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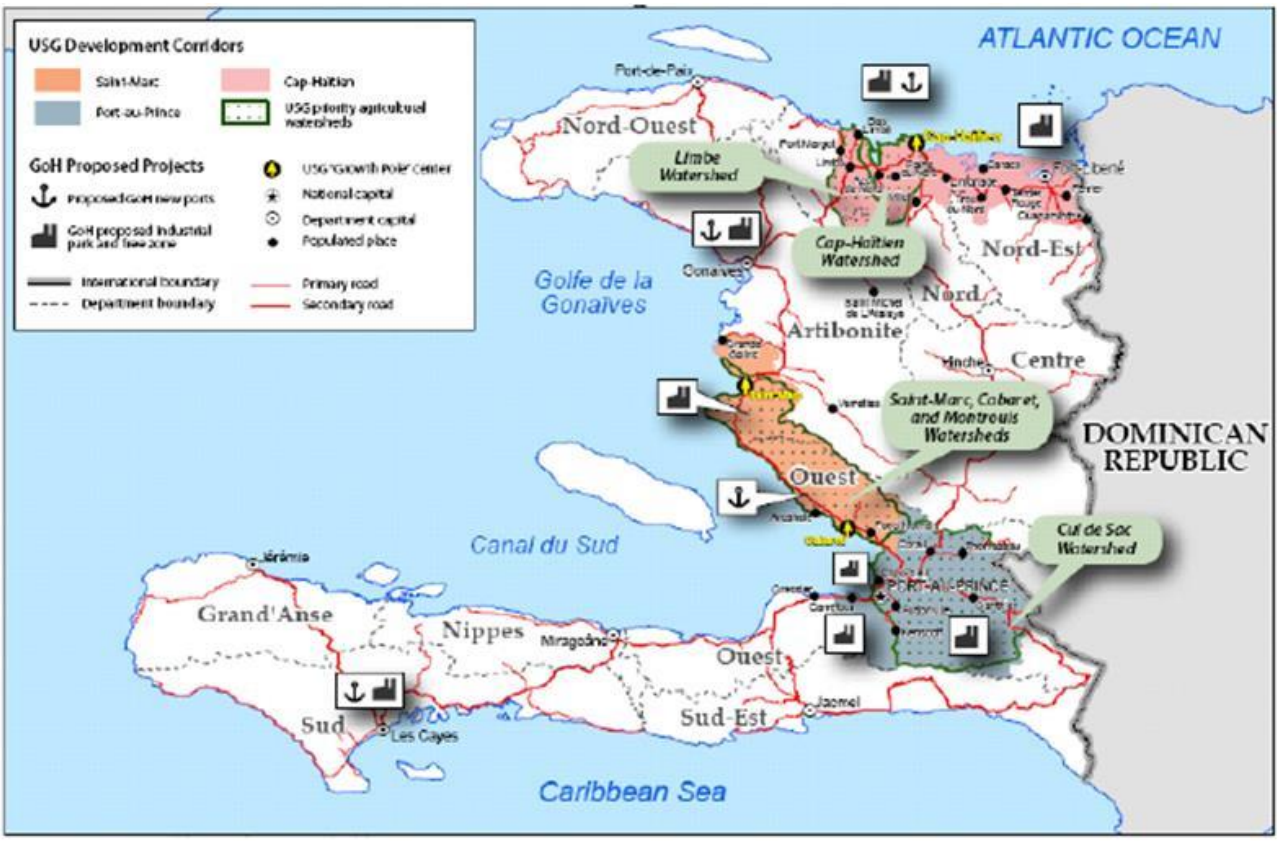

