







MIDTERM EVALUATION REPORT

Tearfund Project

« La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi »

2017-2021

Kabadege Melene, Lead Consultant

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Acronyms and Definitions

ACT	Artemisinin-based Combination Therapy
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
BCC	Behavior Change Communication
BDS	Bureau de District Sanitaire
BPS	Bureau de Province Sanitaire
CAMEBU	Centrale d'Achats des Médicaments Essentiels du Burundi
CG	Care Group
CHW	Community Health Worker
CI	Confidence Interval
COPED	Conseil Pour l'Education et le Développement
COSA	Comité de Santé
DGD	Belgian Directorate General for Development
DHS	Demographic health survey
DHIS	District Health Information System
DS	District Sanitaire
FARN/FAN	Foyer d'apprentissage et de réhabilitation nutritionnelle /Foyer d'Apprentissage Nutritionnel
FFS	Farmer Field School
FGD	Focus Group Discussions
EOP	End of Project
GMP	Growth Monitoring and Promotion
GVC	Gruppo di Volontatiato Civile (Civil Volunteer Group)
HC	Health Center
ICCM	Integrated Community Case Management
IHP	International Health Partner
IYCF	Infant and Young Child Feeding
KII	Key Informant Interview
KPC	Knowledge Practice Coverage
LM	Light Mother
MAD	Minimum Acceptable Diet
MOH	Ministry of Health
MSPLS	Ministère de la Santé Publique et Lutte Contre le SIDA
MTE	Midterm Evaluation
NGO	Non-Governmental Organization
ORS	Oral Rehydration Salts
POU	Point of Use (water treatment)
RDT	Rapid Diagnostic Test
TFB	Tearfund Belgique
ТОТ	Training of trainers
TPS	Technicien Promoteur de la Santé
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WR	World Relief
WRBU	World Relief Burundi
VSLA	Voluntary Saving Learning Association

Map of the targeted Health Districts

« La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi »



Executive Summary

The project "La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi", is carried out by Tearfund (lead agency), World Relief, Council for Education and Development (COPED) and Dutabarane (implementing partners) in Burundi. The project is covering three Provinces of Burundi: Mwaro, Bujumbura and Gitega Provinces including six Health Districts (Gitega, Fota, Kibumbu, Kabezi, Isale and Rwibaga Health Districts). The population entirely lives in rural areas, the targeted beneficiaries includes women of childbearing age: 206,558; children under five years old: 123,761; households for under five years old children: 78,004¹.

The overall goal is the reduction of mortality and morbidity among children under five in six targeted health districts in Burundi. The two specific Objectives of the project are as follows:

Specific Objective 1:	The accessibility of health care is improved in the Health Districts targeted by
	strengthening the capacity of the health system through the implementation of
	integrated community management of diarrhea, malaria, pneumonia, postnatal follow- up and malnutrition.
Specific Objective 2:	Strengthen key prevention practices and community resilience mechanisms to improve
	community-level health and nutrition in targeted health districts.

The project's interventions primarily brought together:

- Training and equipping the Community Health Workers to implement successfully ICCM activities. The intervention was supported by a considerable effort in training carried out with the MSPLS, Health Districts and the Health Centers.
- Initiation of VSLA in order to empower women as key beneficiary of the project
- Organization of farmers into FFS groups to learn improved farming technique with primary mission, to improve household income and food security
- Implementation of the BCC strategy, Care Group Model integrating CHWs. purposely to create the community demand for health services and to saturate the community with key health and nutrition messages shared one by one at the household and to reinforce the BCC by building the capacity of local leaders for successful involvement in community awareness.
- Implementation of FARN/FAN with purpose to rehabilitate children suffering from malnutrition and to educate the mothers on feeding practices

Purpose and research question and methodology of the evaluation

The purpose of this evaluation was to assess the program progress towards its end project objectives and to provide key recommendations that will lead the project management to take decisions to improve the program in order to meet the program objectives.

The evaluation responded to four key evaluation questions

- 1 Is the implementation of ICCM having the expected impact on the communities?
- 2 Are the activities related to SO2 being implemented effectively?
- 3 Are the activities related to SO2 being implemented efficiently?
- 4 Was there coherence, complementarity and synergy with other actors for SO2?

¹ Tearfund Program 2017-2021, « La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi » Version Avril 2017

The evaluation methodology used both quantitative and qualitative data. The data collection took place in October 2019. The household KPC survey was implemented in order to collect the quantitative data. A sample of 390 mothers of under five years old children has been selected from the population of Mwaro and Bujumbura Rural Provinces using the two-stage standard 30-cluster sampling methodology with 13 households per cluster. The qualitative data were collected using Key informants' interviews and Focus Group Discussions. KII have been organized with MSPLS and Health Districts key informants, Project country directors, project Managers, and with Key Partners. FGDs were conducted with CHWs, Community leaders, health Center staff and COSA, mother- participant to the integrated project activities and with project staff.

Key Findings and Conclusion

After two years of the implementation, ICCM brought big impact on the community. More than 37,000 children have been treated by CHWs, 99.9 % improved after treatment, no death did occur after the treatment provided by the CHWs. Noticeable changes have occurred such as 71% of children have been treated within 24 hours of onset of malaria symptoms, 69% of children have been treated for diarrhea and 50% of children have been treated for cough/fast breathing respectively within 24 hours of onset of symptoms. Although the delay in the implementation of pneumonia and diarrhea treatment at community level and the issue of frequent stock out, the project has accomplished and contributed to its first specific objective "Accessibility of health care is improved in the targeted Health Districts".

VSLA activities has been implemented with effectiveness. The increased VSLA membership and ultimately the enhanced access to microloans (from 34% -Baseline value to 48%- MTKPC value) translated the effectiveness of VSLA intervention. Although the project did not yet bring significant impact to the economic development of the population, VSLA activities have been highly appreciated by the local leaders and farmers emphasizing the gains they have earned from VSLA activities. However, the FFS project did not meet the targets as the program was not effective for almost one year. It is too early to confirm the effectiveness or ineffectiveness of the FARNs/FANs implemented in Isare health District, since only one FARN cycle of 12 days have been implemented and is not enough to bring big impact in the community. However, the midterm findings revealed ineffectiveness of the current modified CG implemented in Rwibaga Health District. Since the model was poorly meeting the 13 CG required criteria, only 54% of the required criteria were met.

The approach adopted for health promotion and prevention and for family resilience was inexpensive, affordable, and sustainable. VSLA activities have been implemented efficiently. The budget was enough to carry out activities as planned since the beneficiaries have contributed to purchase some VSLA supplies. The membership growth rate was 8.9%, the average annual saving per member was \$54 versus \$48 average in Burundi, the Fund utilization rate was 26.6% versus 11.2 % in Burundi. As mentioned above it is too early to analyze the efficiency of the FFS and FARN activities as the implementation has been delayed due to administrative reasons. The imbalance between the CG inputs and the expected output translated the inefficiency of the CG that can be attributed to the insufficient budget for implementing CG activities such as the lack of enough budget for printing CG materials and for conducting trainings and also the lack of quality CG implementation .

The project had built synergy and complementarity with other community actors. The coherence has been remarkable with the MSPLS from the planning to the implementation and to the procurement of ICCM supplies and drugs. The Project has been designed in such a way the costs are minimal and reliance is placed on partners who do not depend on short-term external funding for their support, such as the MOH, the community, and local organizations. By "building a bridge" between the MOH services and the community, the Project has strengthened the synergy of the health system in Burundi and the complementarity of the Health Facility services with community health services. Partnerships were built with other partners like Red Cross and GVC engaged in community-based nutrition interventions implementing FARN/FAN in Bujumbura Rural and Mwaro Provinces. At country program level the project team have been making phenomenal joint complementary plans throughout the project lifecycle.

Below is Table1 including key project indicators

Table 1: Project Indicators, Baseline value and End-of-Project targets

	Indicators	Baseline Value	Midterm Value	End of project target	Verification Source
Objectif Global Reduction of mortality and	Two-week prevalence of Diarrhea	33%	41.8	10,5%	KPC Survey
morbidity among children under five	Two-week prevalence of cough with fast breathing	36%	57.2	6%	KPC Survey
Burundi	Two-week prevalence of Malaria	43%	45.1	1,5%	KPC Survey
SO1. Accessibility of health care is improved in the targeted Health	% of diarrhea cases treated by CHWs with Zinc & ORS	3%	18.7%	60%	KPC Survey
Districts.	% of Pneumonia cases treated by CHWs according to the national protocol in the targeted districts	32%	70%	60%	KPC Survey
	%of malaria cases treated by CHWs according to the national protocol in the targeted districts	69%	16%	60%	KPC Survey
	Annual ICCM CHW retention rate		97%	95%	Project Reports
SO2. Strengthen key prevention	%of respondents were in a savings group	34%	48%		KPC Survey
practices and community resilience	% of households are severely food insecure	81%	82%		KPC Survey
mechanisms to improve community- level health and nutrition in targeted	% of respondents reported that women participate in decision-making	38%	23%		KPC Survey
health districts <u>.</u>	% of respondents of Rwibaga Health District reached by Care Group members with key preventative messages;		14.8%	80%	KPC Survey
Results 1.1 Provision of necessary medicine and consumables	% of CHWs without stock out during the month preceding the control visit		98%	90%	Supervision reports
Results 1.2 Health system is strengthened	# of health providers trained		181 (129.3%)	140	Training reports
	# of CHWs from Bujumbura and Mwaro trained and equipped at least for one out of the four targeted child diseases		572 (100%)	572	Training reports
	% of female CHWs trained and equipped		53%	60%	Training reports
Results 1.3 Mechanisms of appropriate supervision to CHWs are	% of CHWs receiving supervision visit in the last three months		100%	80%	Supervision report
put in place	% of CHWs treated an average of 10 ICCM cases per month		73%	80%	CHW Report
	% of children treated by the CHWs within 24 hours of the onset of fever symptoms		71%	70%	MTE KPC Survey
	% of children treated by the CHWs within 24 hours of the onset of diarrhea symptoms		69%	70%	MTE KPC Survey
	% of children treated by the CHWs within 24 hours of the onset of pneumonia symptoms		50%	70%	MTE KPC Survey
Results 2.2 Creation of VSLA and FFS groups	# of VSLA groups formed		164 (111.5%)	147	VSLA report
	# of FFS groups formed		38 (63.3%)	60	FFS report
	# of Care Groups formed		118		CG report
	# of Community leaders mobilized on project activities		532 (46.8%)	1,136	CG report

Results 2.2 The messages on health and nutrition key family practices	% of households had received any visit related to health in the prior month/ CG visit	8%	14%	МТ КРС
are disseminated to the parents in	% of respondents reported washing hands at all five key times	3%	27%	МТ КРС
the community	% of respondents used an acceptable method to treat drinking water	5%	15%	МТ КРС
	% of children age 0-5 months who were exclusively breastfed during the last 24 hours	86%	78.4%	МТ КРС
	% of children 6-23 months who receive a minimum acceptable diet	2%	13.5%	МТ КРС
	% of household with Soap observed for hand washing	83%	89%	МТ КРС
	% of respondents who knew at least three danger signs of illness		73%	МТ КРС
	% of children 6-59 moths who received Vitamin A supplement		80%	МТ КРС
	% of children 6-59 moths who received Vitamin A supplement in last 6 months		67%	МТ КРС
	% Women who took decision for health		16%	МТ КРС
	% of children received systematic deworming		46%	МТ КРС

Key Recommendations

Even if the program appears to be making some progress towards achievement of its objectives, several recommendations should be considered for the implementation to ensure that the gains to date will be maintained and increased. Among many recommendations related to program managements and to each of the key program strategies adopted, we have selected only few key recommendations to be presented in this section:

Program management and Finance Managers with Tearfund should review the budget to increase the CG, FFS and FARN budget lines in order to afford CG resources and printing, to pay salary of an agronomist who will help and accelerate the implementation of FFS and to conduct trainings and refresher trainings for the three interventions above mentioned. The project management should speed up the rollout of CG, ICCM, FARN and FFS activities t according to the program targets in order to increase the coverage and to meet the end of project targets

ICCM: CHWs should get refresher training on diarrhea case management as the CHWs have revealed hesitation in treating diarrhea (only 9% of respondents seek diarrhea treatment at the CHWs). The program management staff should raise the issue of continuous medicine stock out at community level - they should advocate to the MSPLS to integrate ICCM needs into the HC drug provision

FARN: COPED should emphasize supervision to the Light Mothers by setting up the target number and frequency of supervisions. The HC staff in charge of nutrition should be involved in the planning of FARN/FAN activities to ensure that s/he can organize and carry out her regular supervision activities and maximize the use of existing HC resources. Mobilize light Mothers for home visit in order to encourage mothers for improved feeding practices and to assess how new behaviors are taking place in the homes. They should also make close follow up of children who have been graduated from FARNs for at least 3 more months to avoid any relapse or delay to the recovery from malnutrition.

