FIRST 1,000 DAYS PROGRAM

Endline Evaluation Report

Sanma & Shefa Provinces, Vanuatu

August 30, 2021

Executive Summary

The First 1,000 Days project was a four year program in Vanuatu funded by Australia's Department of Foreign Affairs and Trade (DFAT) and implemented by Save the Children (SC) with the goal of reducing stunting among children under two in 22 rural and urban communities. The two primary approaches of the project are use of peer support groups (PSG) to promote optimal health and nutrition behaviours and a community action plan (CAP) in which community committees select and implement nutrition-sensitive projects to benefit their communities. Implementation started in 11 communities in 2018 and scaled up to an additional 11 communities in January 2020.

Baseline, mid-term, and endline evaluations were conducted to measure the program progress against targets, assess behaviour change among the target population, and review effectiveness of program implementation. A quantitative household survey was conducted with program target beneficiaries to measure maternal and child health and nutrition (MCHN) behaviours, water, sanitation and hygiene (WASH), household decision making and support for caregiving, and program exposure (mid-term and endline only). Qualitative data was collected via focus group discussions during program close out workshops with project volunteers, community leaders, and government stakeholders, and project staff to assess reach, participation, and effectiveness of approaches. Data was collected, cleaned and analysed by Save the Children staff.

The program clearly improved nutrition in the target population based on the seven percentage point reduction in stunting among children under 2 (20.8 percent at baseline to 13.8 percent at endline). Endline results demonstrate high levels of knowledge on key MCHN practices among both men and women, including ANC attendance, the importance of early, exclusive and continued breastfeeding, and timely introduction of complementary foods. The most significant improvements in behaviours were in minimum acceptable diet and the two indicators that contribute to it - minimum meal frequency and diet diversity of children 6-23 months. Households with handwashing stations decreased overall from baseline but increased in Sanma province. While it wasn't possible to measure women's dietary diversity score at endline there were notable increases in consumption of grains, roots, pulses and meat. Women also reported an increase in support for breastfeeding, housework and childcare from their spouses or other family members and an increase in decision making power over her own and her child's health and nutrition.

Qualitative consultations provided valuable insights on program implementation and effectiveness. Overall the key program approach of PSG was well regarded, particularly for engaging women. Mobilization was seen as key in the beginning and facilitation was seen to be inclusive. There were some challenges to men's engagement with both the PSG and CAP which improved somewhat over time in rural areas. The CAP component faced additional operational challenges getting projects completed and ensuring accessibility or benefit for all community members, but quantitative data showed a majority of respondents felt they benefited from the CAP.

Government stakeholders and community leaders were engaged in and supportive of the project and its approaches. Qualitative evidence pointed to opportunities to better engage area council in reviewing, leading, and overseeing the CAP project and community leaders have also committed to continuing CAP committees. Provincial and national government also plan to incorporate PSG content and approaches into health worker and VHW training to enhance nutrition programming. The sustainability of the project can be seen both in the local and government commitment to integrating and sustaining key approaches, and at the household and community level through the behaviour changes for, and in support of, young child health and nutrition.

Program Log Frame First 1,000 Days Project

Indicator Level	Indicator	Baseline	Endline	Target
Goal: Contribute towards improved health status of pregnant and lactating women (PLW), girls, boys, and children with disabilities (CWDs) under 2 years.				
Impact	Prevalence of low height-for-age in children under five years of age (stunting)	20.8%	13.8%	16.6%
Outcome 1: PLW and primary caregivers of girls, boys and CWDs under five demonstrate healthy behaviours and practices within the home for improved maternal nutrition, infant and young child feeding, and hygiene				
Outcome	Continued breastfeeding at 1 year	73.3%	78.3%	88.0%
	Minimum dietary diversity - children	50.7%	74.1%	60.8%
	Minimum meal frequency	56.7%	84.9%	68.0%
	Minimum acceptable diet	35.1%	54.2%	42.1%
	Minimum dietary diversity - women	22.4%	-	26.9%
	Soap in place for handwashing	25.4%	47.1%	29.2%
	Knowledge of key MCHN practices	86% F 57.6% M	84.9% F 81.8% M	90%

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Acronyms

ANC	Antenatal Care
ANCP	Australian NGO Cooperation Program
CAP	Community Action Plan
CLTS	Community Led Total Sanitation
CWD	Children with Disabilities
DFAT	Department of Foreign Affairs and Trade
ECD	Early Childhood Care and Development
EBF	Exclusive Breastfeeding
GMP	Growth Monitoring and Promotion
IYCF	Infant and Young Child Feeding
LF	Lead Facilitator
M&E	Monitoring and Evaluation
MAD	Minimum Acceptable Diet
MAFF	Ministry of Agriculture, Forestry and Fisheries
MDD	Minimum Dietary Diversity
MMF	Minimum Meal Frequency
MOH	Ministry of Health
PLW	Pregnant and Lactating Women
PNC	Postnatal Care
SAM	Severe Acute Malnutrition
SBCC	Social and Behaviour Change Communication
SC	Save the Children
SG	Support Group
UNICEF	United Nations Children's Fund
VHW	Village Health Worker
WASH	Water, Sanitation and Hygiene

Introduction

Project Background

With funding from Australia's Department of Foreign Affairs and Trade (DFAT) through the Australian NGO Cooperation Program (ANCP), Save the Children (SC) implemented the First 1,000 Days project in Vanuatu from 1 August 2017 – 31 July 2021. Total funding for the four-year project was approximately AUD $3,400,000[1].

The First 1,000 Days project aimed to reduce chronic malnutrition (stunting) among children in 22 communities across Shefa and Sanma Provinces by increasing coverage of evidence-based health and nutrition practices among pregnant and lactating women (PLW) and caregivers of children 0-2 years old, improving community engagement, and influencing national level nutrition policies.

The overall goal of the project was to contribute towards improved health status of PLW, girls, boys, and children with disabilities (CWDs) under two years. The goal was supported by three outcomes:

1. PLW and primary caregivers of girls, boys and CWDs under two demonstrate healthy behaviours and practices within the home for improved maternal nutrition, infant and young child feeding hygiene
2. Improved enabling environment for improved health and nutrition practices in target communities
3. Project-derived evidence is communicated and used to inform and influence nutrition-related policy and practice in Vanuatu and foster cross-sector dialogue with key government stakeholders on first 1000 days

Key Project Activities

Under Outcome 1, the project designed a *peer support group methodology* (SG) which aimed to support mothers, fathers, and grandmothers of children under the age of two to adapt evidence-based health and nutrition practices through monthly meetings facilitated by a trained community volunteer. In support of Outcome 2, the project implemented a *community action planning* (CAP) approach by establishing and training Community Action Planning committees consisting of local community leaders to design and implement nutrition-sensitive projects related to WASH, agriculture, and livelihoods in their communities. Under Outcome 3, the project developed an advocacy strategy which aimed to increase Ministry of Health's (MOH) prioritization of community health initiatives and encourage multi-sectoral collaboration for First 1000 Days programming. Documents outlining the detailed methodologies for these activities are included in Annex 2.

Purpose of the Endline Review

In 2019, Save the Children undertook a comprehensive internal mid-term project evaluation to assess progress towards the project's overall outcome measures and identify any required adjustments to project methodologies or approaches over the final Phase of the project. Now in the final year of the project, updated data is required to measure progress towards the quantitative indicators included within the project's logical framework to assess the impact and outcome of the projects on households within the initial 10 project communities[2]. The endline assessment also included qualitative data on the

[1] Annual funding is determined year-on-year. Budgets for Years 1, 2, and 3 are: AUD $807,879, AUD $930,545, and AUD $836,411, respectively.

[2] The project is implemented in a total of 22 communities. Implementation in 10 of these communities commenced in 2018 and the mid-term survey data was collected from households within these 10 communities. In late 2020, implementation

perceived effectiveness, relevance, and sustainability of project interventions from key program stakeholders including Ministry of Health, Provincial Government, community leaders, Support Group Facilitators, CAP Committee members, and program beneficiaries, including those with a disability.

