



KTF

**EVALUATION OF THE
KOKODA TRACK FOUNDATION'S
STRONGIM MERI BISNIS PROGRAM**

EQUITY ECONOMICS AND DEVELOPMENT PARTNERS

JUNE 2021

ABOUT EQUITY ECONOMICS

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The unique focus of Equity Economics on addressing issues surrounding inequality drives passion for inclusive growth, equality of opportunity and stronger bilateral and multilateral relationships. Equity Economics strives to bolster development and shared prosperity in our region and internationally.

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EXECUTIVE SUMMARY

The Kokoda Track Foundation's (KTF) Strongim Meri Bisnis (SMB) Project works with women's groups in remote and rural communities in Papua New Guinea (PNG) to establish and support women's small-business operations. The project aims to equip women with technical and business skills, access to start-up capital and equipment and supply chains providing them with an opportunity to generate an alternative income. SMB has evolved over time, responding to various needs presented by women's groups and external and environmental factors affecting PNG. The SMB program currently supports five women's groups in Buakap, Gabagaba, Lontis, Saiho and Kavieng. This report focuses on the activities of the first three groups.

This report is an independent evaluation of SMB, undertaken by Equity Economics and Development Partners. A mixed methods approach was employed to evaluate the program, drawing on consultations with key stakeholders, data on program outputs and relevant secondary literature. Best practice evaluation frameworks guided the choice of five criteria for analysis. These were relevance, effectiveness, efficiency, sustainability and women's empowerment. Each criterion was weighted according to its relative importance and then scored based on level of achievement.

The evaluation found that SMB's strength is its impact on women's lives, with 'women's empowerment' scoring most highly of all the criteria. It provides relevant skills that are viewed as desirable by the majority of women invited to be involved in the early training programs. The program itself is relevant to many women but significant numbers of program 'drop-outs' suggest that further exploration by KTF is required to work out why the program struggles in some communities. The program is effective, efficient and financially viable although opportunities for improvement exist through exploration of additional buyers and products. Sustainability was the lowest scoring criterion. Low profit margins and difficulty selling some products may reduce interest in the program in the long term.

Relevant to the program objectives, the program is effectively:

- Increasing access to income generating opportunities for women;
- Increasing access to education and products related to menstrual health; and
- Increasing the understanding that women can lead, organise, make money and run a successful business, thereby enhancing women's empowerment.

In order to build upon this success in future, participants must be able to generate profit through product sales. Hence, further exploration of products, buyers and associated support (including education and training) is required to maintain the positive impact on women's lives. This report makes the following recommendations:

1) Careful selection of women and communities to establish the program is needed. A key ingredient of success for future programs is identifying strong and organized women leaders and communities that are sufficiently collaborative and receptive to supporting the program. The program works better where markets are more robust and communications more reliable.

2) Closer consideration of the product and its marketability is vital. The switch to facemasks has been advantageous, with high sales and deep interest from the women's groups. There is a risk that slow sales of the pawa pack will reduce the appeal, not only of the product, but of the program in its entirety. KTF may need to consider different strategies such as further education on the pawa pack or selling the pawa pack's component parts. Seeking external subsidies for production of the pawa packs is also worth exploring. The production of soap is a potential option that has been piloted through KTF's work with women in the Kavieng prison. Women's groups could be encouraged to brainstorm one additional product which could be produced as a trial. Wider use of the sewing machines could be encouraged through permission arrangements or user fees.

3) Greater investment in identifying bulk buyers is required. This would reduce the time costs placed on women to sell the product locally. It would also increase demand and increase profits. Sustainability could also be fostered through enhanced linkages with other KTF programs which may offer ideas for market opportunities.

4) An important consideration in terms of sustainability is the way in which the groups manage their income. The ability to control the way in which income is managed is an integral aspect of empowering women through income generation. KTF should discuss with the groups the division and use of profits because if participants fail to see the benefits for their time and effort it's likely their interest in the program will wane. KTF could also explore ways to increase independence by having groups source and transport their own fabrics.



INTRODUCTION

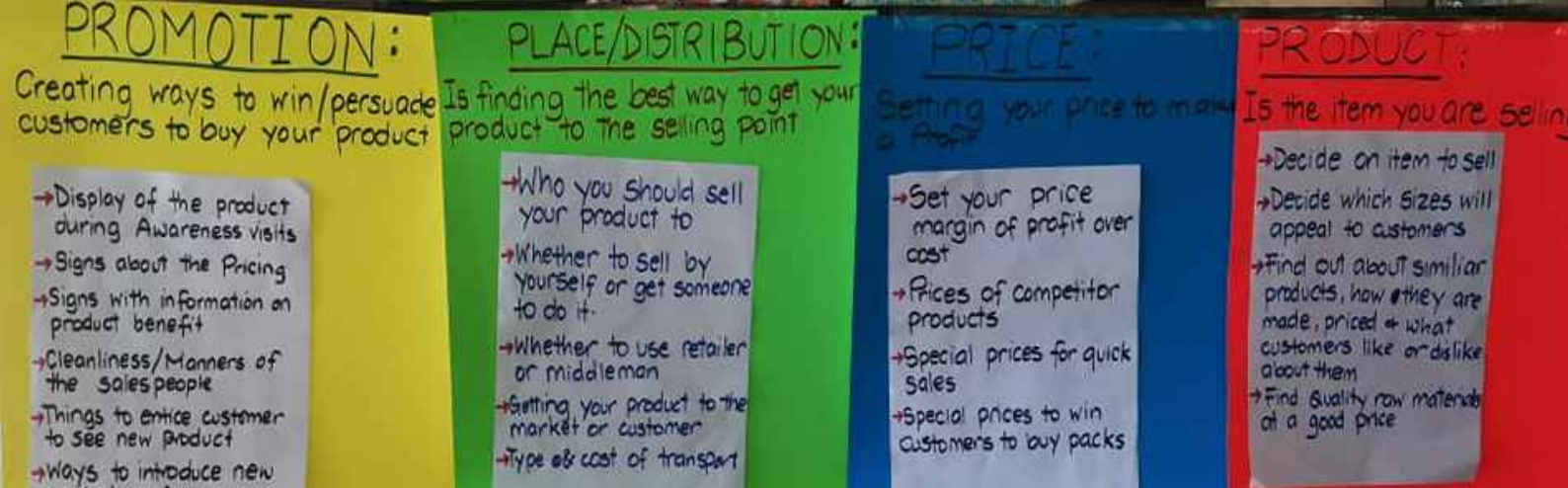
The Kokoda Track Foundation (KTF) is a not-for-profit organisation that has worked in PNG for over a decade delivering a range of projects promoting better health, education, livelihoods and leadership opportunities in 17 of PNG's 22 Provinces.

