Final evaluation of the project Kore L'Avni Nou

Food Voucher Programme implemented by CARE in the department of Grande-Anse

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1. Executive summary

This report presents the final evaluation findings on the “Food Voucher Programme - Kore L’Avni Nou” implemented by CARE in nine (9) communes of the "Grande d'Anse" department in Haiti. The program aimed to support 12,000 vulnerable families with a $50 (2,000 HTG) monthly voucher over a six-month period. In addition, 68 local shops were approved to supply the beneficiaries with key commodities: Rice, vegetable oil, maize and beans. Beneficiaries were also able to purchase magi, haring, and fish within 10% of total cost of the voucher. Merchants received payment through an electronic voucher platform developed by CARE in partnership with the Haitian mobile company, Digicel.

The main goal of this evaluation was to assess project impact on beneficiaries (target families as well as participating shops) and the effectiveness and relevance of the electronic food voucher as implemented by CARE. Both qualitative and quantitative methods were applied. Qualitative data was collected from the main stakeholders of the project (CARE staff, Digicel and Transversal staff, USAID, community leaders etc.) via a series of focus group discussions. Quantitative data was collected from beneficiary families, selected shops and non-beneficiary families (control group) for comparison purposes.

Results from benefitting families were compared with a baseline study. However, data from shops were collected in a retrospective manner (ex-post and ex-ante data), as no formal baseline existed. The evaluation was conducted by a team composed of an external consultant supported by two external monitoring and evaluation experts.

1.1 Beneficiary outcomes

Women remained predominantly head of the household from baseline (69%) to final evaluation (65%). On average, interviewed household size in the baseline study was 5.6 while it accounted for 4.9 in the final evaluation.

Increasing food availability was one of the expected outcomes of the project. The proportion of benefitting families complaining lack of food over the last six months dropped by approximately 51% from the baseline to final evaluation. Moreover, 65.2% of the control group respondents, suffered lack of food, while only 46.5% of the beneficiary respondents did. The project also intended

to support retention of assets of the beneficiary families with findings confirming an increase in livestock and land retention.

The results revealed a positive shift in the possession of poultry with beneficiaries declaring possession of between five (5) and 15 poultry, increased by 12 % from baseline. Comparisons with the control group exhibited a positive difference in favor of the beneficiaries. Findings also showed that after the project, 11% of the beneficiaries owned more goats and pigs than they did before. This positive change was confirmed by the proportion of beneficiaries who declared having sold their animals before and after the project.

Results also showed increased land retention, improvement of personal finance and shift of debt from basic needs to fund education. After the project, 5% of direct beneficiaries claimed retention of more agricultural land. In addition, from baseline to end of the project, the proportion of beneficiaries who were in debt dropped by 33%. Meanwhile debt of control group remained 8% higher than the treatment group.

Lastly, the final evaluation showed a positive impact on enabling education of children. Approximately 20% of beneficiaries declared that their children would not be able to go to school were it not for the project. Moreover, among the beneficiaries, 56.3% mentioned that savings on food expenditures contributed, among others, to education of their children.

1.2 Program effectiveness

Selection of beneficiary families was drawn from a participatory approach involving community representatives such mayors, ASEC and CASEC, religious and informal leaders in the communities. Though absent of[1], criteria adopted by CARE for beneficiary family selection was in conformity with the World Food Program definition of food insecurity. Bias from the selection committee was regulated by a systematic verification process but not without impact on program operations.

According to beneficiaries, the food basket was appropriate with majority indicating a preference for the form of intervention as provided by CARE. In general, more than 90% were satisfied with the project. Overall levels of satisfaction with the food basket was very high, though there were some concerns raised by community leaders regarding the short period of the program.

[1] Anthropometry provides portable, universally applicable techniques for assessing the size, proportions and composition of the human body. It reflects both health and nutritional status and predicts performance, health and survival. Monitoring indicators: increased percent of eligible children in growth monitoring/promotion and increased percent of children in growth promotion program gaining weight in past 3 months. Such indicators are important but less relevant in emergency food programs.

who voiced that they felt a longer period was required to change nutritional behavior and guarantee a long-time improvement in the food security of the most vulnerable population.

Although encountering an initial learning curve in the first months, in overall, the electronic food voucher as implemented by CARE was successful, facilitating confidentiality, flexibility to food acquisition and monitoring of the process. CARE partner, Digicel, designed and managed the e-voucher software including: electronic registration of the beneficiaries, voucher issuance, redemption and merchant payment. This system reduced fraud, logistic burdens and distortion of local market channels. During the first four months of implementation, average total errors in the system was 5443 but dropped to 1466 in the last two months. Lack of coordination between partners and tight project schedules including logistics were the main issues.

Evaluation findings revealed improvement of merchant businesses and overall local economy. Shop managers revealed improvement of their organizational capacities and reinforcement of the supply chain with suppliers, including those for local products. All shops but one had a bank account and managers reported an increase by 13.6 % of tax declaration compared to baseline. In addition, more than 90 % of retailers in the program declared that their local product stock increased. Also compared to baseline, an increase of 4.5 % of merchants claimed cultivating local products to sell as coping strategy. However they complained that local production was less elastic to respond to demand due to production seasonality. In addition smaller retailers and local traditional markets activities reported decreasing in activity around voucher redemption days.

1.3 Recommendations

1.3.1 Main recommendations

Sustainability options: In order for emergency food response to improve beneficiary conditions over a longer period it should be coupled with long term interventions. Agencies implementing short term food assistance programs need to leverage their programs with other stakeholders in order to complement respective interventions. This can be accomplished through cooperation on other programs that aim to sustain local production by providing economic incentives (grants, technical assistance) or those that link local producers and food retailers.

Reinforcing food insecurity assessment: The monitoring and evaluation system can be made more illustrative by providing case studies to local community leaders. As well, a systematic verification of preliminary selected beneficiaries prior the beginning of the program would improve

efficiency. Even if not currently in the emergency food program monitoring system, using anthropometric measures would provide additional insights.

1.3.2 Secondary recommendations

According to beneficiaries and some stakeholders, the duration of project implementation was too short to have a sustainable impact on vulnerable families. In addition, training sessions would benefit from being be longer, practical and more illustrative. Implementing agencies should use mass communication (radio and talk show) to inform on the population on the program. As well, the implementing agency should consider at least one information and technology staff for knowledge transfer purposes. Finally, the technical partner of electronic food voucher should consider scale up strategy and technologies that both cut cost and are easy to be used by vulnerable population with low literacy levels.

2. Introduction

2.1 Background

The devastating earthquake of January 2010 has increased the risks of food insecurity within poor rural households in the Grande-Anse department of Haiti. The supply of food has decreased due to deterioration of already poor infrastructures and limited market linkages. The availability of food on a per person ratio also decreased due to an increase of households members as a consequence from influx of displaced persons from Port –au-Prince.

In November 2010, Hurricane Thomas worsened the vulnerability of the Grande-Anse population by destroying assets from agriculture and fishing in the department. In the commune of Moron, households reporting losing 90 % of agricultural goods. Two months later, food prices for basic staples had increased up to 21% according to the national commission for food security (CNSA). Rice and local corneal prices climbed sharply respectively by 21 % and 20% while cooking oil prices increased by 9%. Those two events combined forced populations living with less than $ 1 a day to allocate more than 60 % of its income to food.

Soon after, a cholera epidemic broke out in Haiti, with the heaviest number of cases reported in the Grande-Anse. Studies revealed that the hurricane and cholera outbreak, along with rising food prices, greatly increased family vulnerability. In addition, an increased number of orphans augmented the risks of health issues for children including malnutrition.

To tackle the aforementioned problem, CARE submitted a proposal to USAID/Food for Peace addressing food insecurity concerns for populations in nine communes of the Grande-Anse department. Approved by USAID, this project named "Electronic Food Voucher program – Kore L'avni Nou", aimed to support 12,000 vulnerable families (72,000 individuals) with a $50 (2,000 HTG) monthly voucher over a six month period. In addition, 68 local shops were approved to supply beneficiaries with the following key commodities: Rice, vegetable oil, maize and beans, forming a minimum food basket and required kilocalories per family per month.

Before implementing the project, a baseline study was conducted in January 2012 to collect information on food availability, current household situations, retention level of net assets, negative coping strategies, etc. Upon termination of the project[2], CARE Haiti commissioned an external evaluation of the core aspects of the "Kore L'Avni nou" project. The goals of this evaluation were:

[2] As per approval from USAID, the final Evaluation of Kore L'avni Nou does not take into consideration phase 2 (cost-extension) of the project in response to hurricane Sandy aftermath in Grande-Anse.

- Identify and evaluate program outcomes, intended and unintended, positive or negative and impact on beneficiaries versus non-beneficiaries
- Overview data collected on a regular basis and present performance monitoring (strengths, weaknesses), triangulate with final evaluation collected data for better understanding
- Determine the adequacy of program design to meet the identified needs in the target area
- Compare final conditions with baseline findings and present persisting gaps in coping strategies used by the households to mitigate vulnerability
- Relate lessons learned to appropriate stakeholders
- Identify key obstacles preventing a correct program execution
- Identify key successes and recommendations for future consideration

2.2 Methodology

The external evaluation of the CARE Food Voucher program was conducted by using both qualitative and quantitative methodologies. The methodology and instruments to conduct the study took into consideration the baseline study findings and inputs from CARE staff. The complete evaluation was carried out by an external team composed of a consultant and two monitoring and evaluation experts. A team formed of one experienced supervisor, nine experienced enumerators and nine local guides from the nine different communes conducted data collection. Field data were collected on a mobile device (tablets) and automatically uploaded on an online application platform developed by Diagnostic & Development Group. Then data were exported to SPSS for statistical analysis.

2.2.1 Quantitative methodology

A comprehensive survey addressed Food Voucher program "Kore L'avni Nou" beneficiary families, non-beneficiary families and beneficiary merchants/shops. Units of analysis were selected through a *probabilistic sampling approach*. The overall beneficiaries (12,000 families and 68[3] local shops) constituted a sampling frame for drawing out a sample of family beneficiaries and local shops. A *proportional sampling size method* based on the principle of spatial and population

[3] As per program management and reported elsewhere in the reports, 2 merchants/shops were disqualified for fraudulent activities and therefore have not been taken into consideration during sampling.

representativeness with a *Quota method*) used to choose the samples. Hence, the number of beneficiaries and shops that was selected in each zone was determined by the quota of beneficiaries and shops it holds.