The primary audience of the end-line assessment is project staff and SC management at Vanuatu, Pacific region, and Australia levels; national and provincial level Ministry of Health staff, other in-country and regional nutrition stakeholders such as UNICEF and World Bank, and DFAT ANCP.

The specific objectives of the endline assessment are to:

- Measure progress towards the project's goal and outcome indicators as articulated in the project logical framework.
- Assess the relevance, effectiveness, and sustainability of engagement of MOH Provincial and community health staff and local government in implementing the F1000D program with communities they service.
- Assess the level of engagement of parents or grandparents with a disability in the F1000D peer support group and CAP project model, and enablers or barriers to inclusion.

Methodology

The endline assessment included the collection of both quantitative and qualitative primary data.

Quantitative data were collected through a household survey of 150 households however due to data collection errors 10 cases were discarded and the final sample consisted of140 caregivers of (66F, 74M) of children 0-2 years in 9 Phase 1 target project communities. Anthropometric measurements (height and weight) were taken for all children and two cases were discarded. Topics collected through the household survey included coverage of key health and nutrition practices (from the project log frame) and exposure to and participation in project activities. The household survey collected data on disability status through use of the Washington Group questions, and all indicators were disaggregated by gender.

Observation checklists were completed at the same time as surveys, to observe handwashing stations. Observations were undertaken at each household participating in the survey with observations being conducted overall; 59 in Shefa and 26 in Sanma.

Qualitative data were collected from key stakeholders including national and provincial Ministry of Health officials, community health actors including Village Health Workers and Nurses active in the program, local government actors including Area Administrators and Area Secretaries, community leaders, Support Group Facilitators, CAP Committee members, and program beneficiaries, including those with a disability.

Qualitative data were collected through two workshops:

- Shefa Province close-out meeting attended by 20 Support Group Facilitators (6M, 14F) from ten Phase 1 communities held in May 2021
- Project close-out meeting attended by 41 national and provincial Ministry of Health, Village Health Workers, health facility staff, local government stakeholders, community leaders, and Support Group Facilitators (37M, 4F) from both Phase 1 and Phase 2 communities, held in Santo in April 2021

commenced in the remaining 12 communities. The endline survey will only focus on the initial 10 communities, recognising the short amount of time the program has been in place in the 'Phase 2 communities' and in order to document whether gains in key indicators from baseline to mid-term have been sustained over time.

During these workshops participants were broken out into small groups to discuss and present on the evaluation questions and their responses were transcribed for analysis and inclusion in the final assessment report.

Endline data were compared in analysis to baseline and mid-term survey data, though sample size and methodology household questionnaire varied slightly across the surveys. The baseline survey had a total sample size of 282 households with a child under 5 from 33 communities across Sanma (88), Shefa (143) and Panama (52) province while the mid-term had a total sample of 144 respondents (Sanma 61, Shefa 83). The survey questionnaire at baseline included numerous topics and questions that were later excluded from the mid-term and endline tool. Additional questions around program exposure and male partner knowledge were added at mid-term and endline and WASH was included at endline. Anthropometric measurements were not taken at mid-term.

Sampling

Surveys and measurements were undertaken in 9 communities in Sanma and Shefa that participated from Phase 1 of Peer Support Group implementation. According to the logframe, data collection should have occurred in 10 communities but due to the cluster sampling one community which was very small did not have any clusters. As at mid-term, 10x15 cluster sampling was used to randomly select target households to participate in the survey. Sampling was conducted using a 10x15 cluster sampling methodology whereby 10 clusters were randomly selected proportional to population size, within the initial 10 communities of program implementation. Within each cluster, 15 households with a child under the age of two were randomly selected to participate in the survey using the "spin the bottle" approach. The survey therefore targeted a total of 150 respondents. The primary caregiver of the child was the survey respondent. If available, the husband/partner of the primary caregiver was also interviewed. Topics collected through the household survey included coverage of key health and nutrition practices (from the project log frame) and exposure to and participation in project activities.

Data management

The survey was collected through Kobo. Identifying data (names, phone numbers etc.) were not collected in order to preserve confidentiality of participants. Surveys data was exported from tablets to the central Kobo dataset and cleaned by SC MEAL Advisor.

Qualitative data was recorded through detailed notes during discussions, and then transcribed into a clean, translated document for analysis.

Endline Team Members

The household survey and qualitative workshops were led by the project team in Vanuatu. A team of volunteer enumerators were contracted to conduct the survey.

Save the Children staff who participated in the endline included:

- Jenn Weiss, Program Director
- Leiwaku Noah, Health Technical Advisor
- Anne Crawford, MEAL Advisor
- Edith Lingmal, MEAL Coordinator
- First 1,000 Days project staff
- Carolyn O'Donnell, SCUS Nutrition Advisor

Data Collection

Data collection occurred during April – June 2021, with qualitative data collection during project meetings preceding the household survey. The full schedule of data collection is detailed in Table 1.

Table 1. Data Collection and Consultation Schedule

Date	Data Collection Activity
April 29-30	Project Close out meeting with stakeholders in Sanma with 41 participants in 6 focus groups (37M, 4F)
May 1	Project Close out meeting in Shefa with Support Group Facilitators 20 participants (6M, 14F – 6 mothers, 8 grandmothers)
June 22-25	Household survey in Shefa Province (83 F caregivers, 10 M partners)
June 22-25	Household survey in Sanma Province (70 F caregivers, 12 M partners)

Following the completion of the household survey, the MEAL Advisor cleaned and validated the quantitative data in Excel. The SCUS Nutrition Advisor analysed quantitative data in SPSS and qualitative data in Microsoft Word.

Study Limitations

The principal limitation of the endline evaluation was the small sample size which made cross comparisons, disability disaggregation, and tests of significance unfeasible. The baseline and midline collected data from a larger sample (282) and so comparisons between baseline, mid-term (144) and endline (140) proportions within this report will not be direct comparisons, as the smaller sample size within mid-term and the endline will lead to higher weighting of individual answers and larger variations. The larger sample size at baseline was also due to the inclusion of 11 communities in Panama province, which were removed from the project shortly after the baseline due to a volcanic explosion and therefore not included in the later surveys.

There were also some data collection errors that resulted in the elimination of cases or their anthropometric measurements and limited our ability to calculate Women's Dietary Diversity. These data collection errors were:

- 13 cases excluded due to incomplete survey
- 2 anthropometric measurements excluded due to extreme result, indicating an error in measurement
- At endline, two food groups were excluded in error from the survey instrument so women's dietary diversity score cannot be fully calculated and compared to baseline
- Phrasing and translation of the WASH questions indicated "Please show me where members of your household most often wash their hands." Some people may point to the same dish of water where they wash their utensil or cloths, which could be considered an improper place for handwashing and thus recorded as none.
- Phrasing and translation of the program exposure question may have also caused confusion as it was worded as the First 1,000 Days program but in many communities the program is known by the organization name, Save the Children, rather than the program title.

The baseline, midterm, and endline were all collected in different months (April, October, and June respectively) so there may be some variations around dietary intake due to seasonal availability of foods. In addition the effects of Cyclone Harold in April 2020 and economic impacts of the Covid-19 pandemic may have influenced behaviour and results but assessing or measuring these impacts was outside the parameters of this survey.

Quantitative Findings

Socio-Demographic Characteristics

After data cleaning, the household survey included 140 primary caregiver respondents with an even split between Shefa and Sanma province. Because of the sampling methodology which used cluster sampling more respondents fell within urban communities, which are significantly larger than rural communities in population size, though six of the nine communities were rural. Across the nine communities where the survey was conducted 53 percent of respondents were in urban communities while 47 percent were in rural communities. The vast majority of caregiver respondents, 99.3 percent, were women and 86.6 percent were the mother of the child in question, as demonstrated in Figure 1. As seen in Figure 2 most respondents were married (24.3 percent) or living with their partner (63.6 percent).