One of KTF's projects is the Strongim Meri Bisnis (SMB) Project which works with women's groups in remote and rural communities in PNG to establish and support women's small-business operations. The project aims to equip women with technical and business skills, access to start-up capital and equipment and supply chains providing them with an opportunity to generate an alternative income.

Evaluation plays a vital role in informing the design and delivery of programs that lead to better outcomes. The evaluation process helps ensure programs deliver fair, positive, and sustainable results.[1]

The intention of this evaluation is to provide insights into SMB strengths, consideration of challenges and constraints, as well as providing a discussion on possible future directions and opportunities.

[1] OECD (2021), Applying Evaluation Criteria Thoughtfully, OECD Publishing, <https://doi.org/10.1787/543e84ed-en>.



PROGRAM OVERVIEW

Program Background

Between 2009 and 2013, KTF worked with women's groups across the Kokoda Track focusing on cooking and catering services for passing trekkers. Over time, KTF revised this approach recognising that women didn't have enough time to run food businesses for trekkers as well as taking care of their family and community – particularly as the men were also busy with work along the track.

Between 2014 and 2017, KTF worked with women's groups on various solar start up initiatives that allowed women to work a few hours each week selling solar lights at the market. A lack of access to established and effective supply chains and a growing market supply by well established trade stores made it difficult for women to sell their solar products.

In 2018 KTF undertook training and capacity building with an Australian based NGO, Days for Girls. The Days for Girls model is based on women in rural and remote locations learning how to make and sell reusable female sanitary products – a concept that is relatively new to PNG. The shift to creating a women's hygiene product is based on the identification of the problems caused by not having access to such products (such as poor school and work attendance, poor hygiene, health issues and environmental impacts) and an increasing need within communities for these types of products.

The 'pawa pack' is comprised of absorbent liners, waterproof shields, soap, underwear washcloths, all held together in a drawstring bag. An image is provided in Appendix A.



KTF purchased sewing machines and fabric for several women's groups to provide them with the resources to sew female sanitary products. KTF also provided training on how to sew and market the products and also provided financial literacy training to empower the women to manage their own finances. Grouped in a pack together with soap and towels, the women's groups sold these pawa packs to their community and neighbouring communities.

The advent of COVID-19 in 2020 saw increased demand for personal protective equipment and hygiene products. PNG recorded its first COVID-19 case in March 2020 and in April the Government mandated the wearing of facemasks in schools, offices and public spaces.[2]

As demand for masks emerged, KTF responded by teaching women's groups how to sew facemasks. The design and fabrication of the facemasks was determined through consultation with health experts and guidelines set out by the World Health Organisation. The women's groups also promoted COVID-19 awareness and messaging on hygiene and distancing across PNG communities.

[2] RNZ (2020) Reopening PNG schools to require masks and hand washing 8:22pm on 30 April 2020, <https://www.rnz.co.nz/international/pacific-news/415536/reopening-png-schools-to-require-masks-and-hand-washing>.

Original objectives of the program

The program was initially designed to address:[3]

- lack of access to alternative income generating opportunities for women;
- lack of access to reliable high quality solar products;
- lack of understanding about female menstruation, the availability of affordable solutions and the resulting impact this has on education, health and livelihood indicators;
- lack of acknowledgement of the value that females can play within the community and in leadership more broadly.

The delivery of SMB in parallel with KTF's other programs is designed to enable progress towards KTF's overarching purpose: to improve the lives and futures of the people of PNG. The project aims to contribute to this overarching objective by:[4]

- empowering women in communities by giving them the opportunity to participate in a women's group and generate alternative sources of income for themselves and their families regardless of age and disability;
- delivering a program of learning and skills-based training to women's groups across rural and remote PNG applying creative and innovative approaches to business ideas including using solar lighting and female sanitary products in business modelling;
- providing ongoing mentoring and support to members of the women's groups;
- engaging with community leaders and delivering community awareness programs on menstruation and women's empowerment.

Strongim Meri Bisnis (SMB) in 2021

The SMB program currently supports five women's groups. This report focuses on three of these groups with 82 active members: 35 women in the Buakap group, 7 in the Gabagaba group and 40 women in the Lontis group. The other two groups are located at a safe house in Saiho and at a prison in Kavieng. Two groups in Hula and Kavieng (separate from the prison initiative) dropped out of the program in 2020 as a result of leadership issues and a lack of interest and responsiveness from the groups. Another group is soon to be established in Western Province.

Below is a map of PNG highlighting Buakap, Gabagaba and Lontis. Gabagaba is relatively close to Port Moresby. Buakap is close to Lae, and Lontis is on Bougainville - the most remote of the groups.

[3] KTF (2019), Strongim Meri Business Project Design Report.

[4] Ibid.

In these communities, access to basic healthcare is a challenge with high rates of malaria, waterborne diseases, tuberculosis and maternal mortality.[5] Education levels are low with the average literacy rate for PNG around 62 per cent and the average literacy rate for women at around 58 per cent.[6] Private sector development is weak and law and order is also poorly managed.[7]

Each group is led by one leader who oversees the program and coordinates the women, sewing, sales and liaises with KTF. The community is usually selected based on KTF's past experience or existing relationships. The leader is already a community leader and identified by KTF as someone who has the requisite organisational skills to run the program in their community.



[5] Hayword Jones, J. (2016). The future of Papua New Guinea: Old Challenges for New Leaders, Lowy Institute <https://www.lowyinstitute.org/publications/future-papua-new-guinea-old-challenges-new-leaders>.

[6] World Bank Data (2010), UNESCO Institute for Statistics, Data as of September 2020, Data value 2010, <https://data.worldbank.org/indicator/SE.ADT.LITR.FE.ZS?locations=PG>.

[7] Hayword Jones, J. (2016).