CG: Dutabarane should review the structure of the modified Care Group model in order to meet the 13 required CG criteria. This could provide a big positive community level impact while requiring only minimal initial external resources, thus having a greater possibility of being sustained at the community level. Key elements of the original model, such as home visits and message dissemination at community level meetings should be emphasized and maintained; however, for sustainability, the roles and responsibilities of project Promoters who have previously

played a key role in CG training, will be absorbed by the trained CG leader who will facilitate the CG sessions while the promoter will supervise the CG leaders with support from TPS.

FFS: Accelerate the implementation of remaining targeted FFS and reinforce the 38 FFS formed at the beginning of the program. Recruit an agronomist to roll out and follow up FFS activities

VSLA: Continue to build the capacity of VSLA facilitators and Local leaders in order to sustain successfully VSLA activities after the end of the project. Link experienced VSLA groups to the microfinance or microcredit institutions

1. Overview of the Project

1.1. Project background

The multi-year (2017-2021) program "La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi", is carried out by Tearfund (lead agency), World Relief, Council for Education and Development (COPED) and Dutabarane (implementing partners) in Burundi. The project is covering three Provinces of Burundi: Mwaro, Bujumbura Rural and Gitega Provinces including six Health Districts. The population entirely lives in rural areas, the targeted beneficiaries² includes women of childbearing age: 206,558; children under five years old: 123,761; households for under five years old children: 78,004.

The program aims to support the MSPLS (Ministère de la Santé Publique et de la lutte contre le SIDA) to train and equip 1,125 community health workers for early treatment near their homes of one or more of the following health problems: diarrhea, malaria, pneumonia and malnutrition; and for postnatal follow-up during the first 7 days of life of a newborn. The program also aims to strengthen key prevention practices and community resilience mechanisms to improve health and nutrition in more than 200,000 households. The overall goal is the reduction of mortality and morbidity among children under five in six targeted health districts in Burundi. The two specific Objectives of the project are as follows:

<u>Specific Objective 1</u>: The accessibility of health care is improved in the Health Districts targeted by strengthening the capacity of the health system through the implementation of integrated community management of diarrhea, malaria, pneumonia, postnatal follow-up and malnutrition.

<u>Specific Objective 2:</u> Strengthen key prevention practices and community resilience mechanisms to improve community-level health and nutrition in targeted health districts.

Tearfund Belgium is leading the project as the contract holder at the DGD and is implementing the program in collaboration with World Relief Burundi. Dutabarane is responsible for implementing activities focused on increasing the resilience of the community and households such as VSLA, FFS and Care Groups activities. COPED is responsible for implementing activities focused on expanding health care services at the community level through the implementation of ICCM and FARN (Foyer d'Apprentissage et de Réabilitation Nutritionnelle). World Relief is responsible for postnatal care in targeted health districts. World Relief is also responsible for strengthening the technical capacity of Dutabarane and COPED therefore provides technical assistance to the entire project. Tearfund is supporting the program with logistics, monitoring, expertise, financial management of the program and training of local staff on management and reporting in accordance with the protocol of the Belgian Federal Government.

<u>Project input:</u> The program is funded by the Belgian Directorate General for Development (DGD). The total program budget of the direct costs is € 1.427.137.44 EUR over 5 years. The amount of the total subsidy is €1.226.751.27 EUR, Tearfund own contribution of €300,285.,80 EUR not included.

1.2. Burundi – National context

Burundi is located between East Africa and Central Africa. It is bordering on the north with Rwanda, on the South and on the East with Tanzania and on the West with DR Congo. Populated by an estimated population of 11,687,549 inhabitants (2019)³, Burundi covers an area of 27,834 km². The health status of the Burundian population remains relatively precarious. The crude death rate is 15 per thousand (RGPH, 2008) for a population whose life expectancy

² Tearfund Program 2017-2021, « La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi » Version Avril 2017

³ World Population review : <u>http://worldpopulationreview.com/countries/burundi-population</u>

is estimated at 56 years⁴. According to the DHS 2016-2017, in Burundi, the infant mortality ratio for the 5-year period before the survey is estimated at 47 ‰ and that of juvenile mortality at 33 ‰. That means that about 1 child in 20 dies before to reach his first birthday and 1 in 30 children dies between the first and fifth birthday. The infant-juvenile mortality ratio is 78%. In other words, one in thirteen children does not reach his fifth birthday. The neonatal mortality rate is 23 ‰⁵(Burundi DHS2016-2017)

Despite geographical access to health care that is theoretically satisfactory with more than 80% of the population living within 5 km of a health center (HC) and free healthcare for children under 5 and for Pregnant women delivered at health facility, Burundi remains among the countries with high infant-juvenile mortality. This situation is linked to (i) the existence of geographical disparities with areas of rugged terrain, (ii) the low quality of care offered in certain health facilities due to the lack of qualified personnel, adequate facilities and overwork and (iii) sometimes a weak resort to a health facility or health provider for children under 5 when they are sick. Among the causes of death of children under 5, the proportion attributable to pneumonia was 20%, that attributable to diarrhea 14% and that to malaria 3% while neonatal causes accounted for 32%.

The Ministry of Public Health and the fight against AIDS (MSPLS), in collaboration with its partners, adopted in July 2014 the scaling up of an integrated package of curative interventions at the community level: The integrated community case management (ICCM). Community health workers (CHWs) are important actors in the management of diseases at the community level. There is, however, good evidence that CHWs can diagnose and correctly treat these children, significantly lowering the burden of these diseases⁶.

The Ministry of Public Health and AIDS (MSPLS) has also adopted community health as an approach to health promotion in Burundi. In order to establish this approach, the MSPLS has launched a series of actions in recent years. Thus, in collaboration with its partners, it has developed six documents as community health management tools, including the document of the 19 family practices of which 6 were selected as keys. The selected six key family practices are (i) exclusive breastfeeding for up to six months, (ii) complementary feeding, (iii) use of long-lasting insecticide-treated bed nets, (iv) hand washing at critical times with soap and water, (v) treating diarrhea with ORS and Zinc, (vi) recognizing danger signs and seeking care⁷

1.3. Project Approach and management

The Project focuses its efforts on five key Strategies including strengthening the health system, providing the necessary medications and consumables, oversight of CHWs, establishment of Savings Groups & Farmer Field Schools and transmission of messages and key prevention practices on health and nutrition. For more details refer to the Logical Frame in Annex A. Following are key approaches implemented by the project in order to reach the project objectives.

Integrated Community Case Management (ICCM)

ICCM is a strategy to increase access to effective case management for young children suffering from malaria, pneumonia and diarrhea, especially in hard to reach areas and among vulnerable populations who otherwise may

⁴ OMS-Burundi : Stratégie de coopération avec le pays 2009-2015. Revue en 2014

⁵ Burundi Demographic and Health Survey, 2007-2008

⁶ MSPLS : Document d'orientation en matière de prise en charge intégrée des maladies des enfants au niveau communautaire (PEC-CI) au Burundi, Décembre 2014

⁷ World Population review : <u>http://worldpopulationreview.com/countries/burundi-population</u>

be neglected. According to the MSPLS⁸, ICCM aims to contribute to the reduction of morbidity and mortality attributable to the leading causes of death among children under five years of age in Burundi, and more specifically to increase accessibility to care by setting up the most common conditions for the management of children's diseases in the local community with the active involvement of the latter; to provide early diagnosis and management of the most common childhood illness cases at the community level and to strengthen collaborative links between communities and health structures. ICCM package includes:

- The diagnosis and treatment of uncomplicated malaria with ACTs.
- Diagnosis and treatment of pneumonia with Amoxycillin dispersible tablets.
- Diagnosis and management of diarrhea with ORS and Zinc.
- Screening and referral of cases of malnutrition.
- Home visits to check the condition of newborns and advice for the delivery of newborns.
- The search for signs of danger for the use of care.

The program has implemented trainings on the ICCM for several stakeholder groups such as the staff of the MSPLS(Districts and Health Centers) and the CHWs, training and equipping the health centers to allow program monitoring; training and equipping the CHWs with the kits and tools needed to implement ICCM and also equipping the CHWs to perform postnatal home visits for women who have given birth during the first seven days after delivery, providing key messages on infant health and to recognize danger signs, organizing training sessions for community volunteers (Light Mothers) who are involved with nutrition. At midterm the program has trained 181 ICCM trainers and 572 CHWs to implement ICCM in five Health Districts.

Care Group Model

Care Groups are an evidence-based social and behavior change methodology that contributes to improved health and nutrition outcomes in several settings. Care Groups use volunteers to motivate mothers to adopt key health and

nutrition family practices. The volunteers meet as a group every 2–4 weeks with a paid facilitator to learn new health promotion messages. Each CG member is allocated a certain number of households for the BCC home visit and follow up. Their functions also include the collection of vital events data and reporting to the health Facility. Key ingredients of the approach include peer-to-peer health promotion, selection of volunteers by the mothers, a manageable workload for the volunteers (no more than 15 households per volunteer), frequent (at least monthly) contact between volunteers and mothers, and regular supervision of the volunteers⁹.



The model employs an innovative cost-effective community-based strategy for universal coverage of health and nutrition education interventions through volunteers selected and managed by communities. However, in this project, the CG model was innovated to integrate the existing health system community architecture, by using CHWs and the elected local leaders, and other village leaders participated in the CGs. Studies have shown that by extending the reach of traditional CHWs to saturate communities with key messages and training, the potential efficacy of this model in improving behaviors relating to nutrition and family health have been noticed. The Modified CGs were more effective than standard national protocols in improving health and nutrition outcomes for children under five. Those MOH-led Care Groups are a promising strategy to both scale-up and sustain Care Group activities through MOH systems and serve to strengthen community health systems more broadly. This project has implemented 118 Care Groups comprising 2,372 CG volunteers with an average of 20 Volunteers per CG.