The sample size of beneficiary groups was calculated in order to ensure a 95%-confidence level and a 5%-margin of error. For a 12,000- beneficiary population, the sample size to guarantee the aforementioned requirements should be of 374 (considering a finite population). This number was then rounded up to 450. Due to budget and time constraints, the control group (non beneficiary families) was arbitrary chosen to be 60% of the sample beneficiaries or, 270. Finally, a third of the total 68 local shops constituted the sample for merchant shops approved to supply the food basket to beneficiaries.

To select the control group sample, the following strategy was adopted. Once in his/her assigned commune(s), the surveyor began at the first street corner and entered the first "Kore L'Avni nou" project non-beneficiary household to start the survey. Each successive fifth household was then surveyed. If a household was not eligible, the next was chosen, and so on. This strategy was repeated until the projected sample size was attained.

2.2.2 Qualitative methodology

Complementary to quantitative techniques, focus groups and semi structured interviews were conducted. Focus groups were held with community leaders at the commune level. Interviews were conducted by key informants including staff and partners of the project.

2.2.3 Sample size and data collection

Field data collection took place in nine (9) targeted communes of the Grande-Anse department from January 18th to January 26th for the three (3) target groups : benefitting families, participating shops and non-benefitting families with questionnaires composed of both closed and open questions. The following issues were faced during data collection:

- Some had migrated out of the locality.
- Some passed away but the food was allocated to a relative or another family member.
- Some beneficiaries were difficult to locate as are known better by their nicknames

As can be seen from Table 2.1, in all but one commune, Les Irois, more than two shops participated in the evaluation survey, therefore target samples size were attained. This was due to

the sample list being increased for each commune, in the case that some shops could not be reached. In the case of Les Irois, the surveyor did more than actually needed.

Table 2.1 Shops sampling

Commune	Number	%	Sample size target	# reached
Roseaux	8	12,3	2	2
Dame Marie	7	10,8	2	2
Pestel	15	23,1	5	5
Chambellan	4	6,2	1	1
Moron	3	4,6	1	1
Beaumont	9	13,8	3	3
Anse d'Hainault	5	7,7	2	2
Corail	8	12,3	2	2
Les Irois	6	9,2	2	4
Total	65	100	20	22

For the beneficiary sample, in all communes but Beaumont where the number of respondents reached were less than planed (3), samples were as projected in the revised technical proposal (Table 2.2).

Table 2.2 Beneficiairies sampling

	Commune	Number	%	Sample	# reached
1	Anse DAinault	1 492	12,4	56	56
2	Beaumont	983	8,2	37	34
3	Chambellan	1 138	9,5	43	43
4	Corail	1 383	11,5	52	55
5	Dame Marie	1 721	14,3	65	65
6	Les Irois	1 058	8,8	40	42
7	Moron	1 075	9,0	40	40
8	Pestel	1 866	15,6	70	72

9	Roseaux	1 284	10,7	48	48
	Total	12 000	100	451	455

As relates to the non-beneficiary group (control group), except for Beaumont where three respondents less than projected were interviewed, the sample group size remained as projected (Table 2.3).

Table 2.3 Non Beneficiaries sampling

#	Commune	Number	%	Sample	# reached
1	Anse DAinault	1 492	12,4	33	33
2	Beaumont	983	8,2	22	19
3	Chambellan	1 138	9,5	26	26
4	Corail	1 383	11,5	31	34
5	Dame Marie	1 721	14,3	39	39
6	Les Irois	1 058	8,8	24	27
7	Moron	1 075	9,0	24	24
8	Pestel	1 866	15,6	42	46
9	Roseaux	1 284	10,7	29	35
	Total	12 000	100	270	283

Moreover, “no-answer” analysis showed that, in general, for all the questions there were no more than three (3) missing answers, hence we may conclude that for the overall evaluation study, the results were as expected.

2.3 Limits of the evaluation

Primary limitations of this evaluation study are linked to non existence of a control group in the baseline study, which does not allow a “difference in difference” approach to measure the net impact of the project. In addition, it did not take into account anthropometrics indicators such weigh, height, body mass index, etc,. which are very important in food security program, however, nutrition improvement aspect was not part of this emergency intervention.

Furthermore, the selected local merchants/shops were not included in the baseline study. This challenge was solved by using a retrospective approach however, with such an approach; the data may have been affected by a so called memory bias problem.

Overall, data collection process was challenged by issues such as:

- Some had migrated out of the locality.
- Some passed away but the food was allocated to a relative or another family member.
- Some beneficiaries were difficult to locate as are known better by their nicknames
- Some stakeholders refused to participate in focus group.

2.4 Organization of the report

Findings of the CARE Food Voucher program evaluation are herewith reported in three sections. The first section presents socio-demographic profiles of families, and discussions of how the program impacted their livelihood and coping strategies. It also assesses the impact of the program on merchants/shops and local economy. The following sections focus on an overview of collected data and the monitoring and evaluation system performance, the effectiveness and relevance of the program, key lessons learned, the challenges faced by the project, and finally key recommendations.

3. Evaluation results

As per the terms of reference, this section focuses on the impact of the project on beneficiaries versus non-beneficiaries, and comparison of final evaluation findings with those of the baseline.

3.1 Evaluation of impact and comparison with the baseline study

As aforementioned, the impact evaluation is twofold: impact on beneficiaries, hereafter referred to as treatment group, and impact on local merchants/shops. This subsection of the report presents impact analysis on beneficiaries by comparing the final evaluation results for the beneficiary group with those of the baseline study. It also assesses the impact of the "Kore L'Avni Nou" project on selected local shops in a retrospective fashion (before vs. during the project course).

3.1.1 Socio-Demographic profile of the respondents

The profiling of the households entails household size, sex of household head, age, and external support received. The mean household size was 5.6 in the baseline study while it accounted for 4.9 in the final evaluation. The mean of household size for control group (non beneficiary families), was 4.9 which is closer to the final evaluation. The results also showed that from the baseline to final evaluation, on average, the beneficiary household head was 63 and 42.5 years old respectively, while for the control group, the mean age of household head was about 34 years. (See table 3.1).

Table 3.1 Mean household size and age of household head

	Treatment group		Control group
	Baseline	Final evaluation	
Household size	5,6	4,9	4,9
Age of household head	63	42.51	33.76

From the baseline to final evaluation, a significant number of women remained as head of the household. The baseline and final evaluation found that female headed households respectively represent 69% and 65 % respectively. The control group had a percentage of men head of households of 37.3 %. (See table 3.2)

Table 3.2 Distribution of household head by sex

	Treatment group		Control group
Gender	Baseline	Final evaluation	
Male	31,5%	35,1%	37,3%
Female	68,5%	64,9%	62,7%
Total	100%	100%	100%

For statistical comparison between the treatment and the control groups, nine (9) non-beneficiaries reporting having received external support from other project, were excluded from the analysis. Furthermore, the validity of the analysis was considered by minimization of the influence

of other factors such supports from family, friends, etc. Assessment of those factors revealed existence of no significant impact difference of external assistance on the two groups, which allow us to hypothesize that they are largely comparable by only the outcomes of the Food Voucher program (Table 3.3). In fact, the percentage of the "Kore L'avni Nou" beneficiaries receiving such support is about 0.6 point less than those of the control group.

Table 3.3 External support

Answer	Treatment group	Control group	Difference
Yes	8,80%	9,40%	-0,60%
No	91,20%	90,60%	--
Total	100%	100%	--

3.1.2 Impact on food security for beneficiaries

The program provided significant improvement of food access to targeted vulnerable families. The impact access to food improved by 51 %. Simultaneously, household complaint of lack of food dropped from 97.7 % , before the program, to 46.5 % , after implementation. Increasing access to food was one of the expected impacts of the project on the beneficiaries. It is worth noticing that food insecurity has[4] been a chronic issue in this region. Before the project, respondents reported insecurity related to food availability over the past 12 months. This improvement of food access was reported just after the six months of project implementation.

In absence of the CARE Food Voucher program, food insecurity in the communes would remain significant. The non-beneficiaries of the program reported a lack of access to food of about 65, 2 % at end of the program while it was only 46.5 % for beneficiaries. This positive impact on beneficiaries is confirmed by this 17.7% difference between the control group respondents and those from the treatment group. (See table 3.4)

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www.fews.net/FoodInsecurityScale

Table 3.4 Impact on food availability

Lack of food	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
	Baseline	Final evaluation	Difference		
No	2,3%	53,5%	51,2%	35,8%	17,7%
Yes	97,7%	46,5%		65,2%	--
Total	100,0%	100,0%		100,0%	--

3.1.3 Effect on beneficiaries coping strategies

Analysis of food insecurity was also assessed through the mitigation strategies of households. Respondents were asked about strategies used to maintain their livelihoods over the 30 days preceding the survey. Questions related to strategies such decrease of food ration volume and quality, food credit and search of external assistance for food. Comparative analysis with baseline addressed whether the treatment group faced this situation.

Evaluation of the project on food availability also considers the distribution of the respondents and whether they never faced the aforementioned situation (figure 3.1). Comparison with the baseline results revealed that after the project, 12.7% of beneficiary families relied on help from family or neighbors to feed the household, 6.5% went without eating for a full day, 5.9% ate unwanted food or food from an immature/early harvest, and 1.8% reduced the number of daily meals less than they did before the project execution (Table 3.5)

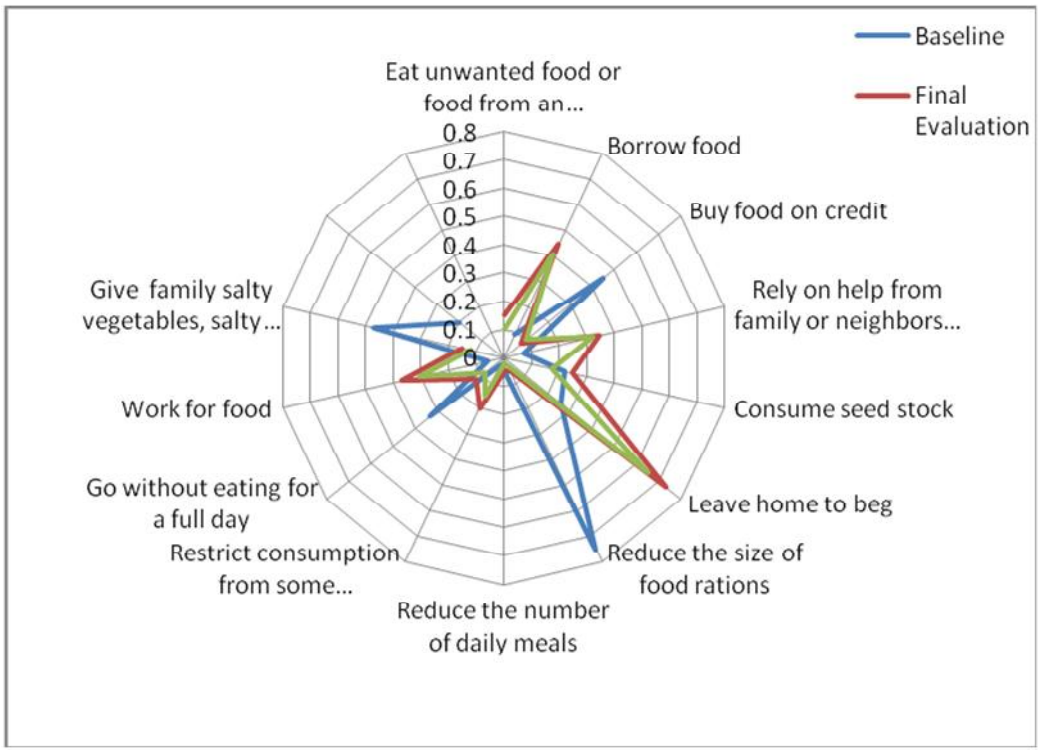

Figure 3.1. Coping strategy as percentage of population (control group, baseline and beneficiaries) who never faced this situation