The groups currently concentrate on the sewing of face masks with some also continuing to make a small number of pawa packs. KTF funds the initial set-up of the business with the provision of five sewing machines and fabric and the delivery of training in sewing and business skills. KTF reduces its subsidy to the purchase of fabric as the women's groups become more established. Revenue made from sales is now used by the women to purchase new materials. KTF provides guidance and support and coordinates the sourcing, purchase and delivery of materials and in some cases, purchases finished products to distribute through its other programs or other contacts.

The program also has a health education component. When the groups were focusing on pawa packs, a significant focus of the initial training program was on what the pawa pack was and its use. This involved education about menstruation, women's health and hygiene. When the groups were focused on facemask production the training was accompanied by training on COVID-19 prevention including the importance of hygiene, social distancing and use of facemasks. This health education component is a key pillar of the initial training program.



METHODOLOGY

A mixed methods approach was employed to evaluate the program, incorporating consultations with key stakeholders, data on program outputs, and relevant secondary literature.

Consultations

Consultations took place in May 2021 with a range of stakeholders. From the KTF organisation, the Chief Executive Officer, Chief Operating Officer, Program Manager and Program Officer were interviewed. Three of the five women's group leaders were interviewed as well as a female representative from the Lontis group and a male who supports the group. Table 1 provides the consultation schedule.

Evaluation Framework

The evaluation drew on a range of secondary literature. Consideration and analysis of evaluation research methods and reviews of similar programs were critical to discern the best evaluation method and understand the context and likely immediate and long-term impacts of the program.

The evaluation framework draws on best practice evaluation guidance, in particular, the OECD's latest publication on evaluation criteria and application. [8] The OECD criteria have been adapted for the purposes of this evaluation to ensure the criteria and questions are appropriate and targeted.

The evaluation framework, provided in Appendix B, details the criteria, the questions considered and data sources.

Five criteria were chosen for analysis, as in Figure 1 below:

- Relevance: Is the intervention doing the right things?
- Effectiveness: Is the intervention achieving its objectives?
- Efficiency: How well are resources being used?
- Sustainability: Will the benefits last?
- Women's empowerment: What difference does the intervention make to women?

[8] OECD (2021).

Table 1. Consultation schedule.

Who	How	When
Dr Genevieve Nelson, CEO, KTF	In-person	05 May 2021
Ms. Lucy Gwahuc, Women's Group Representative, Buakap	Skype phone	19 May 2021
Ms. Vavine Agarobe, Women's Group Representative, Gabagaba (together with Ms. Petra Arifae)	Zoom	19 May 2021
Mr. Petra Arifae, Program Manager, KTF	Zoom	19 May 2021
Mr. Mike Nelson, Chief Operating Officer KTF	Zoom	20 May 2021
Ms. Lydie Dimokari, Port Moresby Project Coordinator	Zoom	20 May 2021
Ms. Momovie Burain, Women's Group Representative, Lontis	Skype phone	24 May 2021
Ms. Elizabeth, Women's Group Participant, Lontis	Skype phone	24 May 2021
Mr. James, Women's Group Supporter, Lontis	Skype phone	24 May 2021

Figure 1. The five criteria used to assess SMB.



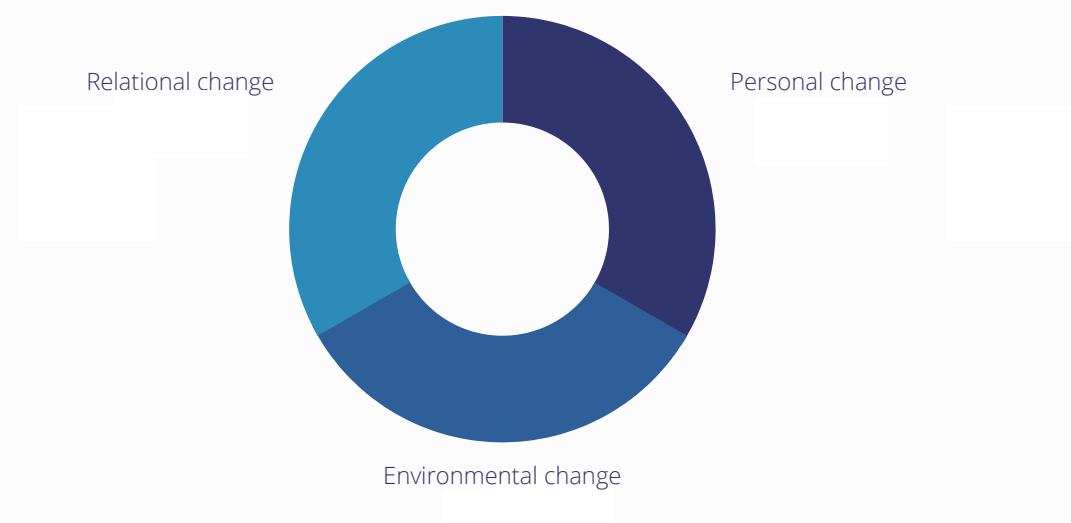
- Relevance: Is the intervention doing the right things?
- Effectiveness: Is the intervention achieving its objectives?
- Efficiency: How well are resources being used?
- Sustainability: Will the benefits last?
- Women's Empowerment: What difference does the intervention make to women?

The inclusion of 'women's empowerment' as a criterion was critical as it facilitated analysis of the impact on women's lives specifically. This concept was drawn from Oxfam's Women's Empowerment Index which considers impacts through the lens of personal change (power from within and power to), relational change (power with and power over) and environmental change (political and influencing) - as shown in Figure 2.[9]

Changes at the personal level take place within the person in terms of how she sees herself, how she considers her role in society and her confidence. Changes at the relational level consider changes within the household and the community and encompass markets, local authorities and decision makers. Changes at the environmental level consider informal changes such as in social norms and attitudes and beliefs of wider society or they can be formal changes in the political and legislative framework. This concept guided the consultation process in terms of asking women how the program impacted their personal lives and their interactions with others as well as how they were viewed by others in their community.

[9] Lombardini, S., Bowman, K., & Garwood, R. (2017). A 'HOW TO' GUIDE TO MEASURING WOMEN'S EMPOWERMENT: Sharing experience from Oxfam's impact evaluations, Oxfam GB .