⁸ MSPLS : Document d'orientation en matière de prise en charge intégrée des maladies des enfants au niveau communautaire (PEC-CI) au Burundi, Décembre 2014

⁹ Food Security and Nutrition Network Social and Behavioral Change Task Force. 2014. *Care Groups: A Training Manual for Program Design and Implementation*. Washington, DC: Technical and Operational Performance Support Program.

Foyer d'Apprentissage et de Réhabilitation Nutritionnelle /Foyer d'Apprentissage nutritionnelle (FARN/FAN)

FARN¹⁰ (PDH: Positive Deviance Hearth) is a strategy for rehabilitating malnourished children in the community using local knowledge and resources. The model involves mothers, families, and neighborhoods in rehabilitating their own malnourished children by using local food. FARN has the twofold purpose of changing the mother's behavior, and rehabilitation of her child. Malnourished children six months to three years of age are identified in the community through growth monitoring outreach sessions and their mothers are invited to participate in a FARN cycle over the course of one month. This FARN cycle includes 12 days of supervised instruction/practice in positive deviant feeding techniques in the community (6 days per week for 2 weeks) with 2 weeks of follow-up home visits from the Light Mother. Mothers of malnourished children learn to recognize malnutrition and how to treat it with supervised supplemental feedings of locally available nutrient-dense foods. Children are weighed at the beginning and at the end of the month, so that the child's progress is tracked, and mothers can recognize the positive impact of their newly adopted feeding practices. Thus, FARN can also prevent future malnutrition in that child and younger siblings. This model is effective, low-cost, and takes only one month of program input per cycle (after initial staff training). FARN cycles will be repeated during the year, as nutritional solutions vary by season and to meet the needs of children identified with acute malnutrition over time.

This project implemented 36 FARNs in Bujumbura Rural Province in order to rehabilitate the children suffering from moderate malnutrition.

Farmer Field School and Village Savings and Loan Association

FFS is a group-based adult learning approach that teaches farmers how to experiment and solve problems independently. Sometimes called "schools without walls". In a typical FFS a group of 20-25 farmers meets once a week in a local field setting and under the guidance of a trained facilitator. In groups of five they observe and compare two plots over the course of an entire cropping season. One plot follows local conventional methods while the other is used to experiment with what could be considered "best practices". They experiment with and observe key elements of the agro-ecosystem by measuring plant development or comparing characteristics of different soils. At the end of the weekly meeting they present their findings in a plenary session, followed by discussion and planning for the coming weeks. FFS is a key implementation model where farmers are the teachers. Training FFS group leaders on farming techniques, saving and using them to train their neighbors farmers joined into FFS groups, improve in puts and improve food security at household level. In Year 2018 this project has implemented 38 FFS then after few months the intervention has been halted by the Ministry of the Environment, Agriculture and Livestock until June 2019, when the MoU between Dutabarane and the Ministry of the Environment, Agriculture and Livestock has been signed. The FFS activities restarted in August 2019. At midterm evaluation, only trainings for trainers have happened while seed distribution was on going in order to restart the FFS activities.

A Village Savings and Loan Association¹¹ (VSLA) is a group of 10 - 25 people who save together and take small loans from those savings. The activities of the VSLA run in cycles of about one year, after which the accumulated savings and profits are shared out among the members according to the amount they have saved. The Loan Fund is comprised of money contributed in the form of shares and loan profits (from service charges). The group also creates a social fund to provide grants to members who encounter serious problems (optional after the first cycle), grants help with funeral expenses, catastrophes such as fire damage or house damage, loss of livestock, etc. The purpose is to create community-managed savings and loan groups that belong to their members.

The project has mobilized community members for VSLA; thus 164 groups has been formed in Mwaro and Bujumbura Rural provinces including 16 VSLAs for CHWs and 26 VSLAs integrated into CGs. The project has conducted VSLA trainings and purchased 108 VSLA kits. The project continues to supervise and to mentor the VSLA leaders. The below table 1 summarizes inputs, activities and outputs that contributed to the project outcomes:

¹⁰ Core Group (Child Survival Collaborations and Resources Group Nutrition Working Group): Positive Deviance /Hearth; A Resource Guide for Sustainably Rehabilitating Malnourished Children, February 2003

¹¹ Hugh Allen and Mark Staehle : VSL Programme Guide, Village Agent Training Guide Version 1.04, April 22, 2011

Table 2: Summary of Inputs, Activities, and Outputs that Contributed to Key Outcomes

Specific Objective 1:

The accessibility of health care is improved in the Health Districts targeted by strengthening the capacity of the health system through the implementation of integrated community management of diarrhea, malaria, pneumonia, postnatal follow-up and malnutrition

Project Inputs	Planned Activities P/a	Activities Implemented up to MTE	Outputs	Outcomes
Partners: MSPLS BPS, Health District and HCs IHP drugs	Monitor stock and supply status at all levels of the supply chain. WRB with the support of the MSPLS are monitoring and influencing the process through monitoring.	 Advocate for the integration of ICCM drugs into the MSPLS drug distribution chain through CAMEBU Proceed the order for medicines through UNICEF. Receiving the drugs delivered by IHP and proceed to the paper clearance Encourage ASCs to make their requisitions at their HC Encourage the HCs and the DS to present their requisitions to their next levels of drug distribution chain 	 The Ministry of Health instruction / prescription that all drugs and consumables must pass through the single circuit to reach the CHWs has been issued ICCM medicines have been integrated into the distribution chain of the MSPLS drugs The process of receiving the drugs delivered by IHP has been cleared and IHP drugs has been integrated into the MSPLS chain of drug distribution. The drug distribution chain from CAMEBU is operational and the request of drugs to the CHWs is timely executed 2.2% of CHW's experiencing stock out of ICCM drugs in Year 2018 however 22.6% of CHWs experiencing stock out of ICCM drugs (mostly for Zinc and SRO packs for few days) in the last quarter of the Year 2018 	Improved access to child health care Improved drug management at all levels resulting in
Trainers from MOH, BPS, DS, HCs CHWs Training Materials Reporting tools Drugs RDT Kits Timers	Train and equip 708 ASCs for diagnosis and treatment (or reference if necessary) of diarrhea, malaria, acute malnutrition, pneumonia	 Train CHWs trainers including 2 trainers by each of 70HC including the head of the HC and the TPS, district and provincial health officers as ASC-ICCM trainers. Organize the ToT refresher training for trainers from Bujumbura Rural and Mwaro Provinces as recommended by the Ministry of Health. Train and equip CHWs from the Health Districts of Isare, Kabezi, Kibumbu, Fota and Rwibaga to implement ICCM Implement ICCM/Malaria in 5 Health Districts: ICCM/Diarrhea in four Health District and ICCM/Pneumonia in one Health District 	 181CHWs trainers has been trained on ICCM 572 CHWs from the Health Districts of Isare, Kabezi, Kibumbu, Fota and Rwibaga are trained and equipped to treat child malaria and diarrhea, few to treat pneumonia 78,531 children reached from January 2018 to August 2019 37,776 children treated for malaria from Jan 2018 to August 2019 110,265 children treated for diarrhea from September 2018 to August 2019 1,399 children treated for pneumonia from March 2019 to August 2019 No child death occurred after the treatment provided by the CHWs 	Reduced child mortality Improved child health outcomes Improved ICCM skills of CHWs Improved access to health care
Supervisors Supervision tools CHWs	Develop a strategy and organize supervision	 Develop the supervision strategy including at least one supervision for each CHW on a monthly basis by peer supervisors, project promoters; at least one supervision for each CHW on a quarterly basis by HC staff, TPS, MSPLS, DS and COPED Develop the supervision plan 	 The document including the supervision strategy is available 100% of ASCs received a supervisory visit by MSPLS, DS and COPED on a quarterly basis 100% of ASCs received a supervisory visit by peer supervisors and promoters on a monthly basis 	

Trainers Supervisors CHWs Training materials Specific Objective	Strengthen the capacity through training and equipment in the six districts, 87 health centers and 87 ASC associations for the proper supervision and support of the ASCs for the implementation of the ICCM. 2:	Train and equip peer supervisors for effective supervision	 11 peers' supervisors from Rwibaga Health District have been trained and equipped 66.8% to 94.4% of CHWs respectively in 2018 and 2019 have been successful in treating malaria according to the protocol norms based on the CHW performance evaluation for malaria. The CHW retention rate varied from 98.6% to 97.0% respectively in 2018 and 2019 each CHW has received an average of 6 children per month, however 72.72% (267/348) of CHWs have treated more than 10 cases per month. 	
Strengthen key pro	evention practices and communit	y resilience mechanisms to improve community-level hea	alth and nutrition in targeted health districts <u>.</u>	Outcomes
Project Inputs	Activities		Outputs	Outcomes
Trainers FFS Members CG members CHWs	Train and equip community members to form savings groups to build resilience.	 Print membership notebooks Make the order for group kits. Organize orientation and community mobilization meetings 	 164 functional and supervised savings and credit groups are equipped with kits 16 Village Savings and Loan Associations for CHWs and 26 for Care Group members have been trained and are functional. 	Increased family income
VSLA kits Reporting tools		 Mobilize the community for the formation of Savings Groups and Credits especially within the ASCs, light Mothers, Farmer Field Schools members, as well as families with malnourished children. 		Peer-education: Beneficiaries pass on the knowledge to their peer
	Train and equip community members to form Farmer Field Schools to build resilience.	 Organize training of trainers at the provincial level on the FFS methodology. Forming 38 FFS Send the authorization request to the Ministry of Agriculture to start the FFS 	 38 Farmer Field Schools received inputs MoU with the Ministry of the Environment, Agriculture and Livestock signed on the 20/6/2019 	Increased food value chain
Trainers Community	Mobilize opinion leaders and community volunteers (Care	 Mobilize community leaders before implementing each project intervention to 	 532 administrative leaders (commune and province of Mwaro and Buiumbura Bural) were mobilized on ICCM and on the prevention of 	Increased behavior change
Leaders	Groups) to disseminate key	ensure their contribution and support to	malnutrition.	Increased project ownership
BCC tools Reporting tools	them to support ASCs and Light Mothers.	 Organize information and community engagement sessions on six key practices Disseminate key messages on malaria, diarrhea and malaria through weekly sessions held in the community. Mobilize the community members through community meetings to form the Care Groups. Train 118 care groups including 2,372 volunteers In the bi-Weekly sessions on diarrhea and malaria Disseminate the key messages on malaria and diarrhea though household visits conducted by the CG volunteers 	 Incompared of the second sec	Peer-education: Volunteers pass on the knowledge to their peer

		Monitoring and supervise Care Groups by the promoters	 The volunteers referred 838 sick children from the community to the Health Centers and 166 children to the ASCs; All 118 Care Groups are monitored and supervised by the promoters. CG attendance: varied between 52,5% to 61.5% 	
Trainers	Train and equip volunteers (Light Mothers) to conduct	 Conduct orientation and community mobilization meetings for leaders on FARN. 	 134 community leaders (commune and hills leaders in the Rwibaga DS) were mobilized to support CHWs and Light Mothers 	Reduced malnutrition
Community	community resilience	Advocacy meetings with the Department of	The Ministry of Health concluded on the Nutrition program map in	Increased nutrition knowledge
Volunteers	activities related to malnutrition, especially	Nutrition at the Ministry of Health, GVC and Red Cross in order to make a mapping for nutrition	September 2018. The MoU is signed, following is the map: - Red Cross: Mwaro Province and DS Kabezi and one	and feeding practice
Local Food	through the FARN/FAN)	program of the three partners	commune of DS Isare in Bujumbura Province	Peer-education: Light
Training		Isare and 86 I M from DS Rwibaga a to	- COPED: DS Rwibaga and two communes of DS Isare in	knowledge to their peer
resources		implement the FARNs	Bujumbura Province	6 - 1
M&E tools		Conduct a mass screening of malnutrition in DS Isare	 FARN equipment have been delivered 36 FARNs have been equipped and implemented 	

<u>The project management</u>: In each Province there was a field office located near the Health District Office, so it was relatively easy for the health system partners to communicate. The project employed the Project coordinators, the supervisors and the project Promoters. The evaluation team found that joint planning was very collaborative at central level, and all partners were involved in the program implementation. The training process was continual, with training for each new technical intervention that have had taking place. During key informants' interviews with project staff, they were very enthusiastic about the training they have received and felt that the project has provided them with excellent skills to perform their duties. Essential personnel policies were in place however the staff turnover was noticed during the project life. There was very high morale and good working relationships within the consortium. Financial systems at project, country office and headquarters levels have supported the implementation of the project.

