.

The outcome is the sum of the forecast value after deductions and the value from the evaluation deducted 4 months value. The evaluation value has been deducted 4 months to illustrate the annual value creation to calculate the five-year time horizon. This makes up a total outcome on DKK 170,427,844.

Calculation of SROI ratio in the forecast (year 5): $\frac{170,427,844}{5,240,298} = 32.52$

The return can be adjusted for risk by calculating the sharpe ratio. Nepal is a country with a high country-related risk, where natural disasters and political uncertainties have a high risk of occurring. The basis for the calculation of the risk is OECD's Country Risk Classification.²³ If this country-related risk is incorporated in the calculation of a sharpe ratio along with financial risk, organisational risk and dependency on Lind Invest, it gives a Sharpe ratio on 22.98.

This means that even after adjusting for risk WAWCAS still creates a value that is 23 times higher than their input over a 5-year period.

Another measure is the annualised return that is calculated as $\left(\frac{\text{Final value}}{\text{Starting value}}\right)^{\frac{1}{N}} - 1$.

Incorporating this measure in the analysis gives an annualised return on 1.01, which means that the programme generates a return on 101% every year over the five-year period.

Table 15 – Results of SROI calculations

Measure	Value
SROI ratio, evaluation	8.92
SROI ratio, forecast	32.52
Sharpe ratio	22.98
Annualised return	1.01

Sensitivity analysis

The forecast is based on assumptions and with assumptions comes uncertainties. These are elaborated in appendix 2. In addition, this paragraph presents different sensitivity analyses that examine how changes in the assumptions affect the SROI ratio. This gives an idea of the ratio's sensitivity in different scenarios.

DURATION OF EFFECTS

Data on women who earlier have completed the programme indicates that most of the women are still in business 4 years after they have completed the programme²⁴. Because of this, the analysis is based on a duration of 5 years, including the evaluation. However, it is possible that the effect last for even longer, or that the women who completed in 2019/2020 will not sustain their positive development due to Covid-19. Table 16 shows the impact on the SROI ratio given the assumed duration of the effects.

Table 16 – Duration of effects

Number of years	1	3	5	7	10
Duration of effects	8.92	21.91	32.52	45.24	64.11

THE WOMEN'S INCOME INCREASE

The analysis assumes that the women increase their income by 44% each year after the programme has ended. This is based on findings from a similar project in Nepal, where they have tracked the income development of similar women²⁵. Table 17 shows how the SROI ratio is affected if the assumed percent of income increase changes. As illustrated, changing the annual income increase does not have a large impact on the SROI ratio. This is because the financial values constitute a relatively small share of the total SROI compared to the well-being effects.

Table 17 - Income increase each year in percent

Percent Income increases each year (in forecast)	0%	25%	44%	75%	100%
Income increases each year (in forecast)	30.20	31.52	32.52	34.17	35.50

WELL-BEING EFFECTS

The analysis assumes that almost 50% of the 470 women experience the full well-being effects for five years based on the values from the Social Value Bank. As seen in table 18, the percentage of the women who experience the well-being effects has a significant effect on the SROI ratio. This is due to the relatively large share of the total SROI ratio that the well-being effects constitute compared to the financial values. Highlighted percent and ratio is the calculated ratio.

Table 18 - Percent who experience well-being effects

Percent who experience well-being effects	30%	40%	50%	60%	70%
Ratio	25.60	29.06	32.52	35.99	39.45

NUMBER OF WOMEN WHO STILL EXPERIENCE WELL-BEING EFFECTS AND INCREASES IN INCOME AFTER FIVE YEARS

In the analysis, it is assumed that 88% of the 470 women still experience an increase in income and well-being effects five years after the programme began and that the full well-being effects for 50% of the women also last five years. This drop-off is based on the number of women from the 19/20 programme who have applied for WAWCAS' help package. Table 19 illustrates what happens to the SROI ratio if less or more women sustain their development (and thus their income and the well-being effects) in the forecast period (year 2 to 5). This means that the effect documented in the evaluation is kept.