Figure 2. Based on Oxfam's Women's Empowerment Index. (Lombardini, S., Bowman, K., & Garwood, R. (2017)).



The report has a strong emphasis on lessons learned and future directions. This area of focus was considered through the lens of the evaluation framework, and is outlined as part of the framework in Appendix B - but is discussed in this report in the final section. This final section considers what has been learned from the program thus far and provides suggestions to address challenges and consider new opportunities.

Criteria

Each criterion is weighted according to its relative importance and then scored based on level of achievement. Effectiveness and women's empowerment are weighted a 5 out of 5 because they align most closely to the program's objectives. Relevance, efficiency and sustainability are weighted 4 out of 5 because they are also very important but not as closely related to program objectives. Scoring based on achievement is determined through consideration of the degree to which the program successfully addresses each criterion.

Limitations

This evaluation report was limited by the inability to travel to PNG and undertake in-person consultations, given travel restrictions imposed by the advent of COVID-19. It would have been preferable to interview women's group leaders, participants and community members in person onsite. It would also have been beneficial to contact women's group leaders in Hula and Kavieng to more fully understand their reasons to withdraw – follow up by KTF would be valuable in this regard.

The review was limited by the availability of financial data. It is unable therefore to comment more specifically on the financial sustainability of the program. It was also constrained by the lack of data on products made and sold. Quarterly data on outputs, sales and pricing per group would enable analysis between groups on what worked best, what didn't and why.

Finally, this review can provide suggestions for program improvement but market analysis for particular products is required to further investigate new options such as soap or sewn clothes.



FINDINGS

Evaluation findings elicited by the evaluation framework, are discussed below in terms of the five criteria.

Relevance

Is the intervention doing the right things? The extent to which the intervention's objectives and design respond to beneficiaries' needs and priorities, and continue to do so if circumstances change.

Relative weighting of importance to program objectives: 4

Level of achievement: 3.5

Women's group representatives told the review that the program provided them with relevant skills. The ability to sew was clearly highly desirable. Many women were interested to learn how to sew and many could not sew before the program. The women are now able to sew other goods such as school uniforms, meri blouses, and simple bags.

Neighbouring communities expressed an interest to learn the skills and were keen to buy the women's products and also learn how to make the products themselves. All the women's groups voiced an interest in acquiring more sewing machines.

Other relevant skills encouraged by the program included marketing, budgeting and financial literacy. The women representatives said these skills also supported their livelihoods in terms of selling vegetables and baked goods at local markets. The women now know how to showcase their products at the market and they have a better understanding of price setting.



Lucy Ghuwac, Buakap women's group leader, pictured in the background, sewing and cutting.

Lucy Ghuwac: In the village women were interested in the project. I asked if they were interested and they came for meetings and we got together. Most of the women don't know how to sew. Petra wanted women who could already sew but I told Petra no one can sew. Women are interested because they want to sew, and learn how to cut up the materials. I'm in close contact with Petra and Lydia too. They really encourage me and give me strength.

Education and training around pawa packs is also regarded as a relevant and important contribution to community life. Women's groups representatives told the review that the pawa packs were important for girls' hygiene, the environment and were less expensive in the long term. The Lontis group representative spoke of how the pawa pack reduces community waste and litter. Pawa pack production also increased conversations in the community about menstruation thereby increasing knowledge and understanding.

The program has been adaptive to emerging issues and opportunities. The pivot to facemasks with the advent of COVID-19 showed the program was able to respond to emerging opportunities. The program has also successfully identified constraints and pivoted accordingly as highlighted by switching away from solar light production when the product was no longer economically viable.

The program, however, was not sufficiently relevant to the needs of the two women's groups who withdrew from the project in Hula and Kavieng. Reasons cited for their withdrawal were a lack of leadership, a lack of interest and a lack of responsiveness. Further follow up by KTF on why these groups withdrew would provide valuable and important insights to inform future program design.

The program was also not sufficiently relevant to the majority of women in Gabagaba who were initially interested in the program but later withdrew. The program relies on the input of 7 Gabagaba women, after approximately 28 withdrew following the initial training sessions. A lack of time, and a belief that women should 'just be housewives' were reasons given as to why many withdrew their support. It was also noted that many women wanted to use the machines for their own purposes not only for use on the project. [10] Further follow up in Gabagaba is recommended to ascertain why so many withdrew.

[10] It should be noted that KTF supports the use of sewing machines for alternative purposes but some groups have voiced concern that the machines could be broken or not available for use on the project and have thus prohibited more general use of the machines.

Attendance in Buakap is also mixed with some 50 per cent of the women not consistently attending activities.[11] Interviewees noted that women are often busy with family and church activities and don't have time for the program. They also said that because there were so few sewing machines, often only one woman was allowed to sew and the others stood around and watched.

In summary, learning to sew was viewed by the women as highly desirable but the program itself, with the sewing of KTF-prescribed products, was not viewed as relevant to all women in all cases.

Effectiveness

Is the intervention achieving its objectives? The extent to which the intervention achieved, or is expected to achieve, its objectives and its results.

Relative weighting of importance to program objectives: 5

Level of achievement: 3.5

SMB has contributed to the objective of empowering women to generate alternate sources of income. Figure 3 shows the number of facemasks made and sold and pawa packs made and sold. Women's groups shifted to production of mostly facemasks in 2020 but continued to make some pawa packs.