2. Evaluation Purpose, Questions, Methodology and Limitations

The Mid-term evaluation of the program "La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi" was commissioned by Tearfund (BE) as lead agency and focused on the project activities implemented in Mwaro and Bujumbura Rural Provinces. This evaluation did not assess the postnatal project part of ICCM project funded by Tearfund and implemented in Gitega Province as this part of the program is already finished and the purpose of this evaluation was to provide key recommendations for 2020 and 2021 in order to meet the program objectives. Thus, the Midterm evaluation was only conducted in Mwaro and Bujumbura Rural Provinces.

Evaluation purpose

The purpose of this evaluation was to assess the program progress towards its end project objectives and to provide key recommendations that will lead the project management to take decisions to improve the program in order to meet the program objectives.

Evaluation Questions

This evaluation has responded to four key evaluation questions

- 1 Is the implementation of ICCM having the expected impact on the communities?
- 2 Are the activities related to SO2 being implemented effectively?
- 3 Are the activities related to SO2 being implemented efficiently?
- 4 Was there coherence, complementarity and synergy with other actors for SO2?

Evaluation methodology and limitations

The evaluation methodology used both quantitative and qualitative data. The external evaluator reviewed the project reports (e.g., Project Implementation Plan; quarterly reports; and monitoring data), Health Center reports, relevant policies and strategy documents at the national level (e.g., MOH policies and strategies) to assess the quality of quantitative and qualitative data.

The Midterm KPC Household survey have been implemented from October 15 to 19, 2019 in order to assess the knowledge, practices and health care coverage (KPC) related to ICCM (Malaria, diarrhea, and Pneumonia), nutrition, hygiene, food security, income generating activities and access to community based education among the project beneficiaries, mothers of under five children. Primary quantitative data collection for the MTE were nested within the Household survey. A sample of 390 mothers of under five years old children has been calculated from Mwaro and Bujumbura Rural Provinces using Raosoft sample size calculator formula:

$$n = (N (zs/e)2)/(N-1) + (zs/e)2)$$

z = 1.96 for 95% confidence level; s = p (1-p) p = estimated proportion or p = to 50%

e = desired margin of error (3%); N = study population; The confidence level is of 95%,

The sampling methodology followed the two-stage standard 30-cluster sampling methodology with 13 households per cluster. The 30-cluster (13 households per cluster) sample was used to sample the catchment area of five Districts covered by ICCM project (approximate number of households). A sampling interval of 36,928 was determined by using the following formula:

Total number of clusters (30)

The starting cluster was selected using a random number table.

b) Second cluster = Random Number (RN)+SI

The next colline cluster was selected by taking the sum of the random number (8070) and the sampling interval ldentification of the remaining clusters was calculated by adding the sampling interval to the population number of the previous cluster.

c) Clusters 3-3 = Population within previous colline + SI

For more details, please refer to Annex B: Selection of clusters.

From each cluster, thirteen households were selected. The first household was selected randomly from the center of each cluster where the population density is high then by spinning a bottle and walking in the direction indicated by the bottle neck. Surveyors followed the direction indicated by a watch hand in order to select the remaining 12 households. The same KPC questionnaire as the baseline questionnaire including 187 questions was addressed to 390 mothers for under five years old children. A team of 22 enumerators have been trained for three days, refer to Annex C: Timeline for the evaluation and Annex D: List of Evaluation Team. The instruments were field tested prior to the evaluation. The data have been collected by interviewing the beneficiary at their households, conducting direct measurement and observation. The data were analyzed in SPSS program, Excel.4 and Excel.5. Basic statistical analysis, primarily frequencies and ranges, were conducted to identify any inconsistencies, so that the data set could be cleaned accordingly and then we designed appropriate table for each indicator. Mean or percentages with confidence intervals were generated for the descriptive analysis and p values were calculated for select nutrition indicators and 95% confidence intervals were provided for nutrition indicators using ENA for SMART 2011 program. The Annex E: SPSS Raw Data provides detailed information indicating full compliance to standard procedures. There were no major issues with data quality in the collection, analysis and reporting for data.

Formative evaluation has been conducted using Focus Group Discussion (FGD) and Key Informant Interview (KII) at the same period with quantitative data collection. The formative guides were designed by the final evaluator based on the project interventions and type of stakeholder engagement. The measurement instruments focused on multi stakeholder perspective and value of the project interventions, impact and challenges and sustainability. Site visits were conducted by the evaluation team to the health facility and communities to perform FGD and KII, with stakeholders. Key Informant Interviews and Focus Groups Discussions were facilitated by qualified moderators who are knowledgeable, can manage various group dynamics, flexible and able to probe to obtain a deeper understanding and capture a broad spectrum of opinions. There were no major impediments to the field implementation schedules and most selected sites were visited. Below is the sample for the Household survey and for the formative evaluation.

Midterm KPC Household Survey & Midterm Evaluation	Sample Size
KPC Household Survey	390
Midterm Formative Evaluation Stakeholders	Total Participants
KII with Director of BPS Bujumbura Rural Province and Director of DS Kabezi	2
KII with Implementing Agencies	8
KII with Red Cross Supervisor Mwaro	1
FGD with Head of HC & TPS & COSA – HC Kabezi & HC	13
FGD with Project Coordinators	4
FGD with Project Supervisors Mwaro & Bujumbura	6

Table 3: Sample Frame for Midterm Household Survey and Formative Evaluation

FGD with Project Promoters Mwaro & Bujumbura	7
FGD with CHWs implementing ICCM & Light Mothers	16
FGD with VSLA Muyange HC & Mwaro and Local leaders	32
FGD with ICCM and FARN users	20
FGD with CG Volunteers	12

Please refer to Annex F: Stakeholders 'perspectives of Project Contributions and Performance

The inherent limitations of qualitative research studies are still applied to this project evaluation, as samples are not selected randomly, and may not be representative of the entire study population. However, with the cluster sampling, the principles of randomness have been applied. It is likely that farmers at the periphery of the community who may belong to the poorest from the remote area may not be selected. Inherent bias due to the purposive selection and subjective responses from formative research are known, though these make valuable contributions to compliment and triangulate information obtained from stakeholder perspectives on program effectiveness and value.

3. Findings, Conclusions, and Recommendations

3.1. Findings

Evidence from the final Household KPC survey results and from the formative evaluation findings indicate that the Integrated model "La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi" resulted in successful capacity building of community health workers. One of the most significant accomplishments at project midterm is the training of 100% of the targeted CHWs in the intervention districts on ICCM focusing on the case management of at least one of the three childhood illnesses—malaria, diarrhea and pneumonia, and the subsequent scale-up of community treatment. Another key achievement is the successful implementation of all the targeted VSLAs providing a comprehensive package of community activities.

The KPC survey respondents were the mothers and caregivers of under five years old children.

- Mother's age means: 31 years.
- Mother's Education level





a. Evaluation Question 1: Is the implementation of ICCM having the expected impact on the communities?

To assess the impact of ICCM on the community, the consultants have analyzed the data from the monthly project reports to measure the number of children reached and treated in the community by the CHWs and recovered from the diseases. The results from the ICCM implementation reports have been triangulated with the Midterm KPC results on care seeking and with the perception of the stakeholders on the project impact. The below Graph 1 shows the number of ICCM cases treated



The ICCM has been introduced gradually in the community. The treatment of malaria has been launched in January 2018; the treatment of diarrhea introduced from August 2018 while the pneumonia treatment started in March 2019.

The ICCM monitoring data of the project showed that from January 2018, 78,473 children have reached the CHWs, of these 88,2% reached the CHW within 24 hours of the onset of symptoms; 37,776 children were treated for Malaria in 5 districts; of these, 99.9

Children Treated covering January 2018 to August 2019

- 37,776 cases treated for malaria (Jan 2018 t0 August 2019)
- 10,265 cases treated for diarrhea (September 2018 to August 2019)
- 1,399 cases treated for pneumonia (Jan March t0 August 2019)

% improved after treatment; from September 2018, 10,265 children were treated by CHWs for diarrhea and from March 2019, 1,399 children were treated for pneumonia. No child death did occur after the treatment provided by the CHWs.

The below Graph 2 shows the ICCM Midterm KPC results on care seeking at CHWs.



As Graph 2 indicates, the Midterm KPC showed a high percentage of children under five who received appropriate treatment within the 24 hours of the onset symptoms of fever, diarrhea and cough with fast breathing, respectively 71%, 69%, 50% for the five districts surveyed. According to the project quarterly reports 572 CHWs from the Health Districts of Isare, Kabezi, Kibumbu, Fota and Rwibaga have been trained and equipped to treat malaria, some CHWs have been trained and equipped to treat diarrhea and pneumonia in child and mothers have been educated to seek early child treatment within 24 hours of onset symptoms of diseases to avoid any complications. Nevertheless, the MT KPC survey also revealed the low percentage of mothers who seek treatment for diarrhea first from the CHWs, only 17% of mothers seek treatment for diarrhea first from CHWs, versus 67% who seek first the treatment of malaria from the CHWs. The KPC survey also revealed the first main reason expressed by respondents for not seeking child treatment from CHWs were the lack of drugs at the CHWs: around 31% of respondents mentioned the lack of diarrhea drugs at the CHWs.

The ICCM strategy have been applauded by the national, Province, District and Health Center levels. During the key informant interview with the Director of ICCM program at the MSPLS level, he mentioned: "ICCM has been very successful in Mwaro and Bujumbura Provinces", he appreciated the greatest contribution of COPED and World Relief as they have played a vital role in contributing to the successful roll-out of ICCM in Bujumbura Rural and Mwaro Provinces. At HC and community levels, interviews with key stakeholders and focus groups discussions with care givers and volunteers indicated that mothers were getting the Child treatment from the CHWs, mothers were no

longer making long distance to get child health care at HC, the HCs have been released as CHWs were appropriately treating the children and no longer long line of mothers seeking treatment of the 3 child diseases at HC.