Table 19 - Percent who sustain their business for 5 years

Percent who sustain social values and income increase after 5 years	25%	50%	75%	88%	100%
Ratio	15.81	22.46	29.10	32.52	35.75

Other value creation

Throughout the analysis it has become clear that WAWCAS creates more value than measured monetarily in the analysis. Especially, the families of the participants experience many positive effects from the programme, which are not considered in the analysis. The women's participation in the WAWCAS Program is considered to have improved the living conditions for many close relatives involving children, husbands and other family members.

BETTER EDUCATION AND JOB OPPORTUNITIES FOR THE CHILDREN

A positive effect is the increase in children's education level caused by the women's participation in the WAWCAS Program. Results from WAWCAS show that all the participants' children have attended school regularly after their mother joined the programme. Back in 2008, the WAWCAS children's school attendance increased substantially when their mothers entered WAWCAS. It is now mandatory for children to enrol in school. Thus, this measure is no longer as valuable. Instead, WAWCAS now measures how often the enrolled children actually attend school and if they continue to do it on a regular basis after exiting the WAWCAS Program. The problem of infrequent school attendance specifically lies with the children in secondary school, in Nepal defined as above 12 years of age. The national average school attendance in this age group is under 20% for both boys and girls, and therefore this is a particularly vulnerable group, which is necessary to prioritise. In WAWCAS around 40% of the total number of children are in secondary school. Taking a randomised subsample of 107 school going children from the four districts WAWCAS works in, data shows that 100% of secondary students are still in school, and answer that they 'always' go to school. The measure 'always' here refers to "Every day except when he/she is sick or there is a death in the family."

During the programme there has been an increase of approximately 5% in school expenditure, this increase is 10% lower than the previous year. Figure 5 illustrates the increase, also illustrated is that the WAWCAS women had significantly higher school expenditures than the control group. The control group is based on a report from United Nations Development Programme from 2016-2017, where data has been extrapolated to 2019-2020, because no new report has been published. In the recent years there has been a general increase in household expenditures on schooling, and this makes WAWCAS' impact on school expenditure smaller. This tendency is not included in the extrapolation of the education expenditures but can explain why the increase is not bigger. In addition, Nepalese children can only change school in April; thus, many children are moved to better schools after their mothers have left the WAWCAS program. This can partly explain why the change in school expenditures is relatively small during the programme.

The increase in school expenditures has a positive impact on the quality of the children's education. Furthermore, will the requirement that all children must attend school regularly increase the quality of education because the children will benefit more from their education if they attend school more frequently. This will increase the children's skills, which increase their chances of getting a good job and income in the future. The value of better education also affects society in general as the future workforce becomes more educated and the general wealth level will rise correspondingly. The size of this impact is not possible to measure because it is very difficult to estimate the future value of education and because the total number of children is unknown.

Especially education of girls has the potential to have a huge positive effect on society. An analysis made by Citi in 2020 shows that if all girls in several Asian and African countries complete upper secondary school, then the countries will experience a lift in GDP on between 4% to 20% in 2030 and when accounting for cost it gives an average Return on Investment (ROI) of 2.8 by 2030. By

demanding that participating women send their children to school WAWCAS in the long run contribute to Nepal's GDP.²⁶

WAWCAS's vision, as a part of the four-year strategy, is to enhance the focus on children, also in relation to data collection. WAWCAS, therefore, will analyse if the tendencies in the subsample are representing WAWCAS children overall.

LESS VIOLENCE AND ABUSE

The data registrations show that the women have reported a decrease in violence by in-laws and husband, local society, (both mental and physical violence) during the programme. However, the decrease is relatively small. Several factors influence the data collection on violence when interviewing the women. Firstly, violence is a sensitive issue, and the women are not comfortable speaking about it to others. Therefore, many of the women will not tell if they experience violence at home when first asked, but later in the programme they will feel more secure and comfortable in the programme and with the trainers, therefore, the likelihood of telling and sharing experiences on violence to the trainers is higher.