Table 3.5 Impact on coping strategies

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
Coping strategy Never faced this situation	Baseline	Final evaluation	Difference		
Eat unwanted food or food from an immature/early harvest	9%	14,9%	5,9%	9,9%	5,0%
Borrow food	45%	44,6%	-0,4%	40,5%	4,1%
Buy food on credit	7%	7,9%	0,9%	9,9%	-2,0%
Rely on help from family or neighbors to feed the household	22%	34,7%	12,7%	32,1%	2,6%
Consume seed stock	26%	24,6%	-1,4%	17,5%	7,1%

Table 3.5 Impact on coping strategies

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
Coping strategy Never faced this situation	Baseline	Final evaluation	Difference		
Leave home to beg	75%	73,4%	-1,6%	65,0%	8,4%
Reduce the size of food rations	5%	5,5%	0,5%	3,3%	2,2%
Reduce the number of daily meals	3%	4,8%	1,8%	2,2%	2,6%
Restrict consumption from some members in order for others (children) to have enough to eat	33%	19,8%	-13,2%	15,0%	4,8%
Go without eating for a full day	6%	12,5%	6,5%	8,4%	4,1%
Work for food	47%	36,9%	-10,1%	30,3%	6,6%
Give family salty vegetables, salty tea, or salty coffee as only alternative	20%	15,2%	-4,8%	12,0%	3,2%

However, deterioration may be observed for the following:

- Restrict consumption from some members in order for others (children) to have enough to eat (-13.2%)
- Work for food (-10.1%)
- Give your family salty vegetables, salty tea, or salty coffee as only alternative (-4.8%)
- Leave home to beg (-1.6%)

The results also showed that in all but one case fewer beneficiaries faced such situations than did their peer of the control group (with positive differences varying from 2.2% to 8.4%).

3.1.4 Benefits on households assets

The electronic Food Voucher program was expected to improve retention of net assets by beneficiaries. As with many rural areas in developing countries, households assets are mainly composed of livestock and agricultural land.

3.1.4.1 Impact on livestock asset

Project impact on the beneficiary livestock was gauged by comparing the ownership of poultry, goat/pigs and cows before and after the project.

Table 3.6 shows a remarkable shift in the number of poultry owned by beneficiaries after project execution, though it is not obvious to claim that more beneficiaries had access to livestock after the course of the project (about 1% difference between those with zero (0) poultry before and after the project).

About 12% of the family beneficiary respondents declared to own between one (1) and five (5) poultry less than they did before the project, while approximately the same proportion affirmed to own between five (5) and fifteen (15) poultry after the project, more than they did before. Comparisons with the control group exhibit positive difference in favor of the beneficiaries.

Table 3.6 Impact on ownership of poultry

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
# of poultry	Baseline	Final evaluation	Difference		
0	58%	57%	-1%	61%	-5%
1--2	17%	8%	-9%	10%	-1%
3--4	14%	11%	-3%	10%	2%
5--10	9%	20%	11%	18%	2%
11--15	1%	2%	1%	1%	2%
15 and more	1%	1%	0%	1%	1%
Total	100%	100%		100%	

Concerning ownership of goat/pig, it is evident to assert that, based on the data, more beneficiaries owned goat/pork after the project execution than before. From table 3.7 we learn that it appears that about 11% of beneficiaries who did not possess goats/pigs before the project start, with in an inverse situation after project implementation. Furthermore, one can observe that, in general, after the project, the proportion of beneficiaries who owned these animals was higher than before its start.

Table 3.7 Impact on ownership of goat/pig

	Beneficiaries			Control group	Dif. (Fin. Eval. – Cont. group)
# of goat/pig	Baseline	Final evaluation	Difference		
0	81%	70%	-11%	76%	-6%
1	7%	8%	1%	4%	4%
2	5%	11%	6%	8%	3%
3	4%	4%	0%	3%	1%
4	1%	3%	2%	4%	-1%
5 and more	2%	4%	2%	5%	-1%
Total	100%	100%		100%	

The same dynamic may be observed for the ownership of cows (see table 3.8).

Table 3.8 Impact on ownership of cows

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
# of cows	Baseline	Final evaluation	Difference		
0	93%	89%	-4%	91%	-1%
1	6%	7%	1%	5%	1%
2	1%	3%	2%	2%	1%
3 and more	0%	1%	1%	2%	
Total	100%	100%		100%	

The positive dynamic observed on the ownership of animals is reinforced by considering the proportion of beneficiaries who declared having sold animals over the last three months prior to data collection. The results of the final evaluation showed that 3.6% and 3.2% of beneficiaries reported having sold less transport animals and cows than they did for the baseline study (Table 3.9). Regarding the selling of goat/pigs, the situation after the project is not greatly different than before implementation. Comparisons with the control group respondents reveal that these latter were more prone to sell their animals than were the beneficiaries.

Table 3.9 Impact on selling animals

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
Selling animals	Baseline	Final evaluation	Difference		
Transport Animal	4%	0,4%	-3,6%	0,7%	-0,3%
Beef	5%	1,8%	-3,2%	2,6%	-0,8%
Goat/Pork	7%	7,5%	0,5%	8,9%	-1,4%

3.1.4.2 Impact on beneficiary land assets

Impact on beneficiary net assets was also gauged considering whether these latter have sold agricultural land during the life of the project. However, the results of the baseline study showed that was not a concern, since 90% of the beneficiaries then declared not having sold such assets over the last three months prior to the project start (Table 3.10).

The results of the final evaluation show that 5% of the beneficiaries reported not having sold agricultural area over the last three months more than they did in the baseline. It is not obvious that this positive change might be attributed to the project, since the proportion of the control group respondents that gave such an answer was essentially the same as for beneficiaries. However, it is worth noting that land ownership in general is an issue, therefore it would be normal to not see a big difference between the two groups.

Table 3.10 Impact on selling agricultural land

	Treatment group	Control group	Dif. (Fin. Eval. –

					Cont. group)
Selling agricultural area	Baseline	Final evaluation	Difference		
No	90%	95%	5%	94%	1%
Yes	10%	5%	--	6%	
Total	100%	100%	--	100%	

3.1.5 Impact on beneficiary's personal finances (debt and borrowing)

Respondents of both studies (baseline and final evaluation) were asked whether they owed money during data collection periods. Comparison of both results showed a significant decrease (33%) in the proportion of beneficiaries who owed money before the project execution as compared to those who did so after the project. The results also revealed that 8% of control group respondents owed more money than did those of the treatment group. On average, the beneficiaries declared owing 3,821.189 gourdes against 5,608.72 gourdes for the non-beneficiaries[5]. (See table 3.11)

Table 3.11 Impact on debt

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
Debt	Baseline	Final evaluation	Difference		
Yes	86%	53%	-33%	61%	-8%
No	14%	47%	--	39%	--
Total	100%	100%	--	100%	--

Considering the main reasons of borrowing money, as could be expected, the proportion of beneficiaries who affirmed having borrowed money to buy food after the project was lower (8% difference) than those who did so before its implementation. The results showed that money was borrowed for more long term investments such education, housing and re-investments (for example seeds for agriculture) (See table 3.12). This shift of allocation of resources is logical to the fact that the program responded to primary needs (food) of beneficiaries, therefore it allows them to focus on higher ranked needs.

[5] 42 gourdes = 1 $USD

Table 3.12 Reasons for borrowing money

Reasons for contracting debt	Baseline	Final evaluation	Difference
Food	45%	37%	-8%
Health	23%	21%	-2%
Education	16%	23%	7%
Housing	0%	3%	3%
Re-investment	2%	11%	9%
Marriage, funeral	9%	3%	-6%
Other	5%	1%	-4%
Total	100%	100%	

3.1.6 Impact on beneficiary children education

To measure the impact of the project on education, the respondents (treatment and control groups) were asked whether they had schooled children during the project period. Approximately 27% of the beneficiaries answered yes, while about 15% of non-beneficiaries gave the same answer. Thus, nearly 12% of the treatment group respondents sent children to school during the project execution more than did those of the other group. (See table 3.13).

Table 3.13 Children schooling during project the project course

Answer	Beneficiaries	Control group	Difference
Yes	27,1%	15,3%	11,8%
No	72,9%	84,7%	
Total	100%	100%	

To confirm that this difference was attributable to the project, beneficiaries were also asked whether they had children who would not have gone to school were it not for the project. The proportion of positive answers obtained was about 20.1%. Furthermore, among beneficiaries, 56.3% mentioned that savings on food expenditures contributed, among others, to education of their children.

3.1.7 Access to mobile phone

From the baseline study to final evaluation, the gap of access to phone communication decreased. This unintended change is very important considering the role in access to communication for rural and vulnerable households. Use of the electronic food voucher exposed the target group to phone technology; in fact 75 % of respondents confirmed access to phone. Table 3.14 confirms this assertion by showing a positive change of 29%. However, this result is mitigated when compared to the control group with an observed negative difference of 10% (treatment group – control group). Thus, this positive change might be attributed to a more general "dynamic" of communication market expansion.