However, the Focus Group with the CHWs revealed the frequent stock out of ICCM drugs at community level as a barrier to access to the ICCM. Although, the quarterly report of the project has revealed a percentage of 6.3% of ASCs experiencing stock out of ICCM drugs, the information from the MTE formative research showed the frequent stock out of ICCM drug and consumables, mainly for Zinc, ORS and amoxicillin, as an issue of inaccessibility to child health care. All FGDs with CHWs have mentioned about the issue of stock out that did not allow them to treat all sick children in the community. Moreover during the FGDs with the Head of the HCs, COSA and TPS, they confirmed and appreciated the Ministry of Health instruction that stipulates all drugs and consumables passed through the single CAMEBU circuit to reach the CHWs and so ICCM medicines have been integrated into the drug distribution chain of the MSPLS. However, they state the HC monthly average consumption have not been reviewed or adapted according to the ICCM needs, the reason why the drugs are not enough to cover HC and ICCM needs in medicines.

After two years of the implementation, ICCM has big impact on the community. More than 37,000 children have been treated by CHWs, 99.9 % improved after treatment, no death did occur after the treatment provided by the CHWs. Noticeable changes have occurred such as 71%, 69%, 50% of children have been treated respectively for malaria, diarrhea and cough/fast breathing; and 67%, 17%, 56% of mothers have been seeking child treatment respectively for malaria, diarrhea and cough/fast breathing although the delay in the implementation of pneumonia and diarrhea treatment at community level. Moreover, the project has accomplished and contributed to its first specific objective "Accessibility of health care is improved in the targeted Health Districts". However, the issue of frequent stock out and the delay in implementing the full package, should be addressed in the two last years of the project in order to achieve the end of project targets. No unintended results for the intervention, have been occurred, no negative changes have been produced by the intervention.

b. Evaluation Question 2: Are the activities related to SO2 being implemented effectively?

The strategic objective 2 is to strengthen key prevention practices and community resilience mechanisms to improve community-level health and nutrition in targeted health districts. In order to reach the SO2, the project has adopted key strategies including CGs, FARN/FAN, VSLA, and FFS. The evaluation has assessed the activities implemented in each program strategy and measured the effectiveness of each program strategy

a. Care Groups

The CG model is intended to increase the adoption of key family practices for prevention of illness and appropriate home care for sick children; to increase uptake and coverage of key prevention services; to increase prompt care-seeking from trained providers for children with symptoms of malaria, pneumonia, and diarrhea, to increase adoption of key prevention, home-care and care-seeking behaviors. While CG volunteers' approach provided one-on-one counseling and interpersonal communication at the household, the project has built the capacity of the local leaders on community mobilization to reinforce key messages in the community. Thus, 532 administrative leaders (from the province of Mwaro and Bujumbura Rural) have been trained on ICCM and on the prevention of malnutrition in order to mobilize community members for behavior change. Joint effort of CGs and local leaders has been a synergy for successful behavior change.

To assess the CG effectiveness, we have weighed the CG based on 13 required criteria recommended by Community Health experts and we have measured how the key family practices have been adopted by the mothers.

The following table assess the CG model based on 13 required CG criteria¹²

#	Required CG criteria	CG implemented by the project	CG criteria met
			(Yes=1; No=0)
1.	The model is based on peer-to-peer health promotion (mother-to-mother for maternal and child health and nutrition [MCHN] behaviors.) Care Group Volunteers (CGVs)	% of households receiving CG volunteer visit: 14% CGs are not the same as Mothers Clubs where mothers are simply educated in a group. An essential element is having women serve as role models (early adopters) and to promote adoption of new practices by their neighbors.	0
2.	The workload of CGVs is limited: No more than 15 households per CGV	The CG volunteer serves 10 households in this project In the CG model, the number of households per CGV is kept low so that it fits better with the volunteer's available time and allows for fewer financial incentives to be used.	1
3.	The CG size is limited to 16 members and attendance is monitored.	CG members= average of 20 members CG attendance: varied between 52,5% to 61.5% To allow for participatory learning, the number of CGVs in the CG should be between six and 16 members. A low attendance rate (less than 70%) at CG meetings is often an indication that something is wrong somewhere, either with the teaching methodology or the promoter attitude	0
4.	CGV contact with her assigned beneficiary mothers—and CG meeting frequency—is monitored and should be at a minimum once a month, preferably twice monthly.	CG meeting: bi-weekly In order to establish trust and regular rapport with the mothers with which the CGV works, we feel it is necessary to have at least monthly contact with them	1
5.	The plan is to reach 100% of households in the targeted group on at least a monthly basis, and the project attains at least 80% monthly coverage of households within the target group. Coverage is monitored.	% of households receiving CG volunteer visit: 14% Behavior change is much more likely to happen when there is regular, direct contact with <u>all</u> mothers of young children (rather than reaching only a small proportion of mothers)	0
6	CGVs collect vital events data on pregnancies, births and death.	CHWs are collecting vital events but the data are not shared, discussed and used in the CG meeting Reporting on vital health events should be done during CG meetings, so that the data can be recorded by the CG leader (usually using in a register maintained by her) and discussed by the CG members.	0
7.	The majority of what is promoted through the CGs creates behavior change directed towards reduction of mortality and malnutrition	Key messages shared, are related to child health and nutrition CG approach can lead to large reductions in child and maternal mortality, morbidity, and malnutrition so that it is	1

Table 4: Care group criteria compared to CG implemented in Rwibaga

¹² Food Security and Nutrition Network Social and Behavioral Change Task Force. 2014. *Care Groups: A Training Manual for Program Design and Implementation*. Washington, DC: Technical and Operational Performance Support Program

		adopted in more and more settings to achieve the Millennium Development Goals	
8.	The CGVs use some sort of visual teaching tool (e.g., flipcharts) to do health promotion at the household level.	No visual teaching tool used the provision of visual teaching tools to CGVs helps to guide the health promotion that they do, gives them more credibility in the households and communities that they serve and helps to keep them "on message" during health promotion	0
9.	Participatory methods of behavior change communication (BCC) are used in the CG with the CGVs and by the volunteers when doing health promotion at the household or small-group level.	Not used, only readings. Principles of adult education should be applied in CGs and by CGVs since they have been proven to be more effective than lecture and more formal methods when teaching adults	0
10.	The CG instructional time (when a Promoter teaches CGVs) is no more than 2 hours per meeting.	The time is respected; Maximum 2 hours CG members are volunteers and, as such, their time needs to be respected. We have found that limiting the CG meeting time to 1–2 hours helps improve attendance	1
11.	Supervision of Promoters and at least one of the CGVs	Supervision done monthly by the promoters that regular, supportive supervision and feedback is necessary on a regular basis (monthly or more)	1
12.	All of a CGV's beneficiaries should live within a distance that facilitates frequent home visitation	Each CGV educate neighboring households The CGV not have to walk more than 45 minutes to get to the furthest house that she visits so that regular visitation is not hindered.	1
13.	The project culture should convey respect for the population and volunteers, especially women.	Respect for beneficiaries is noted in this project	1
	Total		7/13 (54%)

The above criteria have been used to decide to what degree the implementation strategy is really based on the CG model. The comparison of the required CG criteria to the CG model implemented in Rwibaga Health District showed that 54% of required criteria are followed in the current CG implementation. The finding from the Focus group discussions with CG members have also shown some queries on the current CG model. CG attrition has been high at the beginning of the project then stabilized with the integration of VSLA, apparently, CG members were meeting primary for VSLA, secondary for Health education "That is a shift in priorities, the top priority of CG members should be CG activities however VSLA that was intended to support CG activities and strengthen economically CG members to fulfill their roles as well as to support their families was becoming the top focus of the CG members.

The FGDs with CG trainers and supervisors, promoters, has revealed the lack of appropriate training materiel in order to facilitate the CG sessions and to make them enjoyable. The training material in use are not reflecting CG facilitation methodology, participatory adult learning methods like songs, stories, games, role play etc. Most sessions are facilitated by the CG leader rather than the Promoter, although the CG leader has not been trained on CG facilitation and did not have facilitation skills. Research has shown that the way CGs or CHWs groups are trained,

managed and supported is central to the quality of health services they deliver.¹³ Key informants with Implementing partners also revealed much concerns on the CG implementation. The main barriers to the CG achievements state were the budget constraint that did not allow to purchase CG resources, printing, to conduct effective CG ToTs, and refresher trainings. Only Promoters have been trained on BCC and CG methodology once until the project midterm.



The following Graph 3: Key Family practices, shows the KPC results expressing how behavior change was taking place in Mwaro and Bujumbura Rural Provinces.

The midterm KPC survey revealed that percentage of women washing hands at all five critical times has increased from 3% baseline value to 27% MTE value; percentage of women treating appropriately drinking water increased slightly from 5% to 15%. Percentage of household with soap for hand washing increased from 86% to 88%. Percentage of children sleeping under bed net treated increased from 2% to 83%. The percentage of mothers who know at least three danger signs of child illnesses was 73%. Percentage of children treated by CHWs with Zinc and ORS in case of diarrhea increased from 3% to 18.7%.

There is a dramatic increase with 3 family practices 'indicators including the percentage of children sleeping under treated nets, the percentage of households with soap for hand washing and the knowledge on child illness danger signs. That remarkable increase in project indicators from the baseline can be attributed to the reinforcing nature of the program's BCC approach. The project has appeared to have many BCC players. The BCC interventions were largely integrated in two places: at the community level through modified Care Groups, ICCM CHWs, Light Mothers, VSLA facilitators, local leaders and at the Health Center working with health facility workers. All those players have been reinforcing the same messages.

However, two other key family practices indicators are very low such as the percentage of women washing hands at five key times, the percentage of children treated with zinc and ORS are still low. Those two indicators for key family practices are related to the prevention and control of diarrhea. With reference to the KPC results included in Table 1, It is unsuccessful that the two-week diarrhea prevalence has increased from 33%, measurements at baseline to 41.8% at the midterm. The two surveys were done during the same seasons and therefore they are comparable.

¹³ Landegger, J; Weiss, J; Morrow, M; Kabadege, M; Sarriot, E; Langston, A; Mugeni, C. : CHW Peer Support Groups for Integration of Health Service Delivery and .Improved Performance: Learning from a Peer Group Model in Rwanda

The KPC survey had also shown 14.8% of mothers stating being visited by the CG volunteer for health message dissemination.