Haiti Midterm Assessment 2016[1] Report

November 2016

[1] In the USAID Mission to Haiti's three Development Corridors

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ABBREVIATIONS

5DE	Five domains of empowerment sub-index
AIDS	Acquired immune deficiency syndrome
ANC	Antenatal care
ARI	Acute respiratory infection
BCG	Bacille-Calmette-Guerin vaccine against tuberculosis
BMI	Body Mass Index
BRIDES	Bureau de Recherche en Informatique et en Développement Economique et Social
CASEC	Conseil d'Administration de la Section Communale
CDC	The Centers for Disease Control and Prevention
CPI	Consumer Price Index
CPR	Contraceptive prevalence rate
CSPro	Census and Survey Processing System
DC	Development Corridor
DGI	Direction Générale des Impôts
DHS	Demographic and Health Survey
DPC	Daily per capita
DPT	Diphtheria, pertussis, and tetanus vaccine
EA	Enumeration Area (i.e. cluster)
EGRA	Early grade reading assessment
EHH	Eligible Household
FTF	Feed the Future
GOH	Government of Haiti
GPI	Gender parity sub-index
GPS	Global positioning system
HHS	Household Hunger Scale
HTG	Haitian gourdes
IFPRI	International Food Policy Research Institute
IHE	Institut Haïtien de l'Enfance
IHSI	l'Institut Haïtien de Statistique et d'Informatique
IUD	Intrauterine device
IYCF	Infant and young child feeding practices
JMP	Joint Monitoring Programme
LCU	Local currency units
MAD	Minimum acceptable diet
MSMEs	Micro, small and medium enterprises
NCHS	National Center for Health Statistics
OLS	Ordinary Least Squares
OPHI	Oxford Poverty and Human Development Initiative

PPS	Probability proportional to size
PWD	Persons with disabilities
PPP	Purchasing Power Parity
SBA	Skilled birth attendant
SD	Standard deviation
SDE	Sections d'Énumération
TFR	Total fertility rate
UNICEFF	United Nations Children's Fund
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
USG	U.S. Government
VIP	Ventilated, improved pit
WEAI	Women's Empowerment in Agriculture Index
WHO	World Health Organization

EXECUTIVE SUMMARY

In 2012, The USAID Mission to Haiti commissioned a baseline survey in the three development corridors. Point estimates were obtained for dozens of indicators in each of the four Government of Haiti (GOH)/United States Government (USG) development-focused Pillars that guide program design and implementation. The baseline survey was repeated in 2016 as a midterm survey using essentially the same survey instrument and methodology. This report presents the results of the midterm survey and compares it to the results of the baseline for each of the four Pillars of the GOH/USG Post-Earthquake Strategy.

Pillar A (Infrastructure and Energy)*:* Changes occurred between baseline (2012) and midterm (2016) and differences were noted between the three development corridors at midterm. Consistent with their locations relative to the earthquake's epicenter, Cul-de-Sac households spent considerably more money on home repairs than did the St. Marc which, in turn, spent substantially more than the Northern corridor. Most of the houses destroyed in Cul-de-Sac and St. Marc have been repaired. However, less than one-half of houses with light to severe damage have been repaired. Housing ownership status was similar across all corridors, but HHs in the St. Marc corridor reported having no official title for the housing property more than Households in the Northern and Cul-de-Sac corridors. In St. Marc, however, there is higher ownership of agricultural land compared with the other corridors.

Using the baseline criteria for improved drinking water, household access increased in the Northern corridor since baseline bringing it up to nearly 90 percent; the level measured in Cul-de-Sac at both baseline and midterm. St. Marc's access to improved drinking water did not change and was at 68 percent at midterm. However, when Joint Monitoring Programme (JMP) criteria were applied to the baseline and midterm data, only 54.5 percent of the population across the 3 corridors had access to improved drinking water at midterm and the gains in Northern are diminished. At midterm, St. Marc and Cul-de-Sac differ in access to any improved toilet/latrine facilities that are not shared with other households. Data show a decrease of households without access to electricity since baseline, especially in the Northern corridor. At midterm, Cul-de-Sac reported having the most electrified households, with St. Marc reporting the least.

Pillar B (Food and Economic Security, includes Food security, Nutrition and Diet): Comparison of households with moderate to severe hunger likely decreased in the Northern corridor, while no change occurred in Cul-de-Sac, and either modest change or no change occurred in St. Marc. There are no distinguishable differences between corridors with respect to hunger. There is no change between baseline and midterm for the proportion of women

who are exclusively breastfeeding their 0-5-month old infants and the level remains low (34 percent at midterm) with no differences between the corridors.

Overall wasting in children in the three corridors is very low at midterm with virtually no children are severely wasted, but about 18 percent are stunted, with about a third of these being severely stunted. The Northern corridor might have had a modest reduction in wasting. Stunting in women was and remains very low whereas levels of overweight and obese women remain at about 30 percent with no discernable differences between corridors.