Table 3.14. Access to mobile phone target groups

	Treatment group			Control group	Dif. (Fin. Eval. – Cont. group)
Acces to phone	Baseline	Final evaluation	Difference		
Yes	46%	75%	29%	85%	-10%
No	54%	25%	--	15%	--
Total	100%	100%	--	100%	--

3.1.8 Effect on shops and on local economy

In addition to improvement of living conditions of the most vulnerable populations, distributing vouchers instead of physical commodities, also boosted the local economy. One of the most important features of "Kore L'Avni Nou" is the use of local merchants/shops, mostly retailers, as distributors/procurers. That strengthened shop capacities, injected money into the local economy, created jobs, increased of the food demand and, to a lesser extent, reinforced local products though most of the basket goods are imported commodities. Hence, this part analyzes impacts of the project on the "beneficiary" merchants/shops[6] and local economy.

The survey on shop owners (merchants) was conducted to capture data on the impact of the project on local economy, shop managerial capacities and performance. These data were pooled with

[6] The project did not have specifically target activities aimed at merchant/shop capacity improvement other than trainings on the use of technology and introducing record-keeping (receipts).

administrative data to perform the analysis. A breakdown of the survey conducted in tabular and graphical forms is presented in the following section.

3.1.9 Impact on shops' managerial capacity

Information regarding the change in the shops 'internal management' during the project is summarized in figure 3.2.

From the 22 interviewed shops, only 50% had an account book to register their transactions before the project. This situation did not seem to be improved during the project course. In spite of this lack of accounting system, all were compelled to use receipts to record every purchase/sale transaction during the project, while only 77.3% had used it before the project. Concerning bank account, all shops but one had a bank account while just 50% had before the project implementation. It also appears that, according to administrative data, all shops were tax compliant during the project against 63.6% respectively before.

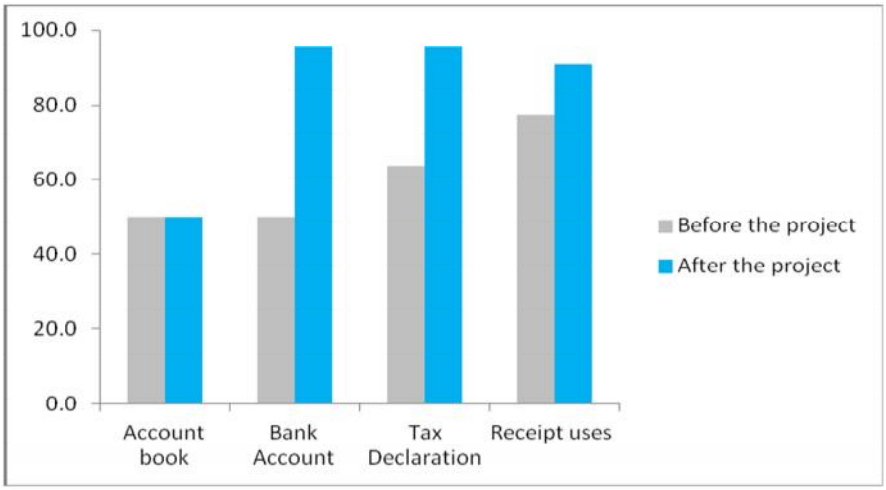

Figure 3.2. Impact on shop managerial capacities

3.1.10 Impact on amount of money in local economy

Table 3.15 reports the amount of money injected directly into the local economy to boost spending, especially of the most vulnerable people. In fact, it may be observed that more than 141 million Gourdes have been injected into the local economy through the vouchers program. That represents, on average, more than 15 million Gourdes per commune or more than 2 million Gourdes per shop. Considering that shops are mostly retailers, the amount injected is relatively important.

However, this injection would have a real effect (at mid and long term) on local economy only if it affected local product demand and, above all, the production sector.

Table 3.15. Amount of money Injected into local economy *

Commune	Number of redemptions	Amount
Anse d\Hainault	8796	17582600
Beaumont	6895	13786200
Chambellan	7416	14822967
Corail	6975	13936620
Dame Marie	9925	19848000
Les Irois	6251	12502000
Moron	5724	11444200
Pestel	10958	21910600
roseaux	7658	15308800
Total	70598	141141987

*Administrative data: extracted from the system[7]

3.1.11 Effect on local production and employment

In response to money injection, it seems that the demand of local products increased during the project execution. Indeed, based on data analyzed on table 3.16, among the shops, 95.5% (63.6%+31.8%) agreed or completely agreed that their local product stock increased during the project. The most products sold were: rice, maize, beans and food ingredients such as oil, spice, etc. Corn and local beans were the two most demanded local products during the project. However, according to the shop owners, seasonal harvesting of local products was an important problem, which complicated the adjustment of the supply to the demand.

In addition, all the respondents claimed increased sales of local products during the project. Moreover, 77.3% and 13.6% completely agreed and agreed respectively that their profits increased during the project, while only 4.5% (one) completely disagreed.

Table 3.16. Impact on local market (%):

	Completely agree	Agree	Somewhat agree
Local Product Stock increased	63,6	31,8	0
Sales increased	77,3	22,7	0
Profits increased	77,3	13,6	4,5

[7] Extract from the « Liste de vendeurs_68 points de vente/Stores 24 dec_2012 »,Project document from CARE.

Although the project did not focus on job creation, all the shops affirmed having created jobs or increased the number of employees to respond to the increasing demand and activities during the project. This is in contrast to the fact that only 68.2% of shop owners (Table 3.17) claimed they had personnel at the beginning of the project. However, some of them were skeptical they might be able to keep these jobs after the project. The project implementing partner, Digicel, claimed to hire additional workers over the course of the project.

Tabble 3.17. Effect on Job creation (%):

	Before the project	After the project	Difference
Job Creation	68,2	100	31,8

3.1.12 Effect on shop coping strategies

Merchants have developed coping strategies to invest or grow their business against a downturn of circumstances. Coping strategies developed by shop owners were assessed with respect to how often they were adjusted by shop owners. In order to assess this fact, data was collected before and after the project. Figure 3.3 and Table 3.18 provides a complete breakdown of data collected related to each coping strategy.

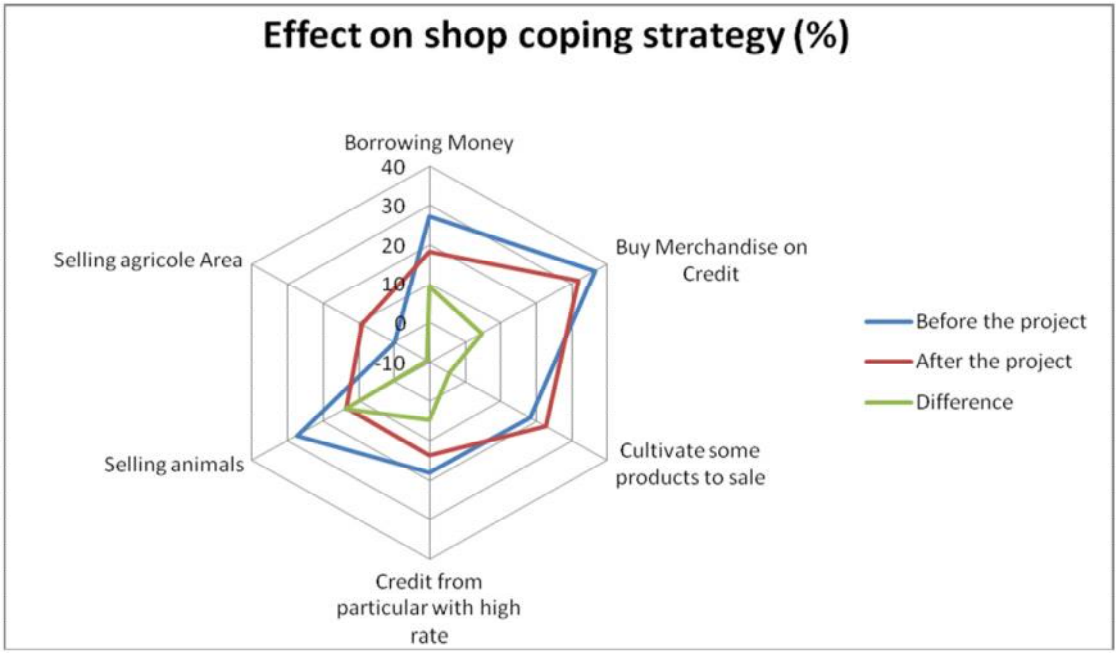

Figure 3.3. Effect of the project on shop coping strategy (%)

Table 3.18. Effect on Coping Strategies (%):			
	Before the project	*After the project*	*Difference*
Borrowing Money	27,3	18,2	9,1
Buy Merchandise on Credit	36,4	31,8	4,6
Cultivate some products to sale	18,2	22,7	-4,5
Credit from particular with high rate	18,2	13,6	4,6
Selling animals	27,3	13,6	13,7
Selling agricole Area	0	9,1	-9,1

After the project, among the six (6) identified coping strategies, four (4) moved in the expected direction: borrowing money, buy merchandise on credit, credit from particular and selling animals. Based on these findings, the project has reduced "selling animals" by half, from 27.3% to 13.6%. As regards credit, "borrowing money" was lowered by 9.1 %, "Buy merchandise on credit" and "Credit from particular", by 4.6% each. Additionally, during the project one shop owner (4.5%) sold products from his harvest. In this case the shop owner is at the same a local producer and distributor through his shop. Finally, two sold some agricultural lands to invest and grow their shops.

3.2 Overview of data collected on regular basis and presentation of performance monitoring

This subsection analyses the monitoring and evaluation system (M&E) of the Food Voucher program, and presents the different type collected by the associated staff. It also maps the flow of information generated by this system and how this information gets to key stakeholders.

3.2.1 Monitoring and evaluation system

The assessment revealed that M&E of the project tackled four main tasks: targeting of beneficiary eligibility, ensuring the quality of food delivery, service performed by merchants/shops and follow up on use of assistance by beneficiary (post distribution surveys). This section of the final evaluation assesses how the on-going monitoring system provided continuous feedback on the project evolution, the main challenges faced by M&E staff during the course of the project, etc. Some improvement points will also be presented. The analysis that will be presented based on the results of the M&E staff focus group.

Following registration in the system and the first voucher redemption, the Monitoring and Evaluation unit undertook a systematic revision of eligibility criteria. Each month, 20 % of the

overall 12,000 was selected randomly in the commune to assess eligibility criteria from February to July 2012. After this period, the verification ratio decreased by 10% due to lack of human resources and need to correct duplication cases or voucher swapping problems by tracing individual beneficiaries and addressing the problem.

According to administrative data, 10 families who did not comply with vulnerability criteria were originally selected and registered. They were revealed and removed from the project list being replaced by other families. The monthly verification process was followed by a correction process involving activation and deactivation of vouchers by transversal technicians.