Figure 1: Caregiver relationship to child

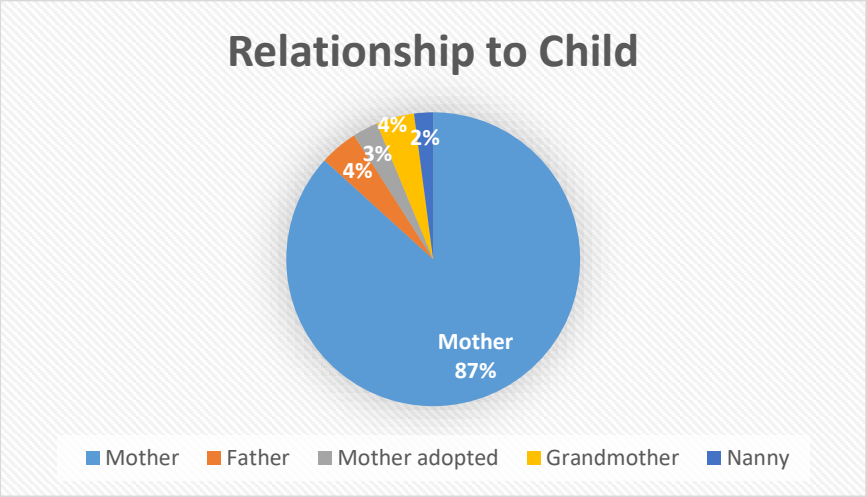
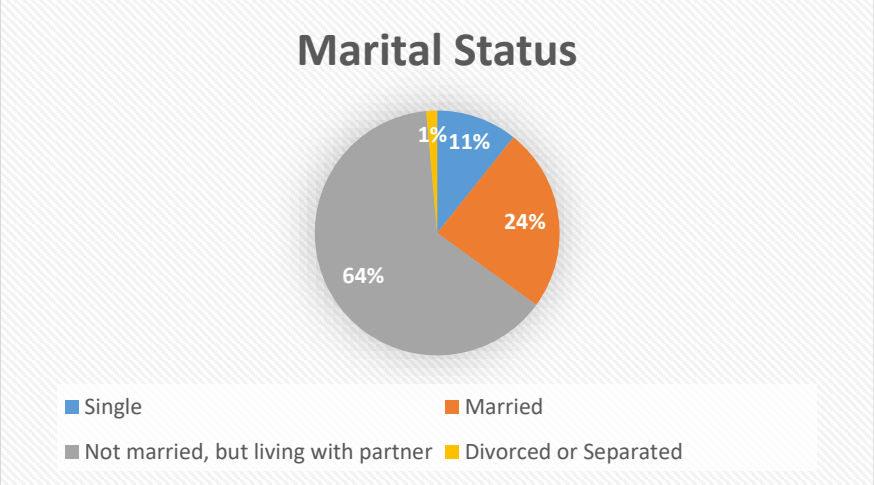
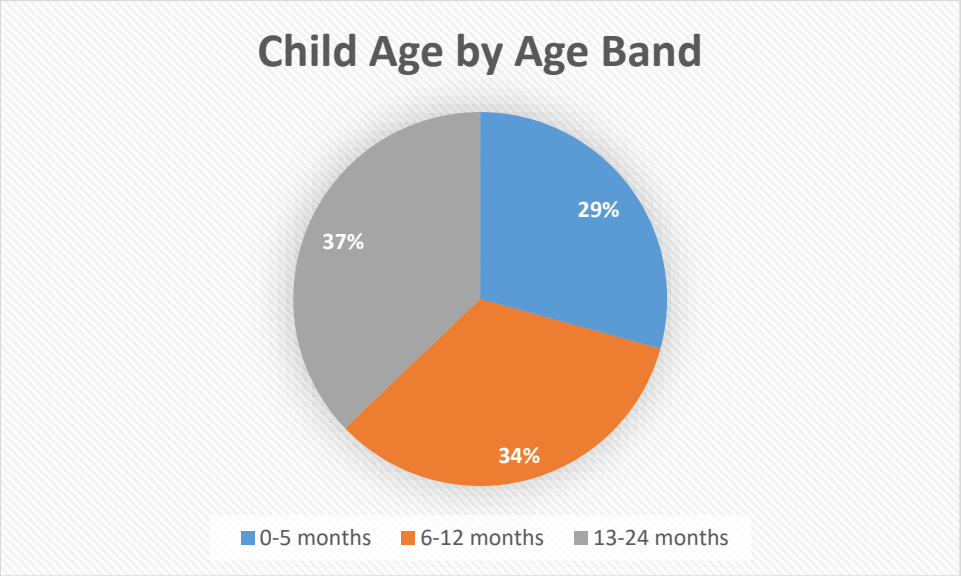


Figure 2: Caregiver marital status



In addition to the primary caregivers the survey asked if the husband or partner was also available and willing to answer questions on male knowledge and participation in the program. Of the 24 men identified as available 22 agreed to complete the survey. The caregivers interviewed were mostly young, with 38.2 percent aged 16-25 and 42.4 percent aged 26-35. Amongst these caregivers, 37.1 percent had a child 13-24 months and 33.6 percent had a child 6-12 months, with the smallest group (29.3 percent) in the 0-5 month age band.

Figure 3: Child Age by age band



The division between male and female children was fairly equal with 52.9 percent male and 47.1 percent female.

The prevalence of disabilities among the caregivers interviewed was quite low at 2.9 percent, all of whom were in Sanma province. When asked about disability and development of their children, 95.7 percent of respondents felt their child was developing normally. Because the reporting rates were so low it was not possible to disaggregate knowledge and behaviours by disability status.

Child Health and Nutrition

Child Anthropometry

Height-for-age Z-score (HAZ) was determined using WHO Anthro software, using the 2006 World Health Organization Child Growth Standards (sex-specific). There were 2 implausible values (i.e. those greater than 5 standard deviations (SD) from the reference mean) excluded from analysis. Moderate stunting is defined as -2 SD from the reference mean, and severe stunting as -3 SD. The endline evaluation found a significant decrease in stunting among children under 2 with 13.8 percent compared to 20.8 percent at baseline. This is impressive progress over the project period with a reduction in stunting by 2.8% more than the target goal of 16.6%, a greater impact on stunting reduction than anticipated. As seen in Table 2, at endline stunting was higher among male children, in Shefa province, and in urban locations.

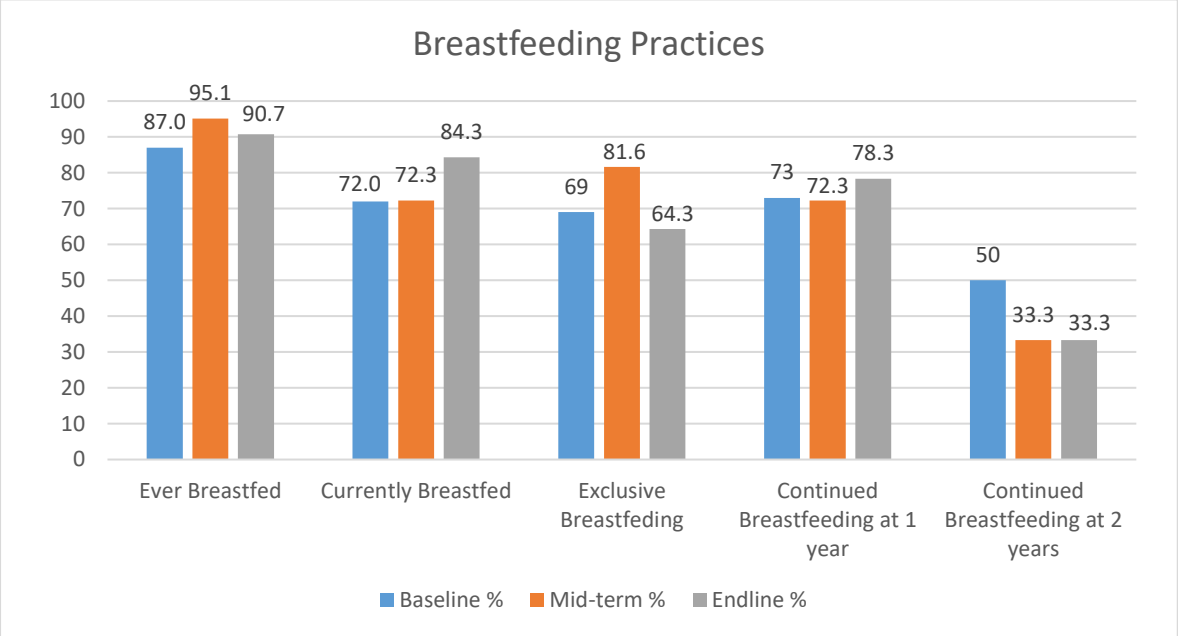
Table 2. Stunting prevalence (-2SD) at baseline and endline (N=138)