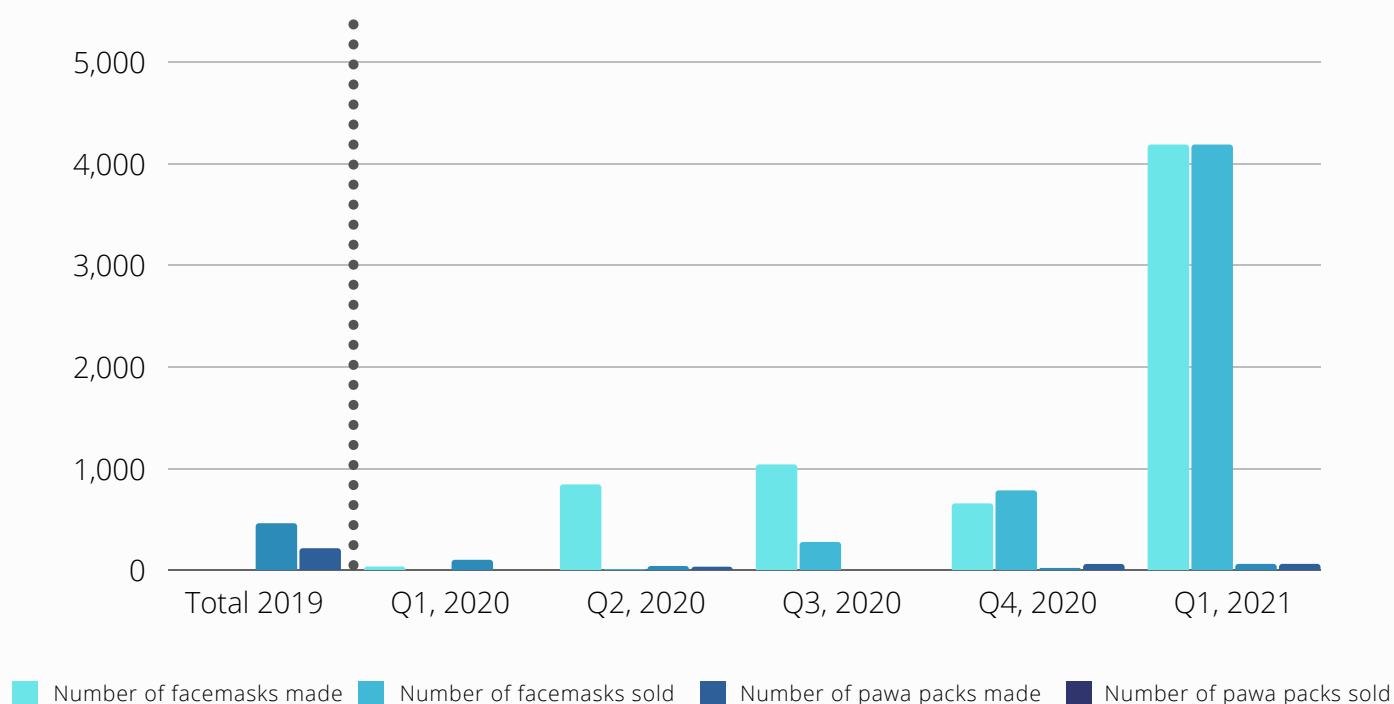
Production and sales of facemasks was very strong in the first quarter of 2021, as shown in Figure 3, with 4,184 facemasks made and sold. Purchasers of facemasks have included the local community, local schools, and KTF for distribution to its other programs. In the case of the Gabagaba women's group, the Central Provincial Government purchased a large quantity for distribution to its community.

The pawa packs, by contrast, have been slower to sell due to the high up-front price relative to disposable products from the store or other alternative products such as scraps of material which are also often used by women. Stakeholders suggested that more education was required to explain the long-term value of the product and the importance of the product to the active engagement of girls and women in everyday life. Purchasers of the packs included the local community, market buyers and KTF for distribution through its other programs.

[11] KTF (2020). SMB 2020, Quarterly Report.

Figure 3. Facemasks and pawa packs produced and sold, Source: SMB Quarterly Report, KTF Effectiveness Results Report 2020 and updated data 2021.

Facemasks and pawa packs produced and sold



The women’s groups generate enough revenue to finance their purchase of more materials but the amount of profit made is variable. The Gabagaba group reported distributing profit among the group members to pay for school fees and clothes. The Lontis group reported they had not decided how to spend the profit from the solar program or from sales of the pawapack and facemasks, suggesting it would be a community decision.

The program successfully delivers learning and skills-based training to women’s groups. The number of women participating in sewing and business capacity skills sessions was 221 in 2020.[12] Women’s groups representatives reported sewing and business training was very effective and many women were applying their new business skills more generally at the market. Education on menstruation was also effective in stimulating discussion and increasing community understanding on hygiene and health.

The program actively engages many women. The number of women actively involved in managing the businesses and sales was 195 in 2020 - including those engaged in the groups from Gabagaba, Lontis, Buakap, Hula and Kavieng.[13] The inclusiveness of the program differs across women’s groups. In Buakap, 35 women continue to participate in the program and benefit from the income generated. In Lontis, closer to 40 women are involved. They are divided into 5 Church groups – giving all Church groups an opportunity to participate. In Gabagaba by contrast only 7 women participate. The Gabagaba women’s group representative reported that many of those who lost interest regained enthusiasm with the pivot to facemasks. The participation of prospective participants was subject to the the discretion of the existing participants.

[12] KTF (2020) Effectiveness Results Report.

[13] Ibid.

The program tends to center around a strong leader and doesn't really reach out to people with fewer abilities or the disabled. In the long term, framing the program to be more inclusive will be important. In the short term, it is advised the program continue to work with strong and capable leaders and support these leaders to further develop their organizational and leadership skills as the program's success is dependent on their role. That said, several of the women leaders voiced a desire to involve younger women in their sewing group as many of the participating women were busy mothers or elderly. Encouragement of younger women to join the group may help promote sustainability of the program and a broader interest among the community.

Efficiency

**How well are resources being used?
The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.**

Relative weighting of importance to program objectives: 4

Level of achievement: 3.5

Resources are being used appropriately by the women's groups. Women are becoming more adept and efficient at cutting and sewing patterns and using fabrics carefully. The provision of sewing machines is the largest upfront cost of the program.

The more general use of sewing machines by the women was an issue raised during consultations. The Buakap group seemed to encourage wider use of the sewing machine for personal use and were considering other products they could make with the machine. The Gabagaba group were very strict with the use of the sewing machine for KTF product purposes only.

While more widespread use of the machine would likely provide significant benefit to the women it should be noted that sharing resources is not without difficulties. All the groups emphasised that more general use of the machine could lead to machine breakdowns and were very conscious of looking after the machines. Potentially the groups could consider charging women a very small fee to use the machines for broader purposes than KTF-specific products. This may help increase the likelihood that the machines are used carefully and any damages could be covered by the fees recouped. The fees could also go toward purchase of an additional sewing machine if desired by the group.