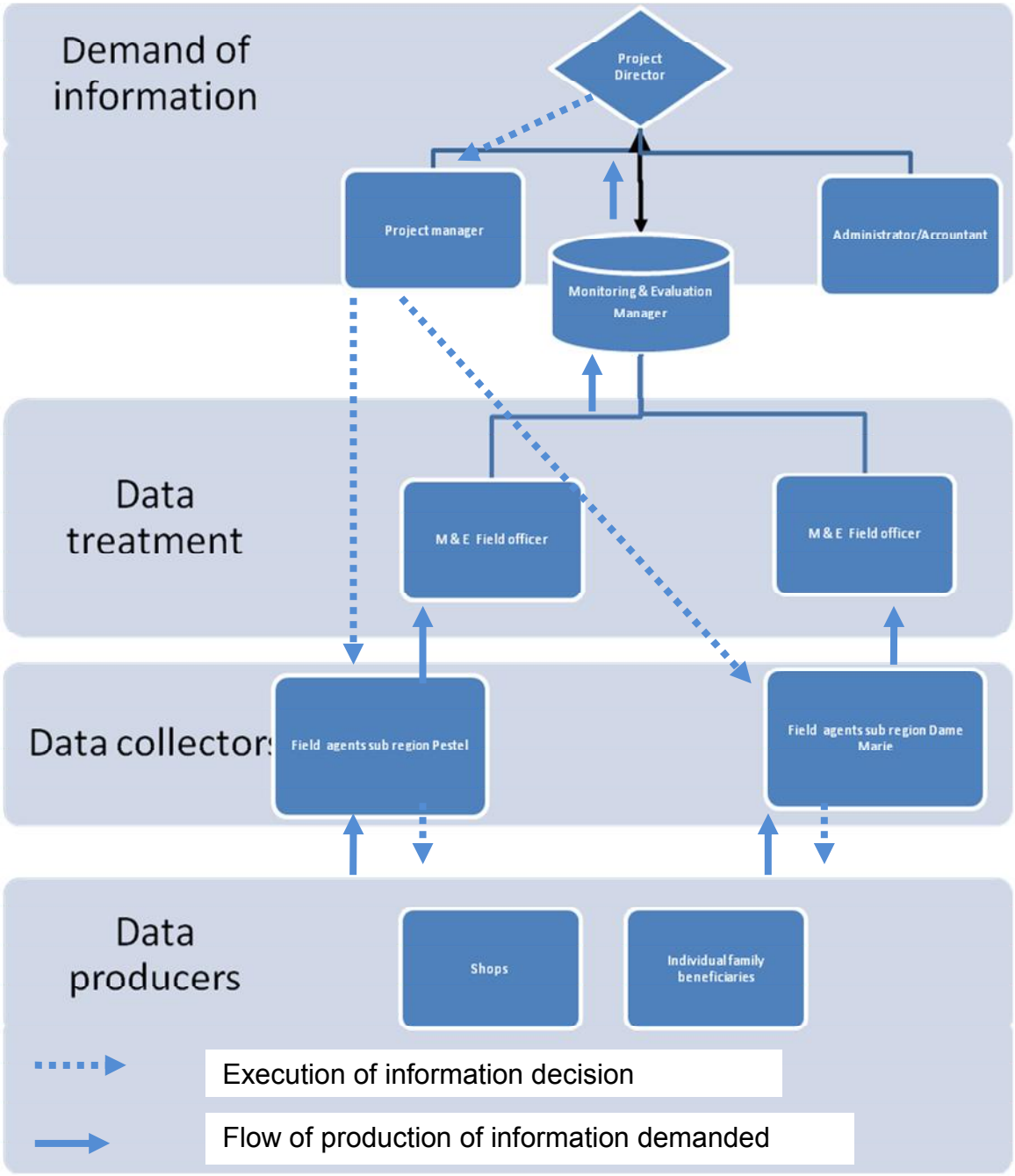

Fig 3.4 Monitoring and Evaluation information Flow

3.2.2 Data collected by the monitoring and evaluation staff

CARE electronic Food Voucher management shortcutted the channel of command to improve efficiency to implement decision making process. Information produced by the M & E

Manager is treated by the Program Coordinator and actions resulting from the analysis are implemented by the Project Manager who is in direct contact with field agents (Figure 3.4). Monitoring and Evaluation produces a monthly report including four surveys: commodity market price, post distribution survey analysis, eligibility criteria verification surveys, and food quality random verification and analysis (Table 3.19). These data are collected by field agents under the direction of the M & E field officers. These officers reported that lack of resources (Field Officers are not totally dedicated to M & E as they also support beneficiary duplication and voucher swapping clearance) and administrative burden (conflicting agenda of field agents with administrative task, access to fuel, logistics were obstacles in data collection as well as overall field operations).

Analyzing information system conflicts of interest rose in data collection and decision implementation related to community mobilizer roles (Principal agents' issue). Those mobilizers are in charge of beneficiary supervision as well, they execute decisions i the field. Therefore, there may be biased in reporting field feedback to top project manager or field office managers. The CARE M & E manager reported that counter surveys and focus groups were conducted to mitigate this potential issue. However we cannot exclude the probability.

Table 3.19 Reports produced with data collected by M&E staff

Reports	Commodity market price report	Post distribution Report	Eligibility criteria matching report	Quality product report
Description & objectives	Assesses the basket commodity prices on the market provided by the shops, and helps to maintain a fair price by the shops. Retailers were asked mandatorily to	This report aims to document the use of beneficiaries of the food.	Provides information on the profile of preliminary selected beneficiaries by community leaders. It helps to ensure the quality and respect of the vulnerability criteria of the	Assesses inventory stock of the shops to ensure the quality and availability of products for targeted beneficiaries.

Reports	Commodity market price report	Post distribution Report	Eligibility criteria matching report	Quality product report
	publicize their price (we can analyze those reports)		targeted group.	
Methodology			Random selection of 20 % of the preliminary beneficiaries selected by community leaders from each commune. This verification process of eligibility criteria held from February 2012 to July 2012, then the sample decreased to 10 %.	

3.3 Relevance and effectiveness of the electronic Food Voucher program in Grand'Anse

This section presents and analyzes the effectiveness and relevance of the electronic Food Voucher program implemented by CARE in the Grand'Anse region of Haiti. First, this new CARE service delivery process is mapped out and presented in the context of food distribution program in Haiti. Assessment of personal satisfaction of beneficiaries and other stakeholders regarding the project is also presented.

3.3.1 Food insecurity in Haiti and Food distribution challenges

The staggering poverty rate in Haiti is associated with food insecurity issues that are severe boundaries to human capital development. According to World Bank, the gross domestic product (GDP) of Haiti is ten times lower than average of Latin America. In 2012, the Haitian economy contracted by 2 % due to low productivity of agriculture and bad weather. The Global Hunger Index ranked Haiti 77 out 79 for the year 2012 and indicated that 38 % of the population is food insecure[8].

In aftermath of the earthquake while food insecurity increased, distribution of rations to vulnerable populations remained challenged. Crowded lines, space for distribution, security for convoy, safety of distributors and potential beneficiaries were among challenges of several international agencies[9]. Logistic and security issues also increased as relates distance in miles to reach beneficiaries from Port-au-Prince to other cities.

3.3.2 Description of CARE electronic Food Voucher program

The electronic Food Voucher program was a new form of food distribution to provide assistance to vulnerable population in nine targeted communes in Grand 'Anse. An electronic voucher associated with a pin card was issued to targeted registered beneficiaries. This voucher was credited with an amount of $ 50 valid for a period of 30 days and refilled each month over a six (6) month period. Beneficiaries then went to a local shop registered in the program to redeem his voucher. The shop manager used a USSD phone on his mobile phone (*567* voucher number*pin#) to communicate with Digicel electronic platform “Merchant Pro”. Then an SMS is sent back to confirm existence of credit for the given beneficiary. This successful message allowed merchants to deliver a preselected food basket to beneficiaries. CARE personnel then proceeded with field beneficiary verification leading to reconciliation of food voucher transactions. Later, shops went to a local microfinance, Fonkoze, with Digicel to access the value of the goods sold. Once verified, the of beneficiary accounts were credited to restart the food voucher cycle (figure3.5).