	Baseline %	Endline %
Total	20.8	13.8
Sex		
Male	25.6	15.3
Female	15.6	12.1
Province		
Shefa	21.1	17.6
Sanma	17.0	10.0
Location		
Urban	18.6	17.6
Rural	22.2	9.4

Infant and Young Child Feeding

Almost all children were breastfed at some point in life, though this did increase slightly from 86.8 percent at baseline to 90.7 percent at endline. Children who were currently breastfeeding was stable from baseline to midterm at 72 percent then increased at endline to 84.3 percent. Exclusive breastfeeding (feeding an infant nothing but breastmilk until 6 months of age) increased from 69 percent at baseline to 81.6 percent at mid-term then decreased again at endline to 64.3 percent, which is below the program target of 82.8 percent. However continued breastfeeding at one year of age increased slightly from 73 percent to 78.3 percent, though this is below the project target of 88 percent, and breastfeeding at two years of age decreased from 50 percent at baseline to 33.3 percent at mid-term.

Figure 4: Breastfeeding practices at baseline, mid-term, and endline



In examining the breastfeeding behaviours more closely among the different contexts, current breastfeeding was similar between urban (83.6 percent) and rural areas (85 percent) and exclusive breastfeeding was higher in rural areas with 71 percent, compared to 57 percent in urban areas. There was only one case of continued breastfeeding at two years, which was in a rural area, but this also may be associated with the fact that only three children were sampled at that age. All breastfeeding behaviours were higher amongst male children than female children, which is consistent with the baseline and midterm evaluations. At endline breastfeeding behaviours were consistent across the two provinces though at midterm they had been higher in Sanma.

The endline and midterm surveys also asked mothers if they received breastfeeding support from anyone in their household. At endline, 95 percent said they had received support which was a significant increase from 65 percent at midterm. Support was given predominantly by female family members such as a sister or aunt, with mothers/mother-in-laws and spouses also providing strong levels of support. As shown in Table 3, at endline support was higher in Shefa province and with some variation between who provided more support.

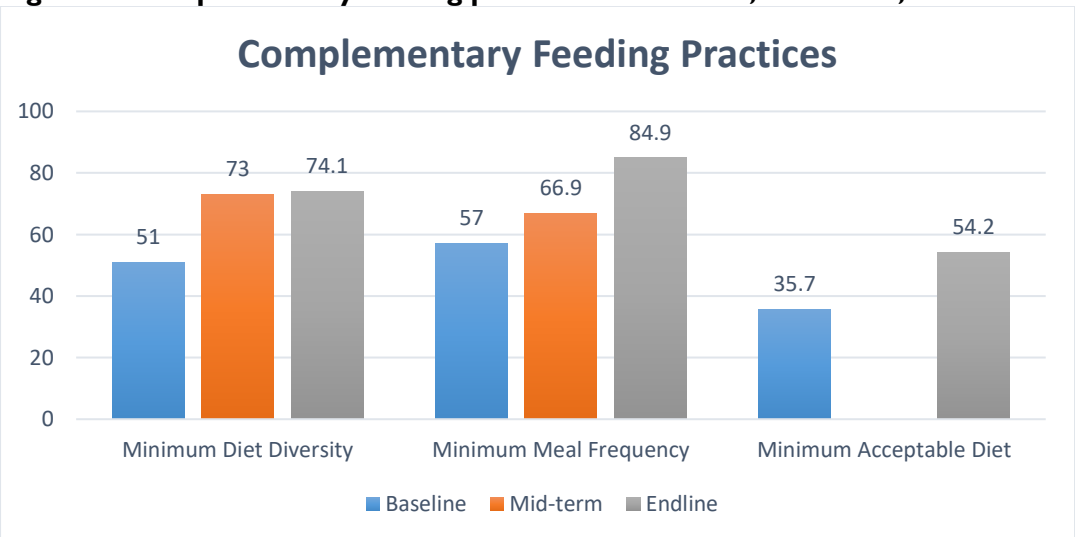
Table 3. Family member support for breastfeeding at midterm and endline

Support Mid-term n=144 Endline n=140	Spouse (%)	Mother or mother in law (%)	Other family (%)
Total			
Endline	68.9	72.8	80.6
Midterm	66.7	72.5	79.1
Male child			
Endline	61.4	71.9	82.5
Midterm	63.5	60.4	73.6
Female child			
Endline	78.3	73.9	78.3
Midterm	71.1	89.5	86.8
Shefa			
Endline	76.0	74.0	86.0
Midterm	64.6	79.2	72.9
Sanma			
Endline	62.3	71.7	75.5
Midterm	69.0	65.1	86.0

Complementary feeding behaviours were primarily evaluated through minimum meal frequency (MMF) (the number of times a child should be fed throughout the day based on age), and minimum diet diversity (MDD) which recommends a child receive foods from at least four different food groups in a day. Both were assessed through a 24 hour dietary recall with the caregiver. Minimum acceptable diet (MAD), which was analysed at baseline and endline but not mid-term measures children who received both MMF and MDD, with continued breastfeeding.

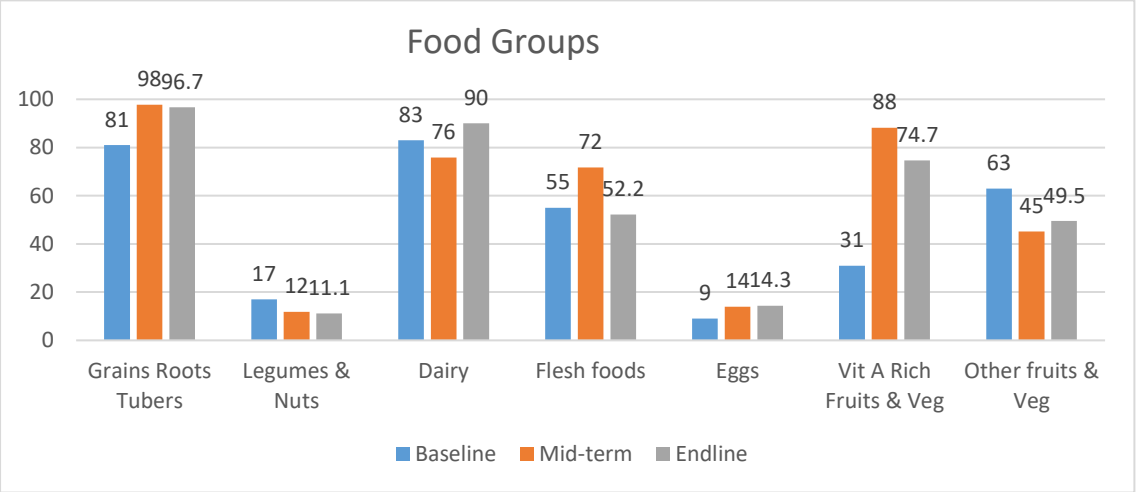
As demonstrated in Figure 5, all three indicators improved steadily from baseline to midterm to endline and surpassed the project targets of 60.8 percent for MDD and 68.0 percent for MMF, and 42.1 for MAD by more than 13 percentage points. Minimum meal frequency increased from 56.7 to 66.9 to 84.9 percent and minimum diet diversity increased from 50.7 to 73.0 to 74.1 percent, which are both significant increases. MDD was higher among male children, higher in rural areas, and higher in Sanma province (83.3) than in Shefa (66.7). MMF was consistent between male and female children, higher in rural areas than urban areas and was higher in Sanma province (65.2) than in Shefa province (57.3). Complementary feeding practices in urban communities may have been impacted between mid-term review and endline by unemployment and other economic effects of the Covid-19 pandemic limiting the purchasing power of parents.