Other ongoing costs associated with the program include the time of the program managers to train the women in sewing and business skills (approximately 1-week training) as well as undertaking quarterly visits and weekly/fortnightly phone calls/text messages to provide mentoring and support. KTF also continues to source, purchase and arrange delivery of materials and in some cases also purchases the final products. Provision of ongoing support was a highly valued aspect of the program by all the women's groups.

They appreciated the guidance and support provided by KTF and the ability of KTF to source high quality fabric. Efficiencies would be afforded by the purchase of materials by KTF on behalf of all the group but where possible, allowing the groups to purchase their own materials could be explored for the purpose of increasing their independence and ensuring sustainability into the future.

Selling the pawa packs was clearly difficult for all the women's groups due to the high upfront price. While all the participants emphasised that greater education on its function and long term use could increase the perceived value of the product, other solutions are also required. One suggestion was to sell the pawa pack components separately (underwear, liners, face cloths, and soap), thus making the components more affordable without reducing the total cost of the pawa pack. Another suggestion was greater consideration be given to the bulk sale of pawa packs to NGOs or local governments. Another possibility is external support through another NGO subsidising the cost of materials.

From consultations it was apparent that while all the groups were able to draw on their revenue to fund purchase of materials not a great deal of profit was left. Greater profit would likely provide stronger incentives for the women to more fully engage with the program. They may see more value in the program vis-à-vis other pressures on their time. Greater profits could be realized through increased sales or higher markups – both of which are a challenge to the program in its current form.

Sustainability

Will the benefits last? The extent to which the benefits of the intervention continue or are likely to continue.

Relative weighting of importance to program objectives: 4

Level of achievement: 3

The program is financially sustainable for the current women's groups with revenue covering the cost of materials and freight. Having run the program in these groups for around two years, progress has been significant in terms of their confidence in sewing, their ability to organize themselves and their time. Their adaptability has been demonstrated by their ability to pivot to facemasks. Advice and support provided by KTF is likely to reduce over time as the women become better at sewing, marketing, and accounting.

Much of the recent success of the program has been as a result of the pivot toward facemasks which saw rapid demand in 2020 and 2021. Depending on the management of COVID-19 in PNG it is likely that demand for facemasks will continue but slowly diminish throughout 2021 into 2022 as the market becomes saturated with facemasks and demand reduces as many Papua New Guineans will already own masks. A key issue therefore, is whether the program is sustainable if relying on pawa packs. As evident from Figure 3. production and sales of pawa packs are relatively slow, while there are some profits to be had from pawa pack sales, interest may wane in the women's groups if the pawa pack is too hard to sell and profits are minimal.

The groups could consider diversifying into other products. Now that the women have gained skills, organized themselves, and experienced the benefits of their work, the groups could consider diversifying into other kinds of sewing such as clothes, or other products, such as soap. Diversification may be necessary to sustain profits in order to preserve interest and engagement in the program. Further exploration of the local demand for soap or clothes would be required if product diversification was viewed as a useful direction for the program

Depending on product choices and likely demand, the program could also be established in other communities. It would be important to be mindful of several important aspects of where to establish a group in terms of leadership potential, access to markets, time available, and cohesiveness of women.

KTF's ongoing support to the groups plays an important role in sustaining the program's momentum. That said, the women's group representatives were confident in their ability to maintain progress without KTF support. A key issue would be access to materials and further consideration could be given to enabling women's groups to organize this themselves rather than KTF facilitate all the purchase of materials.

Reaching out to alternative funding sources may also help promote sustainability of the program. A male supporter from the Lontis group mentioned that he was in contact with the local government on securing funding for roofing iron and supports for a new house where the women could store the sewing machines and meet to sew.

Women's groups could look to sources of funding outside KTF to promote long term investment in the project either through purpose-built buildings for sewing and collaboration, or additional sewing machines for broader sewing purposes and materials.

Women's empowerment

What difference does the intervention make for women? The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects for women.

Relative weighting of importance to program objectives: 5

Level of achievement:4.5

Women's group representatives told the review that the program had had a significant impact on their lives. The Gabagaba representative said that now the women in her group 'were the breadwinners!' – they were able to pay for their children's school fees and the school fees for other members of their family. They were able to pay for medicines and stay healthy. This had increased their confidence in themselves and helped to show other women in their community that women could be 'more than housewives'. In this way, the program has had an impact at the personal level.

Providing the products for their community was viewed as empowering. Their community was worried about how to buy masks but the women were able to stand up and say, 'it's ok, we can make them!' The women said they felt strong by being able to protect their community and other communities from COVID-19 by making facemasks. This strength had reciprocal benefits. The women said they felt they were able to command more community resources as a result of the program. People would help them get things done as their status in the community had increased.

The increase in their status was also apparent through their expanded participation at markets. The Buakap group sold their pawa packs at the market where many communities would come to buy and sell. Until that time menstrual products were a taboo but the market stall was increasing discussion on these issues, making the product available to different villages and changing mindsets. Because the women had a recognized market stall their status at the market had also increased which gave the women an ability to speak up and be recognized as community leaders. In this way, the program was having an impact at the relational level, influencing power dynamics within the community.

Women spoke about how the pawa packs increased their ability to speak to their daughters about menstruation and increase community awareness on women's health issues. Pawa pack training provided the platform for broader community awareness.

Not only for girls and women, but boys and men were becoming educated through KTF's provision of education training either formally by attending or informally – one woman told the story of how boys were trying to eavesdrop on the education sessions and while some women tried to shoo them away, others realized it was important for them to learn and understand.

The women spoke about how the program increased their ability to lead and problem solve. In Gabagaba women wanted to use the sewing machines for different purposes. It took strength and leadership for the Gabagaba women's leader to say that the machines could only be used for production of the products and only those willing to work on the project were allowed to participate. In Buakap women struggled to make times to meet but between them worked out new ways to organize themselves to facilitate more appropriate meeting times. The Lontis women's group leader said the program had given her the opportunity to expand her leadership skills and develop relationships.

Business and financial literacy training had enhanced their ability to run other businesses. They said they now had a better understanding of how to display their products at a market. One woman had decided to create her own business selling batteries. Another woman was sewing meri blouses to sell at the market. The male supporter interviewed from Lontis emphasized that many of the Lontis women were illiterate and thus the program gave them the opportunity to participate in the community which they would not otherwise have had.