[8] WFD 2012

[9] New York Times, problems with food distribution in Haiti, January 27th 2010

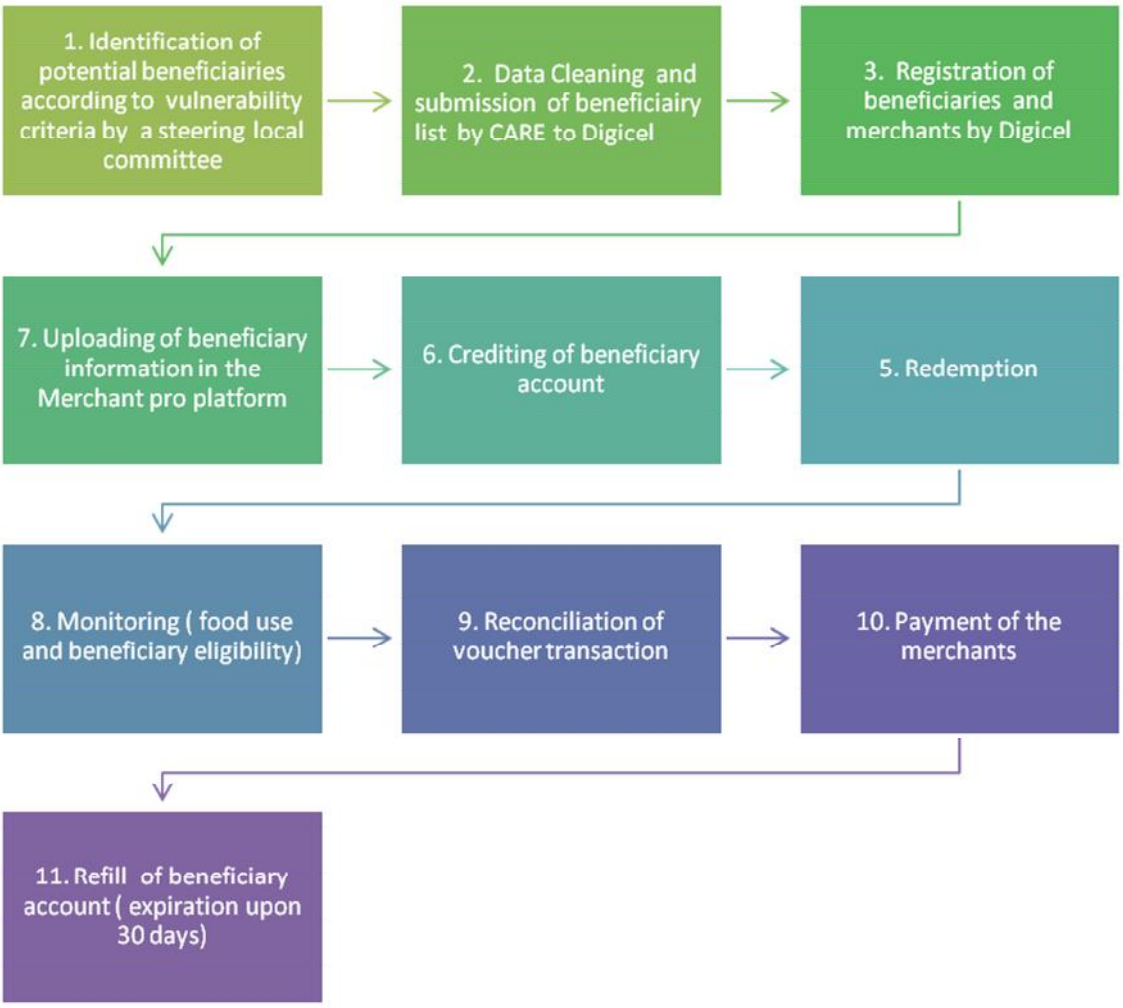

Figure 3.5 Program operations

3.3.3 Effectiveness of the program operations

Globally, CARE electronic Food Voucher program operations improved food security of beneficiaries as compared to traditional distribution. The program operation channels alleviated the logistical burdens by using local shop supply channels to deliver food to targeted populations. From beginning to end, the program operations are be reported in 11 steps (Figure 3.5).

3.3.4 Effectiveness and relevance of beneficiary's selection process

Selection of the Grande Anse department was justified for project implementation after Hurricane Thomas and based on deteriorating socio-economic conditions of its population also exacerbated by the influx of internally displaced families as a result of the 2010 earthquake in Haiti. Grande Anse is an isolated area where the annual revenue (HTG 5,269.00) of independent workers is

less than the average of rural areas in Haiti; moreover 82.3 % of communes in Grande Anse have very weak and weak access to basic services[10] . In addition, transportation is very difficult in this area. The implementation of the project in this region was reasonably justified to recapitalize farmers, rebuild or strengthen market linkages and assist poor households.

CARE used a participative methodology coupled with defined criteria to select the beneficiaries. A community committee formed with mayors, community representatives (ASEC or CASEC), the Citizen Protection office, pastors, judges, teachers and notables of the Communities helped identify potential beneficiaries. This committee also legitimated the process in the community but it is reported that in some cases, influent members were biased in their choice either for political or personal reasons.

Therefore, the second step, data cleaning, was conducted to ensure eligibility of beneficiaries with respect to relevant criteria. CARE elaborated two sets of criteria: one for vulnerability and another for extreme vulnerability.

The vulnerable group criteria consisted of:

- People living with less than $2/day,
- People owning less than two livestock and,
- People owning less than 8/100 Cx of land.

In addition to food insecure, the extreme vulnerable criteria were:

- Pregnant,
- Handicapped (Blind, deaf, mute),
- Widowed, orphan,
- HIV or sick,
- Displaced from the 2010 earthquake or Hurricane Thomas.

Aside from the absence of anthropometrics indicators, the above criteria are pertinent and relevant to define the targeted population based on World Food Program (WFP) definition of food insecurity. In fact, WFP defines food insecurity as a situation where a household or country is not able to provide (future) physical and economic access to sufficient, safe, and nutritious food necessary for living an active and healthy lifestyle.

[10] ECVH 437-438 ;Poverty map, Haiti 2004

This definition is similar to three components of food insecurity: Availability, Access, and Use described by World Health Organzation. In addition, WFP considered specific groups such children, specifically those under five, pregnant women, handicapped as more vulnerable due to their limited capacity to access food or because they are more likely to be physically or economically affected by malnutrition. However, to access a good use of food received and mostly for some people in extreme vulnerability, some anthropometric indicators such body mass measures would be so useful. Even though, it is necessary to concede that it would occur some additional cost.

Contrary to beneficiary families, the merchants/shops were selected through a competitive process. CARE conducted an assessment of business capacity, storage, financial capacity and legal registration of shops. This selection process evicted smaller shops or merchants who did not satisfy requirements. In addition, the financial gross sales of the shops were subjective even it was coupled with CARE staff observation of retailer's stock. In order to respond to criteria some shops registered themselves under the umbrella of shops having legal papers to facilitate product distribution. It can be questioned whether this cooperation as an unintended effect of the project.

3.3.5 Relevance and Effectiveness of registration mechanism

Registration of beneficiaries was relevant to confirm and monitor vulnerability eligibility criteria. Registration of beneficiaries allowed CARE to credit personal account of each beneficiary through a Digicel electronic food voucher program. Therefore, CARE was able to follow up in the field to access food rations by each registered beneficiary. This process also helped to triangulate information regarding food availability and delivery by shops, beneficiary voucher redemption and field data collected by CARE. The system enabled tracing of the information per individual as registered in different communes.

The registration process of beneficiaries in the electronic system was challenging in the beginning but significantly improvement during project implementation. The registration process consisted of matching a voucher number and a PIN number to an individual beneficiary to be registered in the merchant pro platform. This field operation was implemented by Digicel agents assisted by CARE community mobilizers. The registration process was far from being efficient in the first three months mostly due to Digicel and CARE failing to establish an orderly schedule to undertake field registration procedures and online verification in tandem.

CARE reported such issues occurred due to the extended time required for beneficiary verification selection and time required by Digicel to perfom online uploading of the information,

including registering beneficiaries on site afterwards. According to Transversal, a third party contracted by Digicel, it required at least 48 hours for registration in a given commune but the process was rushed in one day due to time constraints.

Schedule issues were coupled with individuals who tried to register several times. According to the project's director, data as electronic registration was limited in refreshing / reconciling uploaded data in real time and such entries could only be revealed once data was transferred into computers and analyzed for duplications. This duplication process was also caused by several families nominated in different “section communale” due to high rates of changing their residence address."

Following the first months of the project, the duplication of errors jumped by 397 %. However, after the first two months of project implementation, the registration process started to improve significantly with duplication errors dropping by about 13 % within the second month and decreasing on-goingly for the following months (Figure 3.6).

Additional issues were related to registration process. Digicel agents sometimes mismatched pin and voucher number. These swapping issues leaded to invalid PIN and vouchers which cumulated respectively to 3518 and 536 cases for the first two months. over the months these errors decreased as technicians mastered the technology (Table 3.20)

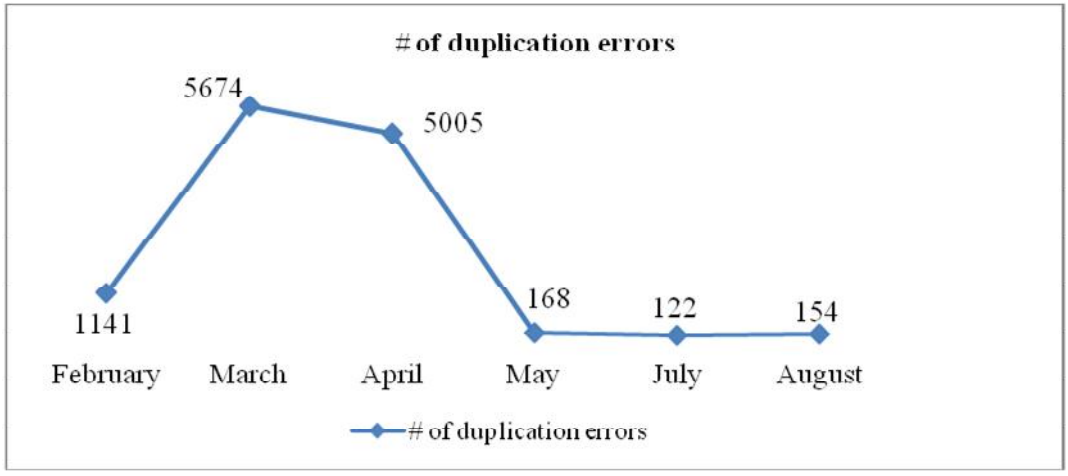

Figure 3.6 Duplication errors during program execution

Table 3.20 Transaction errors registered from July to December 2012

	Month

Error type	July	August	September	October	November	December
Voucher disabled	997	332	285	561	1700	30
Voucher number invalid	241	295	298	286	92	4
Not enough money	1725	2150	3089	3286	478	23
PIN invalid	1716	1802	1492	1724	587	15
PIN reset	499	452	410	55	0	0
Mobile phone not authorized	31	13	11	22	4	0
Total	5209	5044	5585	5934	2861	72

3.3.6 Relevance and Effectiveness of redemption (food delivery)

Redemption transactions efficiency was low during the first two months but then increased substantially at the fourth month of the program. Redemption is the delivery of food to individuals registered in the program by a selected shop. Successful redemption is effective when a beneficiary presents his/her voucher to the merchant and laters receives a message confirming the transaction (redemption of the voucher amount onto the merchant account) from the system after dialing the USSD code including beneficiary's voucher number and requesting the beneficiary to enter the PIN as a confirmation for redemption. The beneficiary then received the preselected basket of food from the local shops.

As can be noticed in table 3.21, 999 families received their 6th refill in September (meaning they had completed the cycle of all 6 vouchers), 9051 families in October, and 1562 families in November. However, as the last refill happened in November, 388 (= 207+181) families missed out either the 5th or 6th refill. All other families completed the six-month voucher cycle.

Table 3.21. Distribution of the beneficiaries by refill date

Number of times already	Quantity of Beneficiaries	Six Months Cycle					
		August 12.	September 12.	October 12.	November 12.	December 12.	January 12.

refilled							
Refilled 1 time	181	1st refill	2nd refill	3rd refill	4th refill	5th refill	6th refill
Refilled 2 times	207	2nd refill	3rd refill	4th refill	5th refill	6th refill	
Refilled 3 times	1562	3rd refill	4th refill	5th refill	6th refill		
Refilled 4 times	9051	4th refill	5th refill	6th refill			
Refilled 5 times	999	5th refill	6th refill				
Total	12000						

Source: Administrative data- extract from table Food voucher analysis September 2012, summary

Significant numbers of errors occurred during the first four months. All combined errors increased from 5000 near to 6000 from second to fourth month, then dropped considerably by an average of 20 % for the last two months of the project compared to the peak. Those errors resulted from an adaptability period due to the use of new technology and difficulties that may have occurred between beneficiaries and shops during voucher redemption within first four months. While Digicel mentioned that a Call Center 202[11] existed at the beginning of the project, CARE's staff and mobilizers claimed it was not really effective for CARE project until the fourth month. It is only at this period personnel were trained to respond to PIN issues related to the food voucher program. While some errors were purely technical, some were related to human fraud. That was a sufficient justification of the next stage of monitoring of the process by CARE staff.