Another factor is, that the women have one comprehension of violence and are during the programme taught in what violence is. Thereby, they develop a broader understanding of it. This makes the women more aware of what violence is or can be, such as mental violence, which results in that more women report violence.

These factors result in that fewer women register violence in the beginning of the programme and more women talk about their experiences with violence in the end of the programme. The data therefore reveals very small changes in violence experiences by the women in their homes.

The women's and the trainers' increased consciousness about violence is positive because it makes the women more aware of their rights and what is not acceptable behaviour.

In addition, positive changes in violence do happen during the programme. WAWCAS' interviews with some of the first groups of women who finished the programme 7-8 years ago show that these women experience less heavy physical violence after the programme. These effects are not revealed as strongly in the data for the women from 2019/2020 due to above-mentioned factors.

The data on the women, who finished the programme 7-8 years ago, also indicates that most of the women have experienced a more supportive attitude from the husband. Also, these women indicate that the women feel more independent and more respected by their husbands, families and the local community.

The increased respect can result in less violence and this effect is assumed to be caused by the programme and the network that the women become a part of through the WAWCAS Program. It is likely that the women who finished in 2020 will experience a similar effect in the longer run.

SUPPORTIVE NETWORK

The WAWCAS network is a strong community where the women continue to support each other's business and help fight social injustice like violence. Most importantly, this network continues to exist after the women have left the programme and this helps them to sustain the positive development in the future. They work together and learn to support each other in struggles. This is assumed to affect the women positively both physically and mentally as well as it improves the health of the husband and children. 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 that are not accounted for.

VOLUNTEER'S SKILLS AND FUTURE OPPORTUNITIES

As mentioned in the analysis, the outcome for the volunteers is only measured and calculated as increased personal wellbeing. It has been documented that volunteering causes many other positive effects²⁷. The working experience is assumed to have a positive outcome for the volunteers' career opportunities and other positive effects such as happiness, social skills, and improved health condition brings additional value to the individuals, which is not accounted for in the analysis.

LOCAL COMMUNITY

The local community such as authorities and other businesses benefit from the women's businesses due to higher employment and additional sales. Furthermore, experiences show that around 80% of the women ends up starting one or more businesses in the years after the programme has ended. The new businesses also effect the local community through additional sales and raises the employment further. This raises in income and social well-being for the people that gets employed. The women who have completed the programme 7-8 years ago has also arranged activities in their local community such as starting a youth club, starting a monthly cleaning campaign in their local community and organising events on Women's Day. It is likely that the women completing this year will take similar initiatives when the pandemic allows it. The value of these impacts is complex to estimate and would be subject to high uncertainty and is therefore not included in the analysis. Collecting data on the local community is a huge task that would require many resources. Furthermore, a lot of other factors influence the local community, so even if it were possible to collect data on the local community it would be nearly impossible to document whether the effects are due to WAWCAS or due to other factors. The SROI ratio would be higher if these effects could be estimated.

Conclusion

WAWCAS creates a positive sustainable value for the participants in the programme and the volunteers in the organisation. This is created through the unique programme that empowers women, builds businesses, reduces social problems and secures education for the participants' children. The WAWCAS Program lasts 16 months and calculating the SROI ratio for the programme in 2019/2020 gives a SROI ratio on 8.92. This means that for every 1 DKK invested in input, 8.92 DKK is created in value. These effects are quite certain because they are based on data collected by WAWCAS. However, it is expected that the effects last for five years, which gives an SROI ratio on 32.52. This means that for every 1 DKK invested in input, 32.52 DKK are created in value in a five-year period. These effects are more uncertain than the value from the evaluation because it is based on a range of assumptions.

Value is composed of an increase in net income and balance between income and expenses for the women in the programme, school attendance for their children, reductions in alcohol expenditure and reductions in medical expenditure. The value is also composed of social values, as higher confidence, member of a social group and increased financial well-being. Moreover, WAWCAS' volunteers experiences increased personal well-being which is included in the SROI ratio. Table 20 summarise the values created for the women in the programme and the volunteers in WAWCAS.