Discussions should be had with the women's groups on how the profits are divided and spent as increasing women's income alone is not necessarily empowering.[14] The Lontis group representative spoke about how the profits made from the solar project (from several years ago) and the more recent profits generated by the sales of pawa packs and facemasks had not been spent. The Gabagaba group had divided the profits and spent them on school fees and other family items which may help reinforce the value of the program to the women, their families and their community. Being a smaller group, the division of profit likely has a bigger impact on the Gabagaba women and it is notable that they have been the most industrious in terms of the sewing of facemasks. KTF program managers should discuss with the groups the division and use of profits because if participants fail to see the benefits for their time it's likely that interest in the program will wane.



Lontis women's leader, Momovi Burain and other project participants talking to school children about menstruation and the pawa pack.

Momovi Burain: This project for my life it has helped me to continue to develop my leadership skills. I continue to take the lead and also I have continued to liaise with KTF on what we should be doing. I have developed a bond with the women and I am enjoying it very much. With the women involved in this project, it has widened their experience in dealing with outside organisations.

[14] Eves, R. & Titus, A. (2020) Women's Economic Empowerment Among Coffee Smallholders in Papua New Guinea, Department of Pacific Affairs, ANU, http://dpa.bellschool.anu.edu.au/sites/default/files/uploads/2020-09/dpa_womens_economic_empowerment_eves_and_titus_september_2020_online_version.pdf.



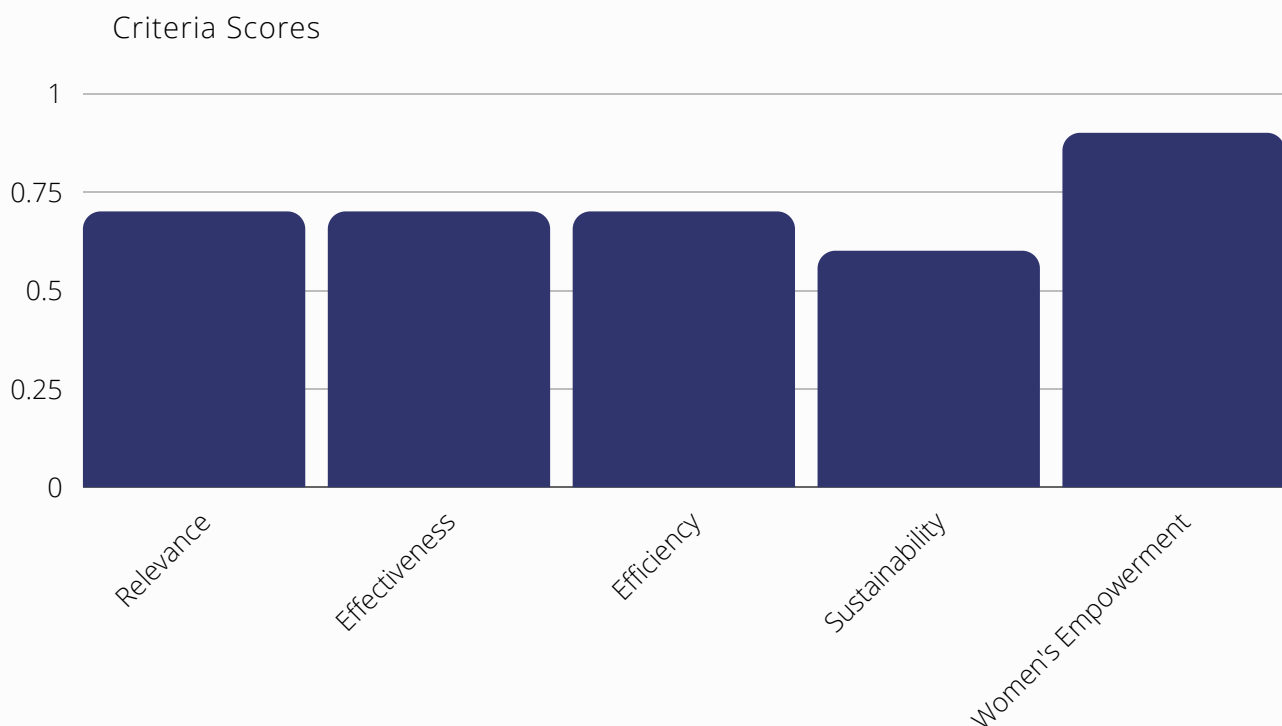
LESSONS LEARNED AND FUTURE DIRECTIONS

SMB's strength is its impact on women's lives. It provides relevant skills that are viewed as desirable by the majority of women invited to be involved in the early training programs. The program itself is relevant to many women but significant numbers of program 'drop-outs' suggest that further exploration by KTF is required to work out why the program struggles in some communities. The program is effective, efficient and financially sustainable although opportunities for improvement exist through exploration of additional buyers and/or products. Low profit margins and difficulty selling some products may reduce interest in the program in the long term.

Figure 4 demonstrates the relative strengths of the program – showing that women's empowerment is the strongest element. The percentages were calculated by weighting each criterion and multiplying by its level of achievement. The weakest criterion is sustainability – highlighting concerns about the viability of the program into the future.

The program has worked best where women leaders are strong and well supported by other capable women. A key ingredient of success for future programs is identifying strong and organized women leaders and communities that are sufficiently collaborative and receptive to support the program. Further consideration of why the program was unsuccessful in Kavieng and Hula and why so many women dropped out in Gabagaba would be useful to identify lessons learned and the difficulties experienced by these groups. Consideration could also be given to the collection of data at the group level to identify what is working and what isn't. Perhaps one group is better at sewing or another group is better at selling? Improved data at the group level would reveal valuable lessons to inform the development of the program.

Figure 4. Criteria scores: Factoring in levels of achievement and relative weighting.



The program may also work better where markets are more robust and communications more reliable. Communities that frequently experience poor mobile communication may have difficulty communicating with KTF or accessing sufficient markets for sales. Given local sales constraints, communities with access to larger markets or access to stronger local government institutions, corporations or NGOs are likely to do better. That said, communities too close to urban centers may not have sufficient interest as they are likely to have more demands on their time. There is a balance to be struck between accessibility and communications on one hand, and the desire to support more remote villages on the other.