Relevance of redemption process was analyzed in comparison of traditional food assistance program distribution. During the first three months mobilizers reported that beneficiaries crowded the lines to redeem their vouchers. The bottleneck of distribution cleared from fourth to sixth month of voucher redemptions. Moreover, more than 80 % of merchants confirmed that the program was safe and felt secure during the process (Security and confidentiality, reduction of stigma)**.**

[11] 202 is client oriented service of Digicel which existed prior of the CARE food voucher program.

The beneficiary could pick up food basket without being noticed in the community as being food assisted. However, low literacy of beneficiaries sometimes compromised their security for PIN number (Flexibility of redemption, pick up of food).

The beneficiary had a period of 30 days to redeem the value refilled on the voucher each month. The system facilitated procurement of products through existing market channels alleviating the burden of coordination from implementing agencies. Overall satisfaction with the system is analyzed in the section following the monitoring system.

3.3.7 Preferred Form of food assistance

Should the project be implemented again, beneficiaries were asked the form of assistance they would prefer. The results indicate that they would strongly prefer the basket of the "Kore L'Avni nou" project (65.27%), while about 17% would prefer more local products, and the same proportion would opt for more vegetables in the basket (Table 3.22).

Table 3.22 Preference for form of assistance

Product form	Percentage
More local Product	16,81
More VegeTables	16,81
As Care did it	65,27
Other forms	1,11
Total	100

The use of the electronic voucher is supported as the best form of intervention by the majority of the beneficiaries (58.19%). The survey also showed that approximately 16% of the respondents would prefer cash while about 26% would prefer a combination of voucher and cash. (See table 3.23).

Table 3.23. Form of intervention

Form	Percentage
Voucher	58,19
Cash	15,71

Both	26,11
Total	100

3.3.8 Satisfaction with the project by beneficiaries

The beneficiaries were also questioned about their satisfaction with the project. The survey shows that they were highly satisfied. In fact, more than 72% declared being completely satisfied, and about 26% appeared to be satisfied. Hence, the proportion of dissatisfied was less than 2% (Table 3.24).

Table 3.24 Beneficiaries satisfaction with the project

Level of satisfaction	Percentage
Completely Satisfied	72,25
Satisfied	25,99
Not Satisfied	0,22
Not satisfied at all	1,54
Total	100

As regards the service provided by the shops, the majority of the beneficiaries appeared to be satisfied. The survey indicated that about 57% declared being completely satisfied and approximately 36% indicated that they were satisfied (Table 3.25).

Table 3.25. Satisfaction with service provided by the shops

Level of satisfaction	Percentage
Completely Satisfied	56,83
Satisfied	36,12
Somewhat satisfied	4,19
Not Satisfied	1,10
Not satisfied at all	1,76
Total	100

Finally, respondents were asked whether they were informed of the project before its implementation. The results indicate that 85.33% responded positively to that question, while

14.67% had a converse opinion. The first group (positive answer) was also asked whether they believed they were provided with enough information. More than 46% completely agreed that the information was enough and nearly 48% agreed it was. (See table 3.26).

Table 3.26. Opinion of beneficiaries on whether they received enough information about the project

Level of agree	Percentage
Totally agree	46,21
Agree	47,78
Somewhat agree	0,26
Not agree	4,18
Not agree at all	1,57
Total	100

3.3.9 Satisfaction with the project by shops

The final evaluation also considered the principal challenges faced by the shops related to the electronic system and interaction with customers (project beneficiaries). Shops owners were asked to express their level of satisfaction with the project, particularly the impact of this latter on their activities. Details about these aspects are provided in the following subsections.

All the shops were completely satisfied or satisfied with the project and the security of the electronic system (Table 3.27). However, one of the shop owner said "he could not say that he was satisfied on his shop progress".

Table 3.27. Shop satisfaction with the project (%):

	Completely Satisfie	Satisfied	Neither satisf	Not Satisfied	Not satisfied satisfied at all
Project	100	0	0	0	0
Security of the electronic system	86,4	13,6	0	0	0
Shop progress	81,8	13,6	4,5	0	0

3.3.10 Program partners and sustainability

Digicel was the main implementing partner of CARE in the electronic food voucher program in Grande-Anse. Digicel also subcontracted Haitian software developing company, Transversal,

and Haitian micro-finance institution, Fonkoze, respectively for developing the electronic payment platform and for paying shops after redemption. CARE also built relations with community leaders including local representatives of Haitian Government. This section discusses the role of those partners, how the project impacted them in a sustainability perspective. The last part also presented perspectives of the beneficiaries after the project.

3.3.10.1 Role of Digicel and its subcontractors

Digicel is the leading private company providing mobile financial services in Haiti. According to Dalberg report[12], Digicel's mobile money services, TchoTcho mobile[13] had a better network to outreach potential clients through its partnership with Alo Communication and Fonkoze that had 43 branches. Digicel had the following main responsibilities in the project:

- Developing e-voucher platform services
- E-Registration of beneficiaries and shops in the food voucher
- Payment of shops upon voucher redemptions
- Technical assistance/troubleshooting related to the electronic food voucher system

Digicel reported that its existing mobile money platform was not ready for the food voucher program which lead to contract the Haitian firm Transversal, to develop a tailored platform for the project. Transversal reported sound capacity building through the development of the electronic exchange platform called Merchant Pro. As a former grantee of the HI-FIVE project, this experience improved their capacity to work with non IT client to provide soft services. Through intensive coaching on programming principles, compliance and information management from CARE Food Voucher program management, they improved the following features of the basic Merchant Pro platform:

- Insertion of an accounting module able to be exported to Excel or PDF.
- Insertion of accounting elements for audit purpose: there is distinction between the demand and approver of a request.
- Redesign of a more friendly interface, more illustrative and less technical.

[12] Haiti mobile Money, a point in time case study

[13] Mobile money transfer product/service offered by Digicel to Haitian community. E-voucher platform was a separate software (independent from Tcho-tcho) used for the voucher redemption, as the Central Bank of Haiti has legal limitations and regulations imposed on the amounts to be cashed in and cashed out through existing Tcho-tcho network, whereas e-voucher platform was flexible enough to allow unlimited voucher amounts being transferred from beneficiary pre-paid (voucher) account into the merchant account.

- Improvement of the interface to be compatible with a low internet debit.

Transversal reported that the project has provided insights and added value to serve non IT clients. They recruited two more staff to work on this project and estimated now having a better capacity to respond to client short deadline and providing solutions to humanitarian issues. At the beginning of the program, Transversal maintained direct contact with the CARE Food Voucher Coordinator as they were in charge of the all technical aspects related to the platform development. Once the system became relatively functional and in order to avoid double management and distorted information flow, information communication (requests of various nature) were channeled from CARE through Digicel to Transversal. FONKOZE was fully administered by Digicel as their approved "cash-out agent" supporting merchant payments..

As mentioned above, the role of FONKOZE was to provide liquidity to shops after the redemption process. FONKOZE received outstanding payment amounts from CARE via Digicel[14] and disbursed payment to the shops based on the reconciliation of redeemed voucher amounts approved by CARE and Digicel (information extracted from the system and verified by hardcopy receipts managed by each merchant shop). FONKOZE was able to address the bottleneck of liquidity and proximity with the shops. Shop managers reported 100% satisfaction with the overall project.

Digicel reported its intention to improve its mobile money platform to serve similar initiatives in the future. This project provided insights for the scale up these type of services by decreasing fixed and variable costs. The sustainability of an electronic food voucher scale up is linked to reliable partners and affordable cost.

3.3.10.2 Sustainability for beneficiaries and shops

The beneficiaries were asked whether they believed they would be able to afford the same basket of products they received from the project. Only a minority, say 6.9%, believed they would, while the rest, 93.1%, said no. They were also questioned about their perspective for the future. The majority of beneficiaries wished the project to be executed again. None of them mentioned personal or family initiatives to keep on improving their living conditions.

[14] Novo Scotia Bank, supporting Digicel financial operations opened two accounts: 1 for CARE to debit the voucher amounts refilled each month and 1 for Digicel to receive those amounts transferred from CARE account to Digicel account for further cash-out to the merchants, through Fonkoze branches in rural areas.

Concerning shops owners (merchants), all considered increasing shop storage capacity, selling of local products, and 90.9% of them will keep using receipts as introduced by Food Voucher program for all future transactions. However, most of them expressed their fear of a probable decrease in demand after the project. They claimed that the project was more emergency based and the implementation period was very short for a real change in consumption behavior.

3.3.11 SWOT analysis of the Food Electronic Voucher and scaling up as implemented

The execution of the project "Kore L'Avni Nou" faced various challenges. Despite these difficulties, the project exhibited strength, though some weakness aspects have been identified by the evaluation study (Figure 3.7).