Throughout the analysis process, it has become clear that WAWCAS creates many additional values that are not accounted for in financial terms. These effects count better social conditions for the families, less violence, and a supportive network for the women. The local community also experiences a positive development, because the women's businesses create additional trade and raises employment. On the long run the local community experiences a positive development as more children receive better education.

It is also important to consider the sheer number of beneficiaries who has participated. In 2019/2020, 470 women experienced a significant improvement in their standard of living and overall quality of life. Furthermore, several family members and children benefit from the WAWCAS Program.

This report is like the 2020 report in numerous ways: data have been collected with the same approach and the same data measures are used, as well as the calculation methods are to a great extent the same. But some changes have been made. In this year's report drop-off is based on another type of data. This report covers a substantially smaller number of women compared to the 2020 report, because during the pandemic fewer women have been able to complete the programme.

The calculations are influenced by numerous assumptions and uncertainties. These are challenged in the section "Sensitivity analyses" and accounted for in appendix 2 "Assumptions and measurement uncertainties". Having assessed these, the conclusion is sustained and the SROI ratios of 8.92 and 32.52 are considered conservative estimates of the value WAWCAS creates. This underlines the positive impact WAWCAS has on their target group and society in general.

Table 20 - Overview of the values created by WAWCAS in 2019/2020

	Social values created	Total social value created (DKK)	Financial values created	Total financial value created (DKK)
The women	<ul style="list-style-type: none"> - Self-employment. - Employed parent for children. - Able to obtain advise locally. - High confidence, - Feel in control of life. - Can rely on family. - Financial comfort. - Member of social group. 	117,259,101	<ul style="list-style-type: none"> - Increase in financial well-being. - Reduction in alcohol expenses. - Increase in school expenditure. - Reduction in medical expenditure. 	49,715,360
The Danish volunteers	<ul style="list-style-type: none"> - Regular volunteering. 	63,972	None	0

Table 21 – Results of SROI calculations

Measure	Value
SROI ratio, evaluation	8.92
SROI ratio, forecast	32.52
Sharpe ratio	22.98
Annualised return	1.01

Appendix

Appendix 1: Impact map

Step 1		Step 2			
Stakeholders	Change	Inputs		Outputs	Outcome
The participants	<ul style="list-style-type: none"> Opportunity to improve life, establish business, provide for the family and secure education for children. Chance to get a better quality of life. 	Time (not included)	0 DKK	<ul style="list-style-type: none"> 470 women finishing the programme 	Increase in income
					Reduction in alcohol expenditure
					Reduction in medical expenditure
					Increase in expenditures spend on their children's education
					<i>Self-employment</i>
					<i>Employed parent for children (11-15)</i>
					<i>Able to obtain advice locally</i>
					<i>High confidence</i>
					<i>Good overall health</i>
					<i>Feel in control in life</i>
					<i>Can rely on family</i>
					<i>Financial comfort</i>
					<i>Member of social group</i>
Volunteers	They help run the WAWCAS Programme	Time	370,276 DKK	<ul style="list-style-type: none"> 1,920 hours 	<i>Regular volunteering</i>
Donors	Contribute with financial input to secure the existence of the WAWCAS Programme	Donations	4,870,022 DKK	<ul style="list-style-type: none"> 470 women and their families helped 	None