Figure 5: Complementary feeding practices at baseline, mid-term, and endline



Looking in more detail at the food groups consumed by children aged 6-23 months, improvements were most notable from baseline to midterm, which is in line with the MDD trajectory with the biggest increase during that period then little change between mid-term and endline. In particular, consumption of grains, roots and tubers, dairy, eggs, and Vitamin A rich fruits and vegetables all increased significantly between baseline to endline. Consumption of legumes and nuts, flesh foods, and other fruits and vegetables did not make gains over baseline levels, possibly because of lack of availability and/or cost of these foods due the impact of Tropical Cyclone Harold on Sanma province.

Figure 6: Consumption of food groups among children 6-23 months



The survey also asked about liquid consumption. Though this is a critical way to verify exclusive breastfeeding, it is also important to evaluate drinks in the child's diet. Most notable are the decrease in juice and water consumption and increase in formula consumption from baseline to endline.

Table 4: Liquid consumption by children in the last 24 hours

Child Liquid Consumption (%) Baseline n = 282 Mid-term n = 144 Endline n = 140	Baseline	Midterm	Endline
Water	75.5	61.0	64.3
Formula	8.0	11.8	15.0
Milk	12.3	16.7	11.4
Juice	43.6	31.9	27.9
Yoghurt	-	2.8	3.6
Other	-	48.6	36.4

The most commonly consumed liquids aside from breastmilk were water and 'other' (usually noted as coconut water), underlying the importance of families to provide clean drinking water given its widespread consumption.

In focus group discussions in Sanma and Shefa during project close out meetings, stakeholders noted that the program interventions have motivated some of the notable behaviour changes in communities including earlier attendance to ANC and men being supportive to their wives by attending ANC or MCH clinics with them and sharing household tasks to allow the mother to focus on child feeding. There also appears to be improvements in handwashing and cultivating/preparing diverse nutritious foods and in some areas an increase in exclusive breastfeeding and use of family planning.

Grandmothers are more supportive to their daughters and decreasing promotion of myths and taboos and promoting good behaviours instead. Respondents in focus group discussions associated the noticed behaviour changes with observed improvements in child health and meeting development milestones.

Water Sanitation and Hygiene

Water, sanitation, and hygiene (WASH) is closely associated with child malnutrition, with WHO suggesting roughly 50% of all malnutrition is associated with repeated diarrhoea or intestinal worm infections as a direct result of inadequate water, sanitation and hygiene[3].Handwashing with soap and water is an important practice to disrupt the fecal-oral pathway. In the endline observations conducted during the household survey, overall 61 percent of households had a handwashing station (observed) compared to 73.5 percent at baseline. The decrease was evident across both rural and urban areas which were similar at endline. However, in comparing provinces only Shefa showed a decrease (93.8 to 37.1 percent) while Sanma improved (61.0 to 84.3 percent).

At the handwashing stations 92.9 percent had water available, which was an improvement over 61.0 percent at baseline, and 47.1 percent had soap, comparable to 25 percent at baseline.

The decrease in handwashing stations in Shefa was surprising, given the post-COVID19 focus on handwashing and improved WASH. There may have been data collection errors at endline due to the translation of the question which asked where people wash hands and if directed to the basin for washing dishes or clothes might be recorded as none rather than a proper handwashing station.

Table 5. Handwashing station at baseline and endline, by province and location

Baseline n = 282 Endline n = 140	**Handwashing Station Present** **%**	**Water available** **% of handwashing stations**	**Soap available** **% of handwashing stations**
Total			
Endline	60.7	92.9	47.1
Baseline	73.5	61.0	25.4
Sanma			
Endline	84.3	94.9	40.7
Baseline	61	36	24
Shefa			
Endline	37.1	88.5	61.5
Baseline	93.8	87.7	30.8
Urban			
Endline	62.2	95.7	52.2
Baseline	76.9	62.5	32.7
Rural			
Endline	59.1	89.7	41
Baseline	71.4	30.1	20.8

In focus group discussions in Sanma and Shefa during project close out stakeholders noted that the program interventions have motivated some of the notable behaviour changes in communities including earlier attendance to ANC and men being supportive to their wives by attending ANC or MCH clinics with them and sharing household tasks to allow the mother to focus on child feeding.

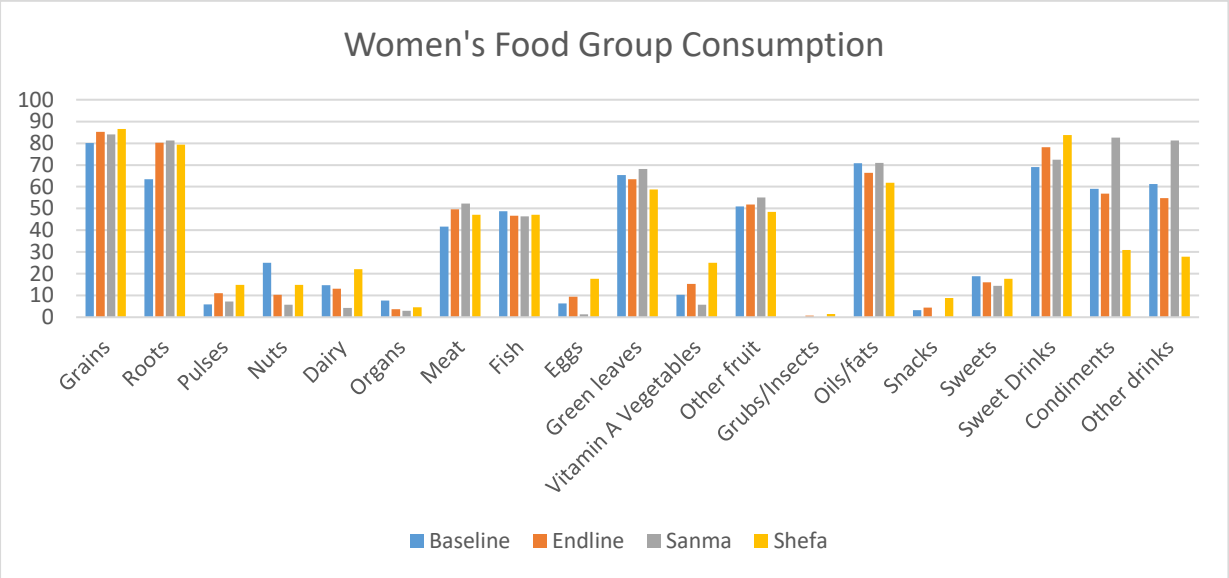
[3] Prüss-Üstün A, Bos R, Gore F, Bartram J. Safer water, better health: costs, benefits and sustainability of interventions to protect and promote health. World Health Organization, Geneva, 2008;

There also appears to be improvements in handwashing and cultivating/preparing diverse nutritious foods and in some areas an increase in exclusive breastfeeding and use of family planning. Grandmothers are more supportive to their daughters and decreasing promotion of myths and taboos and promoting good behaviours instead. Respondents in focus group discussions associated the noticed behaviour changes with observed improvements in child health and meeting development milestones.

Women's Dietary Diversity

At baseline and endline women of reproductive age within the caregivers being surveyed (n=136 women) were asked about their dietary consumption in the last 24 hours to assess if they met the minimum recommended dietary diversity of at least five out of ten food groups, supporting their health during pregnancy and breastfeeding. Due to a data collection error at endline two food groups were excluded from the instrument, Vitamin A rich fruits and other vegetables, so dietary diversity score cannot be properly calculated. These food groups are excluded from the graph below. However as seen in the figure below consumption of certain nutritious food groups did increase from baseline to endline. Most notably consumption of grains, roots, pulses and meat increased while eggs and Vitamin A rich vegetables decreased. The baseline and endline data were collected at different times of year so this may affect the seasonal diets of the time.

Figure 7. Women's Consumption (%) of food groups at baseline and endline, by province



Comparing across provinces at endline Shefa had higher consumption of pulses, nuts, dairy, meat, and eggs while Sanma had higher consumption of green leaves and fruit.