The midterm findings revealed ineffectiveness of the current modified CG implemented in Rwibaga Health District. The modified CGs were poorly meeting the 13 CG required criteria as referenced by the CG training Manual. There is no evidence in terms of behavior change to show the effectiveness or ineffectiveness of the CG alone as the behavior change strategy have been reinforced by multiplayers from community level to health facility level, so the results obtained can't be attributed to the CG activities alone. However, the high CG attrition, the low CG attendance, the lack of appropriate training materiel, the nonuse of participatory adult learning methods, insufficiency of training for CG facilitators, promoters and CG leaders, and the low percentage of household visited by the CG volunteers. All those elements are enough to show that the modified CG have not been effective as they were not well implemented. Hence, the model to be sustained and to be more effective, the project management should make CG restructure taking into consideration the CG criteria, emphasizing on training for CG facilitators and on CG training materials. The project should also put much effort in the prevention of the diarrhea by reinforcing the diarrhea and hygiene messages in the community and by scaling up the treatment of diarrhea in more collines and adopting some mechanisms to prevent the stock out of Zinc and ORS.

b. FARN/FAN

FARN is a community-based cost-effective approach for rehabilitating malnourished children in the community using local knowledge and resources while FAN is a learning approach with purpose of changing the mother's behavior. To assess the effectiveness of the FARN activities, we have measured the prevalence of acute malnutrition and underweight and we measured the exclusive breast feeding and the complementary feeding measured by the minimum acceptable diet, as indicators that translate the adoption of the two nutrition key family practices by the mothers and care givers

The table 5 shows the child nutrition status in Bujumbura Rural and Mwaro Provinces

Table 5: Nutrition status of Children under five years old

Prevalence of underweight	Prevalence of global acute malnutrition
(<-2 z-score)	MUAC < 125 mm or edema
All (298): (69) 23.2% (18.7-28.3 95% Cl)	All (292): (17) 5.8% (3.7-9.195% CI)
Boys (151): (47) 31.1% (24.3-38.9 95% CI)	Boys (150): (10) 6.7% (3.7-11.895% CI)
Girls (147): (22) 15.0% (10.1-21.6 95% CI)	Girls (142): (7) 4.9% (2.4- 9.8 95% Cl)
Prevalence of moderate underweight	Prevalence of moderate acute malnutrition
(<-2 z-score and >=-3 z-score)	MUAC < 125 and MUAC >= 115 mm
All (298): (37) 12.4% (9.1-16.6 95% Cl)	All (292): (10) 3.4% (1.9-6.295% Cl)
Boys (151): (29) 19.2% (13.7-26.2 95% CI)	Boys (150): (6) 4.0% (1.8-8.595% CI)
Girls (147): (8) 5.4% (2.8-10.4 95% Cl)	Girls (142): (4) 2.8% (1.1- 7.0 95% Cl)
Prevalence of severe underweight	Prevalence of severe acute malnutrition
(<-3 z-score)	MUAC < 115 mm or edema
All (298): (32) 10.7% (7.7-14.8 95% Cl)	All (292): (7) 2.4% (1.2- 4.9 95% Cl)
Boys (151): (18) 11.9% (7.7-18.1 95% CI)	Boys (150): (4) 2.7% (1.0- 6.7 95% CI)
Girls (147): (14) 9.5% (5.8-15.4 95% Cl)	Girls (142): (3) 2.1% (0.7- 6.0 95% Cl

The MT KPC survey has shown that 23.2% children are underweight versus 24.4% Baseline value and 29% Burundi DHS value for underweight; According to the MT KPC survey results, 5,8% of under five years old children are suffering from acute malnutrition versus 6.9% Baseline value and 5% Burundi DHS value for wasting. There was a

slight reduction of underweight and acute malnutrition rates. However, both rates, underweight and Global acute malnutrition rates are still high. To address that malnutrition gap, the project has implemented FARN/FAN. Malnourished children under five years old have been identified in the community through growth monitoring outreach sessions then their mothers have been invited to participate in a FARN cycle over the course of one month. This FARN cycle included 12 days of supervised instruction/practice in positive deviant feeding techniques in the community (6 days per week for 2 weeks) with 2 weeks of follow-up home visits from the Light Mother.

The mothers were also educated to prepare the nutritious food and to practice best child feeding practices and hygiene with the encouragement of the Light Mother emphasizing on building self-efficacy of the mothers. The project implemented 18 FARNs including 171 malnourished children in Isale Health District and 18 FARNs including 166 malnourished children Rwibaga Health District, Bujumbura Rural Province. Only one 12-day FARN Session has been implemented until Midterm Evaluation; after 12 days' FARN sessions, 86% and 79% of malnourished children have gained the weight respectively in Isare and Rwibaga Health Districts. That is a remarkable achievement to be attributed to the effort of the Light Mothers supported in their community efforts by CHWs and local leaders.

The adoption of the two nutrition key family practices by the mothers and care givers has been measured by two nutrition indicators such as the exclusive breast feeding, and the complementary feeding translated by the minimum acceptable diet. The percentage of mothers who practice exclusive breastfeeding for children 0-5 months (as reported for previous 24 hours) decreased from 86% - Baseline value to 78.4% - MTE value.



The below Graph 4 shows the results of the mother's complementary feeding practices.

The Minimum acceptable Diet was measured by the combination of the meal frequency and the food diversity criteria. The MT KPC revealed the Minimum acceptable diet (MAD) very low even if minor increase was noticed from baseline value (2%) to MT KPC value (13.5%). There is little difference of MAD across all five targeted health Districts. The small increase can be attributed to the synergy of several partners in nutrition program, GVC and Red Cross. Red Cross implemented 118 FARNS in Mwaro. Light mothers, local leaders' and CG members have deployed effort to disseminate key nutrition messages in the Rwibaga Health District catchment area, although the implementation of FARN by COPED has been hold back waiting for the MSPLS stakeholders mapping.

It is too early to confirm the effectiveness or ineffectiveness of the FARNs/FANs implemented by COPED in Isare health District, since only one FARN cycle of 12 days have been implemented and is not enough to bring big impact in the community. In case the project will maintain the same FARN recuperation rate of 88% in the two last years of the project life, for sure the effectiveness of FARN will be manifest. As the process of Mapping has been completed, COPED should make much effort to implement more FARN cycles, to scale up the FARN program in more collines of the targeted areas, to make joint planification with Dutabarane in order to harmonize FFS, FARN/FAN and CG

interventions purposely to improve the adoption of key nutrition family practices by the mothers and caregivers and to reduce the malnutrition rates.

c. VSLA and FFS

VSLA

The project has mobilized community members for VSLA; thus 164 groups has been formed in Mwaro and Bujumbura Rural provinces including 16 VSLAs for CHWs and 26 VSLAs integrated into CGs. The project has conducted VSLA trainings and purchased 108 VSLA kits. Some of the major achievements of Dutabarane is the implementation of VSLA in all five Health Districts, the integration of VSLA into CGs and the implementation of VSLA for CHWs. It is well known that the budget for volunteers' incentives is still challenging. However, with the integration of VSLA into the Volunteers network, the project has found a way to address issues of volunteer incentives.



Below is the graph 5 showing the improvement of respondents in economic development

Before the initiation of VSLA, only 3% of the population had access to loan. The participation in Savings Groups has been increased from 34% -Baseline value to 48%- MTKPC value, indicating that access to finance is slightly increasing. Almost 31% of the study population had 2 sources of income – Baseline value, 30% for MT KPC value. During the Focus Group with the beneficiaries, they have all appreciated the benefits gained from the VSLA that have contributed to the increase of small family income. The households that have multiple sources of income were usually more resistant to climate or economic shocks, and therefore less vulnerable. They were also able to build income and wealth, as they were finding multiple ways to earn a living.

The VSLA activities has been successfully implemented. The effectiveness of VSLA activities has been remarkable through increased VSLA membership and ultimately the enhanced access to microloans. In addition, VSLA activities have been highly appreciated by the local leaders and farmers emphasizing the gains they have earned from VSLA activities, although the project did not yet bring significant impact to the economic development of the population. Since, Dutabarane has experienced previous successful VSLAs project implementation in Burundi, the technical aspect of the implementation was well done however, he should focus on scaling up more VSLAs to reach more people and also reinforce FFS activities in order to raise family income together with food security.

FFS

Training the farmer's groups on FFS principles and farming techniques should improve in puts and improve food security at household level. In Year 2018 this project has implemented 38 FFS then after few months the intervention has been held back by the Ministry of the Environment, Agriculture and Livestock until June 2019. The FFS activities restarted in August 2019 after the signature of the MoU between Dutabarane and the Ministry of the Environment, Agriculture and Livestock. At Midterm Evaluation period, only trainings for trainers have happened while seed distribution was on going in order to restart the trainings for farmers. Below is the Graph on food security and kitchen garden



The households surveyed were severely food insecure, Only 7% of households were qualified as food secure at base line versus 19% at Midterm KPC. Only 9% of households were observed to have a kitchen garden at baseline, versus 19% at Midterm KPC. Food insecurity problems in the project area remain a threat and may undermine the gains from the nutrition behavior changes that were achieved by the program.

The FFS project did not meet the targets as the program was not effective for almost one year. Thus, Dutabarane was making plans to improve and to accelerate FFS activities and scaling up kitchen garden.

c. Evaluation Question 3: Are the activities related to SO2 being carried out efficiently?

To assess the program efficiency related to SO2 activities, we have compared the inputs with the outputs, we have assessed the level of performance of using the least amount of input to achieve the highest amount of output and determine how best to maximize outputs for the resources allocated. We assessed VSLA and CG activities to determine if the activities related to SO2 have been carried out efficiently. We did not assess the efficiency of the FARN and FFS activities since the implementation has been delayed and did not cover at least one year in order to provide enough data allowing to assess the efficiency.

The activities of the VSLA have been run in one cycle, after which the accumulated savings and profits were shared out among the members according to the amount they have saved. The Loan Fund was comprised of money contributed in the form of shares and loan profits. The groups have created a social fund to provide grants to members who encounter serious problems, the grants have helped with funeral expenses, catastrophes such as house damage or loss of livestock, etc. Current members are 4,191 (75,4% are women and 24,6% are men) they are joint in 164 functional and supervised savings and loan groups, attendance rate is 91,8%, the averaged loan cash

fund is 34,451BIF, the membership growth rate is 8.9%, the average annual saving per member is \$54 versus \$48 average in Burundi, the Fund utilization rate 26.6% versus 11.2 % in Burundi, the Cost per member is \$19,21. The VSLA activities have been implemented efficiently. The activities have been implemented with beneficiary contributions supported by minor project funds. With the first cycle, the results are remarkable, the budget was enough to carry out activities as planned, and the expected results have been reached for the first cycle. No adaptation is recommended to be done on the VSLA project as the model is successful, highly appreciated by the community members and fully owned by the beneficiaries together with the local leaders. The project management should put much emphasis on scaling up the VSLA in more collines and continue to build the capacity of VSLA facilitators and local leaders in order to sustain successfully the VSLA activities after the end of the project.

The project formed 118 Care Groups including 2372 volunteers (48%male and 52%female). The CG volunteers have reached with key health messages an average of 21,736 households (mothers for under-five children) out of 23,720 estimate households for under-five children targeted by the project in Rwibaga Health District. The calculation of the cost per beneficiaries revealed \in 3.47 (75,480/21736=3.47) as a cost for CG beneficiary in Rwibaga Health District. However, the cost per beneficiary was \in 6.03 (\leq 6.65) per year in Mozambique with the first innovative CG project. In Malawi, the yearly cost per beneficiary was \notin 4.39 (\leq 4.84). In Rwanda's five-year CG project, the annual cost per beneficiary was \notin 5.78 (\leq 6.37). All those projects were cost efficient. Usually the care group model has a high cost in preparation time, since it takes about six to seven months to organize care groups. But once care groups are in place, the costs of maintaining them are relatively small. Therefore, once the initial investment has been made in establishing the care group network, adding on subsequent interventions is done at moderate cost. Delivering more interventions becomes increasingly cost-efficient over time. A low project cost per beneficiary is achieved as extensive volunteer inputs reach many beneficiaries¹⁴.