Step 3							
Stakeholders	Indicator	Number	Uncertainty	Type of indicator	Value per unit (DKK)	Source	Yearly gross value (DKK) (PPP adjusted)
The participants	Increase in income	740 women	The social values are based on data from UK. To be able to use these values in Nepal, the values have been converted from GBP to DKK and adjusted for Purchase Power Parity (PPP) to control for the different prices of goods, services etc. in Nepal. Furthermore, the data from UK was collected in 2018, but this is not expected to have changed significantly.	Data from WAWCAS	27,132	WAWCAS	13,935,321
	Reduction in alcohol expenditure	470 women			285		133,936
	Reduction in medical expenditure	470 women			244		114,447
	Increase in expenditures spend on their children's education	470 women			96		45,070
	<i>Self-employment</i>	470 women		Social values from Social Value Bank	26,463	HACT (2018)	12,437,829
	<i>Employed parent for children (11-15)</i>	470 women			3,882		1,824,642
	<i>Able to obtain advice locally</i>	470 women			5,612		2,637,408
	<i>High confidence</i>	470 women			29,872		14,040,013
	<i>Good overall health</i>	376 women			45,996		17,286,716
	<i>Feel in control in life</i>	470 women			36,297		17,059,763
	<i>Can rely on family</i>	393 women			15,493		6,088,880
	<i>Financial comfort</i>	470 women			20,364		9,571,073
	<i>Member of social group</i>	470 women			4,224		1,985,301
	Regular volunteering	15 persons			26,655		399,826

Step 4				Step 5			
Stakeholders	Effect	Gross value	Dead-weight	Dis-placement	Attribution	Drop off	Net value
The participants	Increase in income	13,935,321	6%		10%		11,788,913
	Reduction in alcohol expenditure	133,936	0%		10%		120,542
	Reduction in medical expenditure	114,447	0%		10%		103,002
	Increase in expenditures spend on their children's education	45,070	0%		10%		40,563
	<i>Self-employment</i>	12,437,829	50%		10%		5,597,023
	<i>Employed parent for children (11-15)</i>	1,824,642	50%		10%		821,089
	<i>Able to obtain advice locally</i>	2,637,408	50%		10%		1,186,834
	<i>High confidence</i>	14,040,013	50%		10%		6,318,006
	<i>Good overall health</i>	17,286,716	57%		10%		6,725,678
	<i>Feel in control in life</i>	17,059,763	50%		10%		7,676,893
	<i>Can rely on family</i>	6,088,880	80%		10%		1,107,658
	<i>Financial comfort</i>	9,571,073	50%		10%		4,306,983
	<i>Member of a social group</i>	1,985,301	50%		10%		893,386
Volunteers	Regular volunteering	399,826	80%		20%		74,412

Note: All the total values are calculated for a period of 16 months. To see expected total outcome after 5 years, see the calculation section.

Appendix 2: Assumptions and measurement 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 WAWCAS has invested a lot of time and effort in creating a good data system where team leaders collect data on the women's development. Because of this it has been assumed that the data represents the true values. However, errors in the collection phase cannot be ruled out. If the effects reported in the evaluation are overestimated, the outcome and the SROI ratio will be lower than reported.	Data As mentioned, errors in the collection phase cannot be ruled out. If the effects reported in the evaluation are underestimated, the outcome and the SROI ratio will be higher than reported.
Effects: Long term According to interviews with former WAWCAS participants have almost all the participants continued running a business 6-7 years after they have finished the programme. The SROI analysis has been calculated under the assumption that this will be the same for this year's participants. If more businesses shut down in the five-year period, the SROI ratio will be affected negatively. But because the women who completed the programme 6-7 years ago still run the majority of their businesses, it is possible that the effect has even longer duration than assumed in the analysis. This would increase the SROI ratio.	Effects: Long term There are many uncertainties involved in predicting the future income of the participants. If the women continue to maintain their businesses and develop them, it could be expected that their incomes will increase even more over time. Furthermore, the local communities in Nepal are affected positively by the new businesses and will increase their wealth. This effect will affect other parts of the communities as multiplication effects initially caused by WAWCAS. If these effects could be measured, then the SROI ratio would be affected positively. The forecast is based on the women's development in the programme. Wawcas experiences that after the programme more women create additional business and increase their income.
Deductions The deductions made in the outcome calculation are based on assumptions and interviews with former WAWCAS participants. If the true deductions turn out to be higher, the SROI ratio will be lower than estimated in the analysis. This risk also applies to the other deadweight assigned to other outcomes.	Deductions If the true deductions turn out to be lower, the SROI ratio will be higher than estimated in the analysis.
Displacement It has been assumed that there is no displacement. If there is displacement the outcome is affected negatively and the SROI ratio will be lower.	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.

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