Knowledge and Decision Making

Knowledge of MCHN

Increasing or changing knowledge is the first critical step in improving behaviours to support child health and nutrition. The baseline, mid-term, and endline surveys assessed knowledge of both women and men on maternal and child health and nutrition. While women's knowledge was assessed as part of the primary caregiver questionnaire they were then asked if their husband was available and willing

to answer questions about knowledge and participation. Of the 24 men available 22 agreed to participate in the survey. General knowledge increased among both groups.

Women already had high knowledge levels at baseline about maternal nutrition and early initiation of breastfeeding, which increased further at endline. The biggest increases in knowledge were around the number of times a woman should attend antenatal care (ANC), which showed an 18.6 percentage point improvement, and the appropriate age to start complementary foods, which showed an increase of 8.7 percent. Knowledge of exclusive breastfeeding and continued breastfeeding showed a small decrease between mid-term and endline (-1.5% and -3.5%, but within the small sample size surveyed this is demonstrating a variation of 3-5 responses, and so is not a significant reduction). Across all behaviours knowledge was higher in Sanma than in Shefa.

Table 6: MCHN knowledge among women at baseline, mid-term, endline, and by province

Women's knowledge Baseline n = 272 Mid-term n = 144 Endline n = 139	**Baseline**	**Mid term**	**Endline**	**Sanma**	**Shefa**
ANC	70.6	85.4	88.5	88.6	88.5
Maternal Nutrition	96.3	96.4	99.3	100	98.6
Early Initiation of BF	89.3	86.8	91.4	92.8	90
Age appropriate Complementary Feeding	78.4	87.5	87.1	92.8	81.4
Exclusive Breastfeeding	-	99.3	97.8	98.6	97.1
Continued Breastfeeding	-	51.4	47.9	56.4	40.0

It's important to note that knowledge of exclusive and continued breastfeeding were not assessed at baseline and though knowledge of exclusive breastfeeding (EBF) was high at mid-term and remained high, knowledge of continued breastfeeding until two years was low and decreased slightly. The high levels of knowledge of EBF but decrease in practice (see Table 4) indicates that knowledge is not the most significant barrier to this behaviour.

Men's knowledge increased steadily across all topics by at least ten percentage points, except for early initiation of breastfeeding which increased at mid-term then decreased at endline. The greatest increase was seen in men's knowledge of the importance of women seeking antenatal care, which showed 34.3 percentage point increase.

Knowledge of exclusive and continued breastfeeding were not assessed at baseline and though knowledge of EBF was high among men when measured at mid-term and endline, knowledge about the importance of continued breastfeeding until age two was low at mid-term and decreased further at endline. Unlike the women, knowledge was mixed between the two provinces with Sanma recording much lower levels of knowledge in 3 areas, however this may also be a result of the very small sample of men.

Table 7: Men's Knowledge of MCHN at baseline, mid-term, endline and by province

Men's Knowledge (%) Baseline n =59 Mid-term n = 24 Endline n = 22	**Baseline**	**Mid-term**	**Endline**	**Sanma**	**Shefa**
ANC	47.5	70.8	81.8	83.3	80
Maternal Nutrition	96.6	95.8	100	100	100
Early Initiation of BF	74.6	83.3	72.8	50	100
Age appropriate Complementary Feeding	54.2	62.5	72.7	66.7	80
Exclusive Breastfeeding		91.6	100	100	100
Continued Breastfeeding		41.6	27.3	16.7	40

Adequate knowledge was defined as accurately responding to three of the four topics: of ANC, maternal nutrition, early initiation of breastfeeding, and age appropriate complementary feeding. At endline 84.9% of the women and 81.8% men sampled demonstrated adequate knowledge, which was an increase for men from baseline (57.6%) and mid-term (45.8%) and no change from baseline (86%) and mid-term (85.4%) for women. This demonstrates that the program was clearly effective at increasing or maintaining knowledge of key MCHN behaviours, though practicing those behaviours is often more challenging than just knowledge attainment.

Decision Making and Support

Men and women were both asked who in the household makes decisions about the woman's health and nutrition, child health and nutrition, household and food purchases, and child feeding. Results are presented in tables seven and eight. Unfortunately at baseline, a data collection error prohibited analysis of decision making as reported by women so analysis and comparison has been taken from mid-term and endline reporting.

Figure 7 shows that men report joint decision making with their partner more than women on all topics at mid-term and endline. Between mid-line and endline, women reported an increase in making decisions by herself about her and her child's health and nutrition but also reported a substantial increase in other family members (usually the mother or mother-in-law) making decisions about a woman's health and child's health. Women's perceptions around joint decision-making on women's health and nutrition also showed a substantial decrease in endline, with women saying there was joint decision making on their health only 26.2% of the time, compared to 44.8% of the time at mid-term, whereas men's perception of their involvement in joint decision-making on women's health jumped by 23.1%, with 77.3% of men reporting that decisions about women's health were made jointly. Both men and women said their spouse makes decisions about household purchases about 40 percent of the time and jointly 40-50 percent of the time.

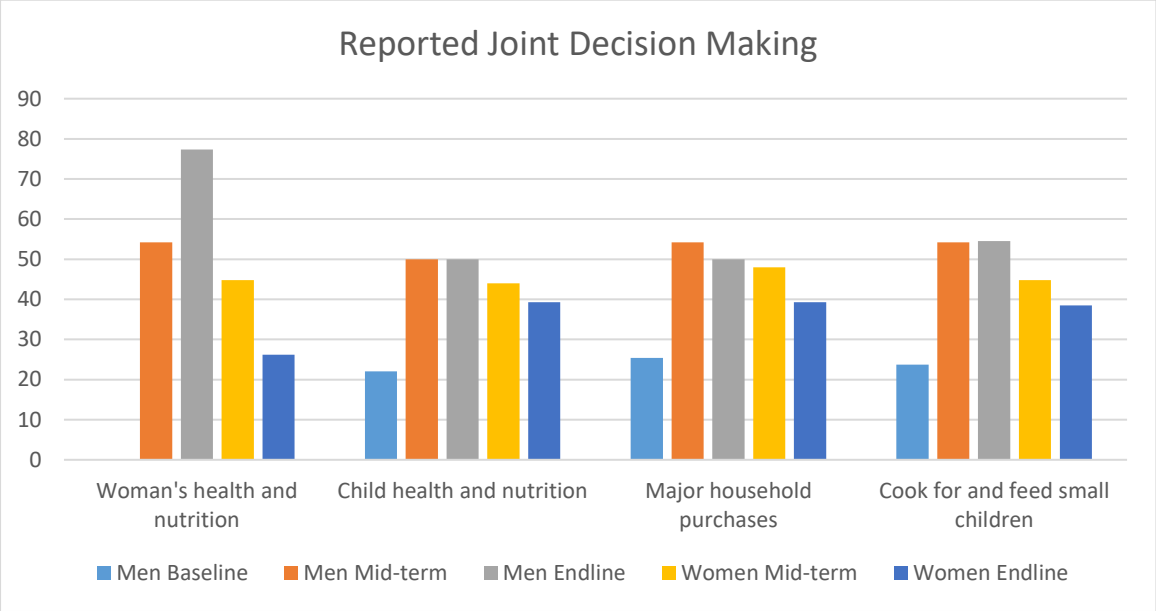
Table 8: Women's perceptions on decision making in household

Decision topic Mid-term n = 144 Endline n = 140	**Self**		**Spouse**		**Jointly**		**Other Family**	
	Mid-term	Endline	Mid-term	Endline	Mid-term	Endline	Mid-term	Endline
Own health and nutrition	34.4	49.2	11.2	13.1	44.8	26.2	8.8	26.2
Child health and nutrition	39.2	42.6	8.0	6.6	44	39.3	6.4	39.3
Major household purchases	17.6	14.8	30.4	39.3	48	39.3	1.6	39.3
Food purchase	24.8	23.8	18.4	19.7	48	46.7	6.0	46.7
Cook for and feed small children	36.0	44.3	7.2	5.7	44.8	38.5	8.0	38.5

Table 9: Men's perceptions on decision making in household

Decision Topic Mid-term n = 24 Endline n = 22	Self		Spouse		Jointly		Other family	
	Mid-term	Endline	Mid-term	Endline	Mid-term	Endline	Mid-term	Endline
Woman's health and nutrition	8.3	4.5	37.5	13.6	54.2	77.3	0	9.1
Child health and nutrition	29.2	27.3	20.8	9.1	50	50	0	13.6
Major household purchases	12.5	9.1	25	40.9	54.2	50	8.3	9.1
Cook for and feed small children	4.2	13.6	33.3	13.6	54.2	54.5	8.3	18.2

Figure 7: Joint decision making as reported by women and men



Men and women were also asked who in the family supports housework and childcare in the mid-term and endline. Though over 90 of women reported receiving some support with housework and childcare, as they did with breastfeeding, only half reported receiving that support from their spouse while 100 percent of men reported helping with these two tasks, which was an increase over 95 percent at mid-term. Women did report a small increase in support with housework from their spouse and other family between mid-term and endline, however spouse support for childcare showed a slight decrease. Other family who supported housework and childcare were typically the grandmother, aunt, or sister.