The cost per beneficiary in the first 2 years of the project is very low, that cost includes the preparation and set up of CGs. That low cost can be associated to the low budget allocated to CG activities but not associated to the performance and maximization of activities. Although the budget was not enough to carry out CG activities, the project has adapted the intervention in accordance with the budget. The cost for CG incentives that should be included in the budget have been replaced by the integration of VSLA into CGs. The CG strategy has been reinforced by local leaders and by other multiple players such as Community health workers, light mothers and VSLA facilitators to enhance behavior change outcomes. However, the lack of enough budget for printing CG materials and for conducting trainings has affected negatively the quality of CG implementation, as the assessment of CG effectiveness in previous section has revealed low quality CGs that did not meet CG criteria.

The imbalance between the inputs and the expected output translate the inefficiency of the CG that can be attributed to the insufficient budget for implementing CG activities and the lack of quality CG implementation. The project staff should make proper plan to improve CG technical quality and to secure more funds for CG trainings and restructure. By delivering quality interventions and reaching more beneficiaries the CG will become increasingly cost-efficient over time.

d. Evaluation Question 4: Was there coherence, complementarity and synergy with other actors for SO2?

The Program is a collaborative effort of four agencies, TFB; WR; Dutabarane and COPED, joint in a consortium. They have built on their successes and lessons learned from previous separate program implementations and generated synergy and complementarity through an integrative approach including curative, preventive and resilience in order to respond to the comprehensive socio economic felt needs of the population. That cohesion was needed and permitted to respond globally at the population needs.

¹⁴ CORE Group & World Relief: The Care Group Difference: A Guide to Mobilizing Community-Based Volunteer Health Educators, 2010

The project had coherence with the MSPLS from the planning to the implementation/capacity building, monitoring, health service delivery, and procurement of ICCM supplies and drugs. That partnership generated synergy and complementarity as the MSPLS has been engaged in sustaining the project interventions as well and those benefits will continue long after the Project ends.

The Project has been designed in such a way the costs are minimal and reliance is placed on partners who do not depend on short-term external funding for their support, such as the MOH, the community, and local organizations. Thus, supporting these partners in the short run has generated synergy. Through their enhanced capacity they will maintain the activities initiated by the Project once the Project funding ends in two more years.

Partnerships were built with other partners like Red Cross and GVC. They were also engaged in community-based nutrition interventions by implementing FARN/FAN in Bujumbura Rural and Mwaro Provinces. With the two organizations, complementarity has been observed through partner mapping elaborated by the MSPLS in order to avoid program duplications. Synergy has been produced by working together with same objective to reduce malnutrition in children and to improve key family best practices through coordinated BCC strategy.

By "building a bridge" between the MOH services and the community, the Project has strengthened the synergy of the health system in Burundi and the complementarity of the Health Facility services with community health services through successful ICCM and FARN program and referral mechanisms in order to save the lives of more children. The collaboration of the Volunteers, CHWs, Light mothers, VSLA leaders with the local leaders have brought synergy through combined effort that contributed to improving the Child and health and nutrition outcomes.

At country program level the project team have made phenomenal joint plans throughout the project lifecycle to create synergies with the ongoing priorities of the project, however similar synergies in joint planification and implementation was not observed at field level where each organization was working independently and the programs looked like stand alone or parallel programs. Much energies should be deployed in these last two years of the project to bring together their efforts through coordination meetings organized at community level in order to implement cost effective sustainable programs.

e. Contributing factors to the success

Existing MSPLS Community Health Policies and strategies advancing ICCM and FARN, have been supporting the program implementation and contributing to the project successes and its sustainability.

The emphasis on gender sensitivity, equity and sustainability has been a capital contributing factor to the program successes. The program focused on gender prioritizing behavior change for mothers as primary childcare givers. The program applied the equity principles during the whole implementation process by reaching remote areas and poorest families with community health services. The program has also contributed to building the capacity of the local resources: MSPLS staff, local NGOs, Community volunteers and local leaders, that have been a promising evidence of sustainability after the end of the program.

The good collaboration with the MSPLS in ICCM through joint planning, implementation, quality insurance and capacity building has increased credibility and has been a contributing factor to the MSPLS ownership of the project and its sustainability.

The good and strong partnership between all implementing agencies including TFB, WR, Dutabarane and COPED has been crucial in the success of the project. Their engagement in community health and development has contributed to the improvement of the life of the Burundian people.

COPED has been granted from his bank an increased exchange rate that had effects in increasing the ICCM implementation budget and covering the budget gap.

Technical and Management skills and competences of each partner in his specialized project intervention were a key for success and the consortium flexibility have allowed smooth project implementation and reaching most midterm project targets

Close project follow- up by Bujumbura project management team has been reinforcing teamwork and partnership through field visits with purpose to respond adequately to the challenges or problems met at field and to ensure continuous support to the project as well as to the project field staff.

Building the capacity of CHWs, Light mothers and VSLA leaders through intensive trainings to train their peer have been a contributing factor to the success in term of project acceptability, ownership and sustainability.

The integration of several interventions (ICCM, nutrition, food security, economic activities...) in one program was a key to reinforce each program and to respond to the rural families' holistic needs.

CHWs continue to play a pivotal role in service delivery at community level. The data routinely generated through their systems are increasingly relied upon for providing information for program management, evaluation and quality assurance.

f. Project Challenges and Limitations

The primary key challenge to the project was the budget limitation that did not allow to smoothly cover the activities related to FFS, CGs and FARN programs in all targeted Collines and health Districts. The budget was cut at the beginning of the project not in concordance with the activities planned. Although the adjustment has been made to cover some activities under costed but remain a financial gap particularly for SO2 activities (FFS, nutrition and CG activities). The Insufficiency of the budget to print CG training resources, to replace the ICCM used or damaged materials have led to the low quality of the programs. The budget review and adjustment should be done once again immediately after the midterm evaluation in order to review the budget inconsistency and to address the financial gaps.

The second challenge was related to the project management: The main project management challenge is the delay in the program implementation that can be attributed to the lack of proper and joint plans and some other reasons beyond the control. The collaboration and joint plans were operational at the project country level but not happening at field level, that challenge has led to the unlikely project ineffectiveness and inefficiency. The activities related to the FFS has been hold back for almost one year, the Ministry having agriculture in his attributions has asked to first seek authorization in the Ministry, the process for signing the protocol delayed, thus the delay in the execution of the FFS activities. The lack of agronomist to implement FFS activities and to mentor project promoters has been an obstacle to FFS activities. The MSPLS's delay in developing the partners mapping has been an obstacle to nutrition program implementation since GVC and Red Cross were also supporting the nutrition program in the same provinces targeted by the project. Another management challenge was the recruitment of the project personnel that was planned differently with the execution of the activities, sometimes the execution of the activities has started before recruiting all staff needed, so, the activities were paralyzed or slowdown. The attrition of CG volunteers has also led to the recruitment of new volunteers, that delayed CG activities. The project should be more proactive and make proper plans.

The third challenges are related to the Health System: Frequent stock out of medicines at the community level have been undoubtedly caused by not only the delay of requisition at all levels of the health system but also by the underestimate of the HC monthly average drug consumption that did not take into consideration ICCM needs. Timers and amoxicillin breakable for community use, has been lacking for many months, therefore halted and delayed the implementation of pneumonia case management at community level. Lack of transportation means for HC staff has been a major barrier to the HC supervision to CHWs. Lack of CHW's incentives has been another issue mentioned during FGDs by the CHWs, it can be a source of demotivation in the future that can affect negatively the ICCM outcomes. The project has introduced VSLA for CHWs and Light mothers however it is not covering all CHWs and

Light Mothers. The project should make plans to address those challenges in order to reach the end of project targets.

In addition to the budget constraint the project faced technical issues that challenged its implementation. The project strategies were well designed; however, the implementation has been challenged by the lack of capacity and experience in some strategies. CGs have not been enough technically supported. The modified CG model implemented in DS Rwibaga is not meeting all CG criteria that did affect CG outcomes. There is no plan for CG performance assessment in order to improve the quality of health message delivery and home visits. Proper ICCM and FARN training matrix was not developed in order to be discussed ahead with the partners and to avoid any interruption due to the misunderstanding of the project that can lead to the delays in the project implementation and go to scale. The lack of proper plan for annual refresher training is a handicap for quality service delivery at community level. Some challenges have been revealed through FGDs and project reports such as: "CHWs felt less confident assessing and treating diarrhea, poverty was mentioned as one of the biggest challenge to the development that have led to the lack or low weekly saving amount for some association members; families at the lower-income socio-economic level have difficulty in obtaining the ingredients for a well-balanced diet for their children, It was difficult for the LM to teach how to make the meals with at least 4 food groups ingredients in the food insecure settings, some people are resistant to change their behavior and so on". All those issues above mentioned should be discussed through refresher trainings with aim to build the capacity of the community agents and community volunteers on how to lead group discussions on the community problems and how the community can solve their own problems and take actions for improving their life.

Please refer to Annex F summarizing the stakeholder's perception on the project contribution, the challenges. The lessons learned and the recommendations gathered through FGD and KIIs.

3.2 Conclusion

The Project "La prise en charge intégrée des maladies des enfants de moins de cinq ans au niveau de la communauté au Burundi" has been a successful Project implemented with a genuine effort to find synergies between four partners : TFB, WR, COPED and Dutabarane. The lead agency, TFB, is to be praised for a high level of integration of the project team and transparency with its partners. All four partners deserve credit for the great benefit of advancing ICCM, community resilience and improving the lifestyle of the population of Bujumbura Rural and Mwaro Provinces.

The Project generated big impact on the community through ICCM activities. The project has made excellent progress in supporting the Burundi Ministry of Health to roll out the ICCM program in two provinces of intervention (Mwaro and Bujumbura Rural Provinces). The project has built local capacity and maximizes existing resources, including the MOH, and community health Workers. Training and supportive supervision have contributed to improved capacity-building of CHWs, HC supervisors and peers supervisors. This capacity building has also made an impact on increased access to quality community services for children under five. The program has addressing successfully key problems underlying child mortality and morbidity such as malaria, diarrhea, and pneumonia. After two years of the implementation more than 37,000 children have been treated by CHWs, 99.9 % improved after treatment, no death did occur after the treatment provided by the CHWs. The Project's impact is obvious to staff and community members, and progress is demonstrable objectively through the measurement of population-based indicators However, the issue of frequent stock out and the delay in implementing the full package of ICCM activities should be addressed in the two last years of the project in order to achieve the end of project targets.

Regarding the prevention and resilience activities, the Village Savings and Ioan Associations activities have been highly effective. The remarkable effectiveness of VSLA activities has been evidenced through increased VSLA membership and ultimately the enhanced access to microloans. The VSLAs expanded in the project area of intervention and have improved access to Ioan and saving culture. It is too early to confirm the effectiveness or ineffectiveness of the FARNs/FANs implemented by COPED in Isare health District, since only one FARN cycle of 12

days have been implemented and is not enough to bring big impact in the community. As the process of Mapping has been completed by the MSPLS, COPED should make much effort to implement more FARN cycles, to scale up the FARN program in more collines of the targeted areas, to make joint planification with Dutabarane in order to harmonize FFS, FARN/FAN and CG interventions purposely to reduce the malnutrition rates.