Close consideration of the product and its marketability is very important. With regard to the pawa pack, it will be vital to consider different strategies. Significantly increasing education around the product to increase its appeal may be helpful but possibly not enough to generate sufficient demand. Selling the pawa pack's component parts could increase sales but careful consideration of pricing would be necessary and further investigation into the likely impact on users and the long term marketability of the whole pawa pack would be required. Two other possible options include identifying buyers outside the local community (such as through markets, stores, NGOs or government agencies), or, seeking external subsidy for production of the pawa pack.



There is a risk that slow sales of the pawa pack will reduce the appeal, not only of the product, but of the program in its entirety. It should be noted that the enthusiasm of the women in Gabagaba was renewed when the program pivoted toward facemasks which presumably were viewed as more desirable and easier to sell.

The production of soap is a potential option that has been piloted through KTF's work with a women's prison. It uses natural resources like coconuts and has become more important with the invigorated promotion of hygiene as a result of COVID-19. More rigorous exploration of soap would require further product and market research including consideration of the cost of production, the cost of the same product from stores, the desirability of the product in the community and the marketability of the product to larger buyers such as companies, government agencies, NGOs. Consideration of export markets is also an avenue to explore.

Women's groups could be encouraged to brainstorm one additional product which could be produced as a trial. Other sewing options include meri blouses, other clothes, school uniforms, bags or purses. Sewing machines could be used to greater effect by encouraging use of the machine for alternate purposes. Permission arrangements could be explored between KTF and the women's groups thus enabling the women to feel that it was ok to use the machine for additional purposes – possibly for an agreed, pre-arranged time and purpose. Alternatively, small fees could be charged to use the machine with the funds raised to either pay for sewing machine repairs or pay for a new machine.

Greater investment in identifying bulk buyers is important. This would reduce the time costs placed on women to sell the product locally. It would also increase demand and increase profits – thereby keeping the women interested and engaged. The successful bulk sale of face masks to schools, governments, corporations and donors demonstrated how this can be achieved. Discussions with corporations on the supply of particular products may be worthwhile. A hotel chain or airline, for example, may be interested in locally made soap or hand towels.

To promote sustainability and self-reliance, KTF could consider reducing its role in purchasing and organising delivery of materials to the groups. It would be important however to ensure that this did not lead to an increase in prices faced for materials which is a key input into the overall cost. A gradual reduction in communication with the groups who are already successfully producing items could also free up time to concentrate on identifying bulk buyers, establishing new groups or investigating new product options.

Another consideration in terms of sustainability is the way in which the groups manage their income. The ability to control the way in which income is managed is an integral aspect of empowering women through income generation.[15] KTF needs to discuss with the groups how the distribution of income can best be managed.

Consultations also noted the importance of greater inclusion of young women. The Lontis women's group leader suggested that they could look to establish a sewing group specifically for young women to ensure their group wasn't dominated by the more experienced older ladies.

The women leaders also talked about the possibility of involving men in the project. This would need to be managed carefully to ensure that the program remained for women, by women. That said, male support for the project may help increase product sales and access to markets and buyers.

Sustainability could also be fostered through enhanced linkages with other KTF programs. Identifying strong leaders through KTF's other programs may help reduce the risk associated with establishing new programs where there is uncertainty about the capability of leaders and supporting women. Other KTF programs may also offer ideas for market opportunities through sales of products to KTF-supported schools or clinics. KTF's links with other NGOs could also broaden the potential for product supply.

In conclusion, relevant to the program's objectives, the program is effectively:

- increasing access to income generating opportunities for women;
- increasing access to education and products related to menstrual health; and
- increasing the understanding that women can lead, organize, make money and run a successful business, and thereby enhancing women's empowerment.

Pivotal to this success going forward is the ability of the women to continue to generate revenue and profit to ensure the longevity of the program. Hence, as outlined in this report, further exploration of products, buyers and associated support (including education and training) is required to maintain the positive impacts on women's lives already supported by this program.

[15] DFAT (2014) Women's Leadership; Evidence review. *Office for Development Effectiveness*.

APPENDIX A: DAYS FOR GIRLS KIT

Days for Girls is an NGO that champions menstrual care, health education, and income-generation opportunities for women.

Images of a Days for Girls kit which provides the basic idea for KTF's pawa pack.



APPENDIX B: EVALUATION FRAMEWORK

Relevance	Indicator (if applicable)	Data source and tool
Is the program useful and relevant to women's needs?	# number of women's groups supported	2020 effectiveness results consultation responses
How has the program adapted over time?	# and type of products made qualitative	2020 effectiveness results consultation responses
Effectiveness	Indicator (if applicable)	Data source and tool
Is the program effectively producing outputs?	# of facemasks made, # of pawa packs made	2020 effectiveness results consultation responses
Is the program effectively selling outputs?	# of facemasks sold, # of pawa packs sold	2020 effectiveness results consultation responses
Is the program effective in creating livelihoods for women?	# of women participating in managing the business in an ongoing manner, # of women's groups that received start up materials and/or sewing machines	2020 effectiveness results
Are there unintended consequences for the women's groups or other stakeholders?	Qualitative	Consultations
Is the program inclusive?	Qualitative	Consultations
Efficiency	Indicator	Data source and tool
Is the program delivered in a cost and resource effective manner?	Qualitative, like-program comparison if possible	Qualitative - Program Managers and comparison with the like-programs
Is the program delivering value for money?	Same as above	Qualitative - Program Managers and comparison with like-programs
How does the program utilise existing networks or resources through other KTF programs or other partnerships?	Qualitative	Consultations - Program Managers
Sustainability	Indicator	Data source and tool
Can the program exist without external funding in the future?	Qualitative	Consultations
Can the impact of the program be sustained or scaled?	Qualitative	Consultations
Does the program strengthen local leadership and knowledge?	Qualitative	Consultations

Women's Empowerment	Indicator	Data source and tool
How does the program make you feel? Sense of purpose, growth in confidence etc.	Qualitative	Consultations
How has the program impacted your family life?	Qualitative	Consultations
How has the program impacted your connections with your community?	Qualitative	Consultations
Did all the intended groups benefit from the intervention?	Qualitative	Consultations

Lessons learned and future directions	Indicator	Data source and tool
What are the key lessons learned?	Qualitative	Consultations
What could be done to improve the program?	Qualitative	Consultations