Table 10: Women's reported family support

Family Support Mid-term n = 144 Endline n = 140	No one		Spouse		Other family		Jointly with spouse/other	
	Mid-term	Endline	Mid-term	Endline	Mid-term	Endline	Mid-term	Endline
Helps with Housework	7.6	9	50	58.2	39.6	45.1	2.8	6.6
Helps with Childcare	10.4	9	50.7	46.7	6.3	6.6	43.1	45.1

Program Participation

New questions were added to the mid-term and endline surveys to assess program awareness and participation in both the peer support groups (PSG) and community action plans (CAP) and asked of all caregiver respondents (140 at endline) and partner respondents (22 at endline). General awareness of the program was only asked at endline and was low at only 50.4 percent for women and 40.9 percent for men, but this may have been due to a poor translation in the survey, the nature of the timing of data collection at mid-term, or the decreased project activity in Phase 1 villages with the expansion into Phase 2 communities. Women and men's awareness of the PSGs decreased between mid-term and endline, though their awareness of CAP remained the same (women) or increased (men). Women's participation in the PSG was higher at endline than mid-term, though men's participation dropped. Participation in general was higher among women than men, was higher in rural areas, and was higher in Sanma than Shefa, especially for men.

Table 11: Awareness and Participation in program

Program Component Mid-term n = 168 (144F, 24M) Endline n = 162 (140F, 22M)	**Women**				**Men**			
	Mid-term	Endline	Sanma	Shefa	Mid-term	Endline	Sanma	Shefa
Aware of Program	-	50.4	60.9	40	-	40.9	58.3	20
Aware of PSG	73.9	58.1	54.4	61.8	62.5	59.1	66.7	50
Attended PSG Meeting	45.8	58.2	70.3	47.6	46.7	40.9	50	30
Visit from lead mother/Father	33.3	44.3	43.2	45.2	53.3	22.7	16.6	30
Aware of CAP	47.0	47.1	60.3	33.8	41.6	59.1	83.3	30
Benefited from CAP	39.7	73.4	70.7	78.3	12.5	86.7	75	20

Women, were more aware of the peer support groups than of the CAP, while men had equal knowledge of both. Women were more likely to participate in the PSG and to receive a home visit than men were. Among women, though awareness of the PSG was higher in Shefa attendance was higher in Sanma. About half of women had attended three or four PSG meetings while half of men only attended one. Around 45 percent of women received a home visit across provinces while twice as many men received a visit in Shefa (30 percent) as in Sanma (16.6 percent).

Men's awareness of the CAP increased significantly since mid-term and was higher than women's, which had remained constant since mid-term. Sanma province had slightly significantly higher CAP awareness than Shefa in both groups. Among women who were aware of CAP, 73.4 percent said they had benefited from the CAP already, a large increase over the mid-term though interestingly more women in Shefa had benefited. Among men who were aware of CAP, 75 percent in Sanma but only 20 percent in Shefa said they had benefited from the CAP, in both cases an increase from mid-term.

Qualitative Findings

During project close out meetings focus group discussions were held with government stakeholders, community leaders, program staff and project volunteers to gather feedback on the effectiveness of the project activities and on the project design and implementation. The discussions and findings are organized around several key topics.

Effectiveness of peer support groups in engaging caregivers and promoting behaviour change:

- The focus groups suggested that PSGs have motivated some notable behaviour change in communities including earlier attendance to ANC and men being supportive to their wives by

attending ANC or MCH clinics with them and sharing household tasks to allow the mother to focus on child feeding. There also appears to be improvements in handwashing and cultivating/preparing diverse nutritious foods and in some areas an increase in exclusive breastfeeding and use of family planning. Grandmothers are more supportive to their daughters and decreasing promotion of myths and taboos was observed.

- Respondents in focus group discussions associated the noticed behaviour changes with observed improvements in child health and meeting development milestones.

Effectiveness of the program design using peer support groups and CAP projects:

- There are some very mixed perceptions of the CAP projects results with variation in levels of completion and benefit to community members. The focus groups reported that the primary barriers to people/communities benefiting from the CAP were distance/accessibility as well as projects not being completed.
- In general the PSG model was well received, particularly the experience exchange among participants and the inclusive facilitation. Scheduling or participation was a challenge sometimes due to other events and especially for men who were occupied with other responsibilities or for women who were distracted by caretaking of their young children during meetings. Home based visits could help to alleviate these challenges. Some respondents felt the flip-chart materials used by the PSG facilitators could have been more pictorial and less word-based.

Participation and inclusion:

- Male engagement was more successful in rural communities than urban and more with CAP than PSGs. Leveraging male role models and existing events in the community helped to engage men and with good counselling sessions with men from PSG facilitators, men do understand the importance of their children's health and nutrition.
- Participants in the project closeout workshop reported that disability inclusion was better for Phase 1 than Phase 2 communities where there seemed to be less of an understanding of disability inclusion as a concept. The shorter time period for implementation of project activities in Phase 2 communities may have contributed to this. Disability inclusion was also reported to be better in smaller rural communities, where communal support and understanding was already established, than in urban areas. The PSG facilitation skills were good for encouraging people with disabilities to participate and engaging them, with the exception of people who were hearing impaired due to the nature of the discussion/oral focused facilitation. Some of the CAP projects were not accessible to people with physical disabilities, depending on the community.

Sustainability and government/local ownership:

- Sustainability measures at the community level centered around leaders/chiefs reaching agreement on an MOU agreeing to roles and responsibilities of continuing the CAP committee. At the provincial level vision, statements and strategic plans for each community are being integrated into existing government planning and oversight including completing outstanding CAP projects and integrating into provincial business plans and savings and loans programs. At the national level, the First 1,000 days topics will be included into the Ministry of Health's Village Health Worker (VHW) pre-service training and health worker training for continued implementation through the government health system and inclusion in the national business plan.
- Area Council administrators recommended that there is a need to increase ownership by Area Councils and to review the implementation design with the council leadership organisation, including the CAP approach.

Interpretation of Results

The purpose of the endline was to measure impact and achievement against objectives, and answer a set of key questions that could then help to inform recommendations for future programming, scale-up, and sustainability. We refer back to the key questions to guide interpretation of the results.

- Is there evidence of improved health outcomes for children (reduced levels of stunting in children under 2 years old) and improved knowledge and practices among the initial 10 project communities after the project implementation period?

There is significant evidence of improved health and nutrition outcomes and behaviours for young children, most notably a 7 percentage point decrease in stunting from baseline to endline. The endline stunting prevalence of 13.8 percent is 40 percent greater than the target stunting figure the project was working to achieve (16.6), which translates to stunting reduction in an estimated 65 children in the target communities[4]. In addition to this evidence of impact, behaviour change was noted in quantitative data, particularly in complementary feeding practices of meal frequency and diet diversity which over the course of the project increased by 28.2 percent for minimum meal frequency and 23.4 percent for minimum diet diversity. Overall knowledge of MCHN practices was improved at the end of the project, especially in knowledge of antenatal care needs for women, indicating that the project was successful with that first critical step to behaviour change and future efforts could focus on the specific barriers that affect the application of new knowledge.