The effectiveness of modified CGs, and FFS activities have been challenged by separate factors bringing to unsuccessful implementation. The midterm findings revealed ineffectiveness of the current modified CG implemented in Rwibaga Health District. The modified CGs were poorly meeting the 13 CG required criteria as referenced by the CG training Manual. There is no evidence in terms of behavior change to show the effectiveness or ineffectiveness of the CG alone as the behavior change strategy have been reinforced by multiplayers from community level to health facility level, so the results obtained can't be attributed to the CG activities alone. However, the high CG attrition, the low CG attendance, the lack of appropriate training materiel, the nonuse of participatory adult learning methods, insufficiency of training for CG facilitators, promoters and CG leaders, and the low percentage of household visited by the CG volunteers; all those elements are enough to show that the modified CG have not been effective since they were not well implemented. The FFS activities did not meet the targets as the program was not effective for almost one year. In Year 2018 this project has implemented 38 FFS then after few months the intervention has been held back by the Ministry of the Environment, Agriculture and Livestock until June 2019. The FFS activities restarted in August 2019 after the signature of the MoU between Dutabarane and the Ministry of the Environment, Agriculture and Livestock. At Midterm Evaluation in October 2019, only trainings for trainers have happened while seed distribution was on going in order to restart the trainings for farmers. Thus, Dutabarane was making plans to improve and to accelerate FFS activities and scaling up kitchen garden.

The approach adopted for health promotion and prevention and for family resilience was inexpensive, affordable, and sustainable. VSLA activities have been implemented efficiently with the beneficiary contributions supported by minor project funds. With the first cycle, the budget was enough to carry out activities as planned, and the expected results have been reached. The model is highly appreciated by the community members and fully owned by the beneficiaries together with the local leaders. Hence, the project management should put much emphasis on scaling up the VSLA in more collines and continue to build the capacity of VSLA facilitators and local leaders in order to sustain successfully the VSLA activities after the end of the project. However, the imbalance between the CG inputs and the expected output translate the inefficiency of the CG that can be associated to the insufficient of the budget to implement CG activities and the lack of quality CG implementation. The project staff should make proper plan to improve CG technical quality and to secure more funds for CG trainings and restructure.

The project had built synergy and complementarity with other community actors. The coherence has been remarkable with the MOH from the planning to the implementation and ICCM supplies and drug procurement. The Project has been designed in such a way the costs are minimal and reliance is placed on partners who do not depend on short-term external funding for their support, such as the MOH, the community, and local organizations. Partnerships were built with other partners to mention GVC and Red Cross for community-based nutrition program. The Project has also strengthened the synergy of the health system in Burundi and the complementarity of the Health Facility services with community health services

Even if the program appears to be making some progress towards achievement of its objectives, several recommendations should be considered for the implementation to ensure that the gains to date will be maintained, to address key issue emerged from the MTE and to provide certain strategies to focus on for accelerating progress interventions and positive results. These recommendations are as follows:

3.3 Recommendations

Program Management

- ✓ Program management and Finance Managers of Dutabarane and COPED with Tearfund should review the budget if any increase on the CG, FFS and FARN budget lines in order to afford CG resources and printing, to pay salary of an agronomist who will help and accelerate the implementation of FFS and to conduct trainings and refresher trainings for the three interventions above mentioned.
- ✓ Quarterly joint planning and project monitoring is recommended involving Project coordinators and supervisors and promoters across the project in order to update on the project achievements, challenges, to harmonize the interventions and to make joint quarterly action plans responding timely to the gaps and improving project outcomes.
- ✓ COPED should make plans to roll out diarrhea and pneumonia treatments in more collines and to roll out FARN in two more communes of Rwibaga Health District and in one more commune of Isare.
- ✓ COPED should also develop the training matrix for ICCM and FARN interventions to be discussed with relevant partners ahead of the intervention in order to prevent any delay in the implementation and to avoid any duplication.
- ✓ Dutabarane and COPED should work together and conduct a small formative research to analyze barriers and motivators factors to behavior change and develop Behave Framework that should be applied in the last two years of the project and even after the end of the project in order to bring positive and lasting behavior change in the community
- ✓ Dutabarane should accelerate the rollout of FFS activities and VSLA activities as planned in the project proposal since the current VSLA implementation reached 50% of the targeted VSLAs
- ✓ The project management should make action plans responding to the evaluation recommendations.
- ✓ Advocate to the development partners to support and strengthen the model where it is already in place and consider expanding it.

ICCM

- ✓ COPED should roll out diarrhea and pneumonia treatments in more collines since the oral rehydration salts (ORS) and zinc are effective in fighting mortality from diarrhea, at home and in the community; it is estimated that ORS could prevent 70 to 93% of deaths from acute diarrhea and that zinc could reduce mortality from diarrhea by 23%¹⁵. The cough/fast breathing is the top leading cause of child morbidity in Burundi and only 52% of targeted CHWs have been trained on ICCM. Therefore, it is recommended to speed up the implementation of Diarrhea and Pneumonia in order to reach the project objectives and target in 2 more years.
- ✓ CHWs and CG volunteers should emphasize key messages with low indicators such as care seeking at the community health workers, care seeking within 24 hours of onset symptoms, hand washing, danger sings and water treatment.
- ✓ CHWs should get refresher training on diarrhea case management as the CHWs have reveled hesitation in treating diarrhea and only 9% of respondents seek diarrhea treatment at the CHWs
- ✓ Program staff should intensify referral/counter referral mechanisms from community to Health Center and monitoring referrals that have reached the HC for proper community mobilization.
- ✓ The cost to cover transportation and communication for HC CHW supervisors is beyond the budgetary limitations of the project, however the issue should be discussed in order to ensure sustainable and regular supervision visits of the CHWs by the HC staff.

¹⁵ MSPLS : Document d'orientation en matière de prise en charge intégrée des maladies des enfants au niveau communautaire (PEC-CI) au Burundi, Décembre 2014

- ✓ Mapping by project staff and HC staff of the collines farthest from the health center so that these sites will be the first on the list during refresher trainings, CHW performance reviews, priorities during stock replenishment and supervision by health center, promoter and project supervisors
- ✓ Program management staff should raise the issue of continuous medicine stock out at community level, they should advocate to the MOH to integrate ICCM needs into the HC drug provision
- ✓ Advocate at the national and district levels for the training in DHIS of HC Data Managers in order to generate correct community data and reports.
- ✓ Organize quarterly M&E feedback meetings with CHWs at health center to analyze data and to use the data by taking adequate actions.
- ✓ Identify other NGOs/government initiatives in the Health district and link the CHW associations non covered by VSLA for livelihood projects

Nutrition Interventions

- ✓ COPED should plan the estimate number of FARN/FAN to be implemented in each commune based on the prevalence of moderate acute malnutrition and estimate number of children unde5 years old for proper monitoring of the FARN implementation.
- ✓ Scale up FARN/FAN in two more communes of Isare and in Rwibaga Health District
- ✓ COPED should emphasize supervision to the Light Mothers by setting up the number and frequency of supervisions. The HC staff in charge of nutrition should be involved in the planning of FARN/FAN activities to ensure that s/he can organize and carry out her regular supervision activities and maximize the use of existing HC resources.
- ✓ Mobilize Light Mothers for home visit in order to encourage mothers for improved feeding practices and to assess how new behaviors are taking place in the homes. They should also make close follow up of children who have been graduated from FARNs for at least 3 more months to avoid any relapse or delay to the recovery from malnutrition.
- ✓ Light mothers, CG Volunteers and CHWs, and community leaders should continue promoting kitchen gardens and key message dissemination on feeding practices emphasizing meal frequency and food diversity and child spacing since the high number of children in the family is a risk factor of malnutrition.
- Emphasize on FAN to prevent malnutrition through growth monitoring and CG and liaise with FFS agronomist in order to develop joint nutrition key messages.
- ✓ COPED should work with local leaders to link lower-income families with malnourished children or at risk for malnutrition to FFS, VSLA or other livelihood projects to enable them to raise their family income and to ensure food security.

Care Group Model

- ✓ Dutabarane should review the structure of the modified Care Group model according to the 13 required CG criteria. This could provide a big positive community level impact while requiring only minimal initial external resources, thus having a greater possibility of being sustained at the community level.
- ✓ Key elements of the original model, such as home visits and message dissemination at community level meetings should be emphasized and maintained; however, the roles and responsibilities of project Promoters who have previously played a key role in CG training, will be absorbed by the trained CG leader who will facilitate the CG sessions while the promoter will supervise the CG leaders with support from TPS.
- Review and print the BCC tools and organize the training followed by distribution to CGVs and CHWs so that the focus on specific BC messages is highlighted and harmonized during home visits and community meetings
- ✓ Train CG leaders in key health message and in participatory adult methodology. Organize quarterly CG leaders' meetings with the promoter/supervisor for planning and monitoring CG activities.
- ✓ Refresher training and on-the-job training during supervision visits will also need to be gradually phased-in so that CG skills are continuously reinforced without incurring the costs of yearly training.

- ✓ During their home visits, community meetings, and other community mobilization activities, modified CGs (CHWs and community leaders) need to place additional emphasis on addressing ways to reduce families' barriers and reinforce the factors that motivate them towards behavior change for malaria, diarrhea, and pneumonia, as defined in the Behave Change Strategy (Behave frameworks).
- The frequency and quality of supervision provided to CG will need to be strengthened and harmonized in order to provide with more uniformity in the CG zones. The supervision check list should be developed and used.
- ✓ Conduct CG performance review and identify the challenges and area of weakness and take appropriate action, if necessary.
- ✓ CHWs in non-CG sites should be trained on data collection and CG community mobilization strategy to reinforce BCC.
- ✓ During the final years of the program, staff and partners will focus efforts to ensure that the gains in behavior change are maintained and that efforts are accelerated to focus on eliminating major barriers to behavior change

FFS

- ✓ Accelerate the implementation of remain targeted FFS and reinforce the 38 FFS formed at the beginning of the program.
- ✓ Recruit an agronomist to roll out and follow up FFS activities
- ✓ Set up clear FFS selection criteria for equity and equality. Those criteria should include farmers with children suffering from malnutrition or at risk of malnutrition.
- ✓ Train FFS facilitators not only on farming techniques but also on basic principles of small livestock farming and on nutrition key messages. Adapt the training module in Kinyarwanda
- ✓ Print and distribute booklets in Kirundi including pictures and useful for even illiterate beneficiaries
- ✓ Establish demonstration plots and follow up how families are building kitchen garden
- ✓ Assist the most vulnerable families with farming's items such as organic fertilizer
- ✓ Mobilize all FFS groups to integrate VSLA activities
- ✓ Quality Assurance for FFS Facilitator's performance in maintaining the acquired skills in farming techniques livestock breeding and nutrition.
- ✓ Developing supervision for FFS Facilitators as a supportive function distinct from control
- ✓ Conduct annual Assessment and food security impact at community level through Household food score to monitor food security and take timely actions

VSLA

- ✓ Continue to build the capacity of VSLA facilitators and Local leaders in order to sustain successfully VSLA activities after the end of the project.
- ✓ Support most vulnerable families with malnourished children to be included into VSLA
- ✓ Link experienced VSLA groups to the microfinance or microcredit institutions

4. References

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5. Annexes

Annex A. Logical Frame Annex B. Selection of Clusters Annex C. Timeline for Evaluation Annex D. Evaluation Team members Annex E. SPSS Raw Data Annex F. Stakeholders' Perspectives