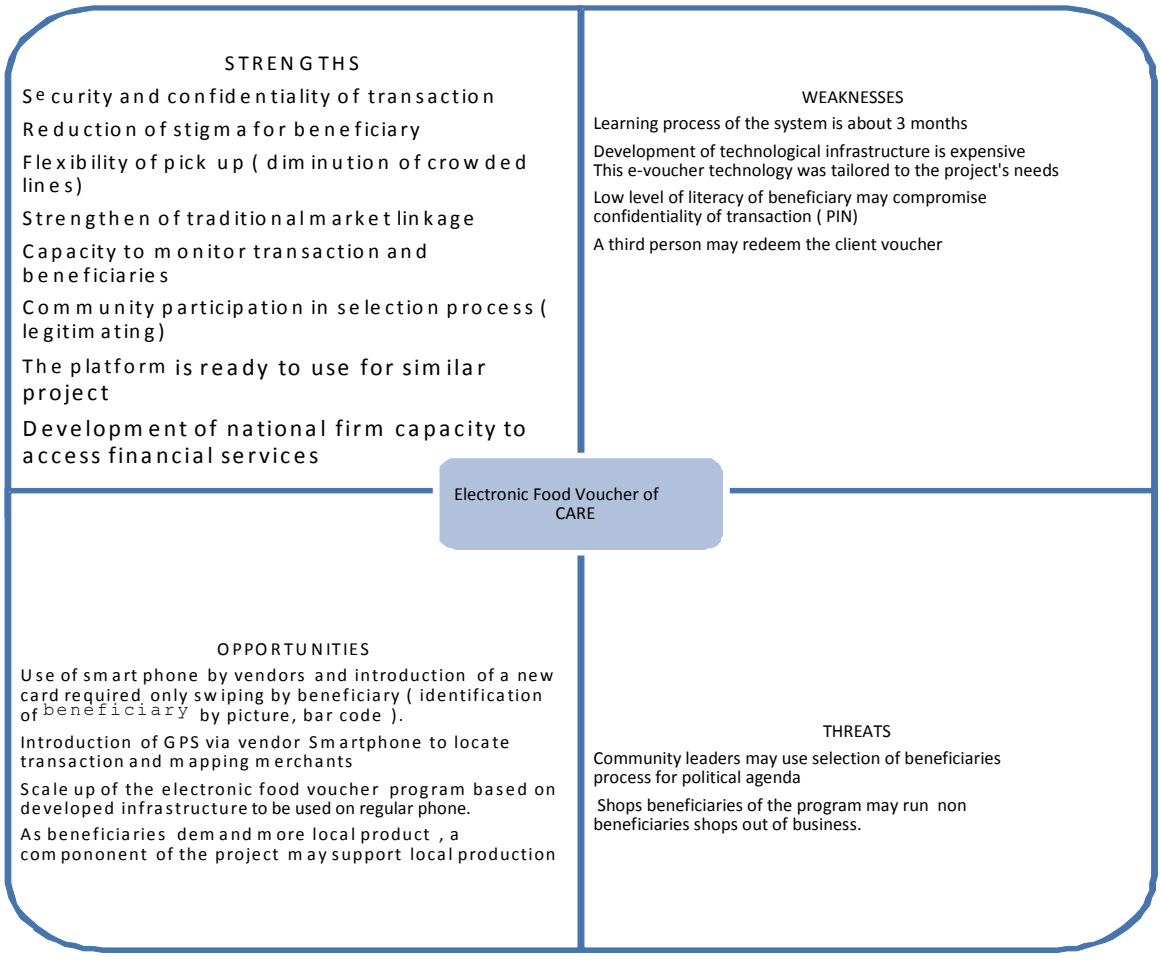

Figure 3.7. SWOT of the electronic food voucher program as implemented by CARE

SWOT analysis highlights are a general assessment of the electronic food voucher as implemented by CARE in a perspective of scaling up. First, the project contains strong points as

being to be more effective than traditional food assistance programs. Legitimating target group selection and ability to monitor this process during the project life was an important feature. In addition, the electronic system, the security and confidentiality of transactions, the facility of pick up (redeem) at different places, and the capacity to monitor transactions and beneficiaries were important aspects that facilitated transactions and avoided (or limited) potential fraud. In case of similar program implementation in the future, those points should be reinforced.

On the other hand, the project also had some weak points that would need to be improved in the case of reimplementation. First, respective to a less-one-year project, the learning process of the targeted system was too ambitious for a new technology system of electronic cash transfer. Nevertheless this process can be mastered in three months if additional human resources are committed to the partner side (Digicel); second, a third person might have redeemed some vouchers and the confidentiality of the PIN could be compromised due to customers (case of illiteracy for example) transmitting the PIN to shop owners to make the voucher redemption transaction.

Regarding threats to project implementation, some community leaders might use and influence beneficiary selection process for political agendas. Therefore confidence between implementing agencies and beneficiaries may be compromised. Moreover, as the project selected shops with higher capital and stock facility, those retailers may create a distortion in local market, as non-participating retailers may be run out of business.

Finally, implementation of electronic food voucher opens doors for opportunities of improvement and extension. Similar projects in a sustainability perspective may create link or partner shops and local farmers to improve local demand elasticity. This strategy should consider timing of the response of seasonal production, institutional arrangement and economic incentives. Low literacy of beneficiaries may be counter balanced by longer hands-on training. In addition extension of e-voucher to regular phone may decrease cost and facilitate financial inclusion (mobile cash transfer).

3.5 Key lessons learned

The study has permitted to learn the following lessons:

- A non-automatic refill helps in the cleaning and verification process.
- Design of an electronic food voucher program should take into account average internet debit in a given country for access facilitation. Use of an interface user friendly, less technical and more practical system. System should be able to export data to excel and PDF format.
- Schedule sufficient time between system and field registration for conciliation purpose. Maintain also constant communication with field team and system operators during the process.
- Selection of beneficiaries by a steering committee may be compromised by personal or political agenda, therefore a cross-verification or accompaniment of the process by the agency is recommended.
- An implementing partner of an electronic food voucher program may need one Information Technology staff to facilitate the process

3.6 Key obstacles preventing the correct execution of the program

During its course, the project faced various types of challenges at different levels. The following subsections describe the main issues encountered.

3.6.1 Challenges encountered by shops during the project

In terms of challenges, shops owners reported some difficulties with the electronic system despite that 95.5% claimed they had used phones before the project. In table 4.10, one will notice that shops had some issues with phone use (27.3%), at least once with payment by phone (50.0%), with vouchers numbers (45.5%) and PIN (36.4%). 68.2% had received help to solve their problems, but only 45.2% claimed they were satisfied with this service. According to many shop owners, the training session received at the start of the project "was good, but insufficient". (See table 3.28)

Table 3.28. Difficulties with the electronic voucher system (%):

Table 3.28. Difficulties with the electronic	*Yes*	*No*
Phone use	27,3	72,7
Payment by phone	50,0	50,0
Vouchers numbers	45,5	54,5
PIN	36,4	63,6
Did you receive help to solve them	68,2	31,8
Satisfied of this help service	45,2	54,8

The shops related some issues with the beneficiaries, to demand and supply. It seems that 18.2% had some concerns with beneficiaries, mostly with the voucher numbers. 18.2% also affirmed that sometimes faced shortages of products beneficiaries wished to buy. When that happened, they offered substitute products.

Sometimes, they had shortages, mostly for local products (27.3%). 50% claimed they sometimes had difficulties in procuring local products. To explain these difficulties, they mentioned "the problem of seasonal effect of local products". (See Table 3.29)

Table 3.29. Shop difficulties (%):

	Yes	No
Customer	18,2	81,8
Change in customer preference overtime	18,2	81,8
Insuficient stock	27,3	72,7
Over stock	27,3	72,7
Facility in procurement local products	50,0	50,0

3.6.2 Issues with beneficiaries

According the M&E staff, the level of education of targeted beneficiaries is very low, which limits their understanding of the full program process. To overcome this, training sessions at the start of the project should use poster and experimental cases (learning by doing). Illiterate beneficiaries disclose their secret pin to vendors which increase the probability of fraud. The mobilizers added that some beneficiaries are better known on their nicknames rather than their official names, which caused some problems to data collection. Moreover, in some cases, the food was taken on behalf of the beneficiary by a third person who never took part in the training.

3.6.3 Issues with the community

The mobilizers also reported that they were sometimes victim of intimidation from community members because they are not selected in the program. This social pressure occurred most likely in deactivation of the coupon. The Program Coordinator observed that despite educational information sharing and trainings of the beneficiaries, the project was misperceived by some communes as a politicized government program. In fact, some individuals associated it with the electoral process. Furthermore, the lack of confidence of the population in the government put an obstacle in the relation between CARE and government involvement in the project, though the Civil

Protection and Ministry of Social Affairs did not accept to be volunteers or partners in the project; they rather wanted to be salaried.

3.6.4 Issues with shops

The mobilizers identified the following issues with the shops:

- They lacked business skills to use the receipts.
- Some did transactions without the presence of beneficiaries.
- At the beginning they had issues to compile basket goods and organize logistics.

3.6.5 Issues with the technology

The mobilizers also faced problems with the technology. A transaction might be possible (as it would be confirmed in a 3 -day delay on the Digicel list), however the basket of goods was not delivered due to the voucher being non active, invalid or having insufficient credit for the transaction. Finally, mismatch problems between PIN and selected beneficiaries was also observed.

3.7 Main recommendations

The final evaluation of the project led to the following recommendations:

- **Establishing Links between farmers and local shop*:*** The project had injected an important amount of money through voucher distribution directly into the local economy to boost spending, especially of the most vulnerable people. As a response to this monetary injection, it appears that the demand of local products increased during the project execution. However, according to the shop owners, response time from farmers and seasonal harvesting of local products were a persistent problem, which complicated the adjustment of the supply to the demand. However, for a real effect (at mid and long term) on local economy and to ensure the viability of the project, it is necessary to increase local production by establishing links between farmers and local shops.
- **Reinforcing food insecurity assessment:** It would be worthwhile to consider some anthropometric indicators in selection of the beneficiaries to complement the subjective data.
- **Pursue sustainable options:** Sustainability of food insecurity improvement is a huge challenge. It is clear that CARE and partners did what could reasonably be done in the short term and with limitations. However, the integration of other aspects such as well-run savings schemes, and expansion of small-scale pilots in nutrition gardens could facilitate some

sustainability. Partnering with other agencies should be a top priority for similar programs in the future.

- **Monitoring and Evaluation:** Include the commodity market price in the system. As a reference price for beneficiary shops, the M& E should consider the baseline market price coupled with inflation. As the biggest retailers are part of the programs, price assessed from smaller retailers would be bias as reference point. M & E should include gender variable and introduce more behavioral indicators.
- **Period of implementation should be longer:** To modify the consumption behavior of families. Training sessions should be longer, more proactive and practical for appropriation of the process in the electronic system.
- **Strengthen the voucher system by using regular cell phones:** The voucher system presents different signs for effective safeguarding of resources: flexible, secure, efficient in management, and favorable for customers. However, some fraud cases were registered when customers had to transmit their PIN to shop owners. Hence, extension of this service to regular cell phone may be a more effective emergency response tool in the near future.

4. Conclusion

Overall, *Kore L'avni Nou* has helped to improve the food security status for 12,000 vulnerable families and reinforced the organizational capacity of 68 local shops. Through various qualitative and quantitative research methods, this evaluation highlights that beneficiary families greatly benefited from the program in terms of received food assistance. Management of the electronic food vouchers was very innovative although being challenging in the first three months.

Findings showed significant improvement in the living codition of beneficiaries, retailers and local shops; nevertheless limitations to the scope of the evaluation did not allow confirming all improvements are relevant only to the project. Beneficiaries were able to redirect spending to other purposes such as child schooling, livestock assets and other needs.

The electronic food voucher system has a learning curve of three months. The system provided flexibility for the pickup of food and confidentiality for beneficiaries and all beneficiaries were satisfied with the system.