- How effective has the Peer Support Group approach been in engaging parents and caregivers with improved child and maternal health outcomes?
    - 2a. what is the coverage of Peer Support Group membership among the target population (mothers, fathers, and grandmothers of children under two)?
    - 2b. What motivated people – especially fathers – to participate in the activities, and what changes need to be made to the peer support group methodology to improve its intended purpose of household-level behaviour change?

According to qualitative data the Peer Support Group was well liked for its group experiential exchange and solid facilitation but could have benefited from more mobilization to motivate participation. The approach was more successful at reaching women (almost 60 percent participation) than men (40 percent participation) and in rural than urban areas with improved participation by the end of the project. Qualitative respondents felt the PSG approach was inclusive to people with disabilities though suggested some adjustments to the flip chart to make them more pictorial for people with vision challenges (including grandmothers or elderly caregivers) and adaptations for people with hearing impairment. Scheduling and time commitment were also identified as challenges to participation, particularly for men and in urban areas, but home visits were seen as a good alternative in those cases. Community mobilization was key to enrollment and participation but could be increased even more and linking the PSGs with existing events was helpful for engaging men. Qualitative respondents felt that leveraging male role models in the community and good counseling by the PSG facilitators did increase the interest and knowledge of the importance of child health and nutrition among men.

- To what extent have members of the target population (mothers, fathers, and grandmothers of children under two) benefited from the Community Action Planning projects and what

[4] Estimated using baseline population of 0-2 year old children of 922 (250 Sanma, 572 Shefa)

changes need to be made to the Community Action Planning methodology to improve its intended purpose of broader community engagement for maternal and child nutrition?

The quantitative and qualitative data were not totally aligned on the perception of the CAP. In the quantitative survey slightly more than half of respondents were aware of the CAP and a majority (73.4 percent of women and 86.7 percent of men) said they had benefited from the CAP. This is a large increase over the mid-term when many of the CAP projects were still just starting. Completion of the CAPs and therefore community member's ability to benefit from them was very mixed by area and by project type. Market houses and food preservation (solar freezers) appeared to have the broadest reach and benefit in communities, while latrines/toilets, fish ponds, and rain water collection (water tanks etc) were less effective. Challenges to these projects included access/distance to the project and seasonality (particularly for rain water collection). The evidence did not demonstrate any strong link between the projects and nutrition and health outcomes, which may be associated with lack of understanding of linkages or limitations of the reach.

- How successful has the program been in engaging fathers in program activities (either Peer Support Groups or CAP)?

While men's engagement in the project has been lower than women's. PSG participation has remained around half, but is much higher in Sanma than Shefa, and CAP awareness and participation increased significantly. Male engagement is significantly better in rural and small communities, with 50 percent of Sanma men reporting attendance at PSG meetings compared to 30 percent of Shefa men, and 83.3 percent of Sanma men aware of CAP compared to 30 percent of Shefa men. Rural CAP projects were well supported through good coordination and management of CAP committees that involves men to execute the projects.

- What was the level of engagement of parents or grandparents with a disability in the F1000D activities? What were some enablers or barriers to inclusion?

The sample of caregivers with a disability was extremely small in the endline, only 4 cases, so it was difficult to measure this quantitatively. Participants in the workshops felt that the PSG was inviting and inclusive to people with disabilities, though the nature of the sessions, which relied on oral presentations and flip charts could be revised to be more user friendly to people with hearing or sight impairments. Fundamentally though, focus group participants felt people with disabilities were considered and included, especially in rural areas where that community fabric was already strong. The CAP projects were more variable in terms of the accessibility for those with physical or mobility challenges as sometimes the location of projects (for example a fish pond) and design (for example a latrine) were not accessible. Qualitative respondents also indicated that caregivers with disabilities were not included in CAP decision making and that planning around inclusion and access was not considered strongly enough at the start of CAP process.

- How sustainable do community members and provincial and national health staff feel the First 1000D approach is following the end of the project?

There is strong interest by the government and community stakeholders in the sustainability of the project approaches. Community leaders are taking responsibility to continue the CAP committees, are defining roles and responsibilities, and feel that role models who participated in the PSGs will continue to promote the optimal health and nutrition behaviours. Respondents felt the area councils should take yet a bigger role and that relevant stakeholders could review CAP methodology to make any necessary adjustments and support roll out in other communities, indicating an interest by the government to adapt and scale this approach including integration through community strategic plans

and provincial business plans. At the provincial and national level there is a strong interesting in integrating the PSG approach into the VHW model and incorporating the First 1,000 Days training topics into health worker and VHW training, demonstrating an increased value by the government on both IYCF and community based programming and outcomes. Government and community interest and value of the project topics and approaches is evident at the close of project.

Recommendations & Conclusions

Recommendations

A series of recommendations were made at the time of the mid-term evaluation to improve implementation of the First 1,000 Days Project and inform future community based nutrition programs in Vanuatu. Many of those recommendations were implemented in the final two years of the project and remain valid for future consideration. The endline data revealed the following broad recommendations for implementers and stakeholders of nutrition outcomes in Vanuatu:

- PSGs are a viable approach for improving knowledge and behaviours, particularly among women/mothers. Though knowledge is an important step in behaviour change a deeper examination and targeting of barriers is important to translate that knowledge into practice. Changes in context, such as natural disasters or global pandemics, may present a new set of barriers so approaches should be revisited and adapted as necessary over the course of implementation.
- Strong community mobilization and community leader ownership of the PSG and CAP processes are essential not only for robust participation but lasting sustainability. Mobilization events, capacity strengthening, and inclusion of role models/influencers should be conducted throughout the course of the project.
- Men are harder to engage in MCHN projects due to both cultural norms and competing priorities for their time. PSGs may not be as effective of an approach to men in urban areas so leveraging existing events and engaging role models to encourage interest are important ways of engagement.
- The CAP process is extensive and time consuming and requires solid community engagement. It is a good mechanism to include men and leaders in the project but requires oversight to complete the implementation and clarify the benefit/connection to health and nutrition of young children. CAP committees should consider people with disabilities at the beginning of the planning process and include them in decision making. CAP projects should also consider accessibility and seasonal issues that may limit the reach to community members and adjust plans to ensure benefit to the broader target audience.
- Local ownership and value of the approaches is essential for sustainability. Provide more emphasis and capacity building to empower community leaders to take ownership of and lead or continue key activities. Build program components into existing community plans where they exist and support leaders to prioritize and sustain the activities.
- The local and national government is interested in sustaining some of the approaches based on the results of project implementation. This is an important first step but capacity strengthening and advocacy need to continue to ensure the strategic integration of these approaches into government plans and budgets.

Conclusion

The First 1,000 Days project was designed based on global evidence and approaches that had been implemented repeatedly in other locations but were new to Vanuatu, principally the PSG and CAP interventions. The significant reduction in stunting, which surpassed the program target, indicate that

these approaches can be successful in this new context. The progressive positive results of the mid-term then endline evaluation show that the project was effective in mobilizing communities to take collective action, increasing MCHN knowledge among men and women, and improving behaviours that affect nutrition outcomes. The quantitative results showed improvements in key complementary feeding behaviours including meal frequency, diet diversity, and breastfeeding to two years. Improvements in women's decision making power and support from family members for breastfeeding, childcare and housework not only helped to improve behaviours but also demonstrates a broader community prioritization of child health and nutrition. Gains made in exclusive breastfeeding at the mid-term fell at endline and should be further explored, but the initial progress was promising. Qualitative data provided helpful lessons learned from implementation which could be applied to future programming. Overall the interest in and benefit of these approaches demonstrated by caregivers, community leaders, and government stakeholders indicates opportunity for future implementation and integration of these concepts into existing government and local structures.

Annexes

ANNEX 1: Household Questionnaire

Endline%20F1000D%
20HH%20Questionna

Annex 2 – Qualitative Meeting Notes

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