Children's consumption of legumes and nuts increased by over 20 percentage points in all three corridors for an overall increase from 20 to nearly 50 percent! Even a greater increase children's consumption of Vitamin A-rich fruits and vegetables occurred between baseline and midterm. These gains are impressive and should reflect improvements in micronutrient intake but they were not enough to improve the proportion of children receiving a minimum acceptable diet (MAD), which was and remains low at midterm. Women's Consumption of legumes increased in all three corridors and, in the Northern corridor, consumption of Vitamin A rich fruits and vegetables increased. In contrast, women consumed less flesh foods in St. Marc and Cul-de-Sac, while consumption of dairy products, eggs, organ meats and Dark leafy vegetables all remain at low levels across all three corridors.

Changes in the population's *Economic Security, also within Pillar B,* occurred from 2012 to 2016 and differences between corridors have been recorded. The proportion of males and females, 15 years and older, that are economically active nearly doubled since baseline reaching a midterm level of greater than 50 percent; this level of increase was seen in all corridors and equally among males and females. Self-employment remains the principal characteristic of employment during both time periods. The median weekly earnings increased between baseline and midterm in Northern and Cul-de-Sac while St. Marc showed only marginal increases. The median income for males doubled since baseline whereas that for females increased by only 25 percent.

The predominant sectors of employment in both the baseline and the midterm surveys were agriculture and retail trade, but there is a suggestion of a slight shift out of agriculture and into retail over time in the St. Marc and Northern corridors. Median weekly earnings in the Northern corridor only increased. There appear to have been a change, between baseline and midterm in: (i) the number of households with farming enterprises in St. Marc and Northern and (ii) households operating 'other sector' enterprises.

The decrease in the number of households living in poverty, since baseline, in St. Marc and the Northern corridor contrasts to Cul-de-Sac which had no change. Expenditure on some non-

food items increased since baseline. Expenditures on food increased only in Northern and usual expenses decreased only in Cul-de-Sac. Expenditures on housing increased in Cul-de-Sac. Expenditures on utilities, assets, and housing have increased over all three corridors. Health care, education, and exceptional expenses have only increased in St. Marc and the Northern corridors. The cost of housing increased more in the urban than the rural setting.

Access to a bank account and loans in the last twelve months were about the same between baseline and midterm. The percentage of households taking loans remained rather small but the average amount of the loan increased in all corridors. There are differences between corridors in the average value of the loans taken with St. Marc being higher than Northern and Northern higher than St. Marc. Obtaining loans from cooperatives and community savings/credit groups increased modestly. Loans to expand family business increased most notably in St. Marc, while loans decreased for farm production in Cul-de-Sac.

Women's empowerment in agriculture in Haiti is relatively high compared to many other developing countries when assessed with the WEAI. Six of the nine WEAI domains are at 75 percent or higher. Areas where women's empowerment in Haiti can be strengthened are in: (a) the purchase, sale or transfer of assets, (b) access to and decisions on credit (c) group membership.

Pillar B (Food and Economic Security; Subsection Agriculture): Changes occurred since baseline. During the primary rainy season, in the St. Marc corridor, the cultivation of sweet potatoes increased from baseline to midterm. In the Northern corridor, cultivation of four crops increased; corn, beans, sweet potatoes, and sweet cassava. In Cul-de-Sac, beans and bananas increased. Both Northern and Cul-de-Sac show increases since baseline in the mean number of crops planted per household.

Cultivation of beans and pigeon peas during the dry season increased since baseline in all three corridors. Sweet cassava increased in St. Marc and Northern corridors. Sweet potatoes and yams increased only in the Northern Corridor, whereas peanuts, spinach and bananas increased only in Cul-de-Sac between. In the secondary rainy season, corn, pigeon peas, sweet potatoes and sweet cassava cultivation increased in the St. Marc and Northern corridors. Peanuts and cassava increased only in the Northern corridor whereas beans and bananas increased only in St. Marc. Noteworthy is that the increased cultivation of beans and pigeon peas are consistent with the increased consumption of legumes seen in the diet diversity data.

There were increases, from baseline to midterm, in the percentage of households cultivating tree crops for households with less than 10 trees per variety. Nearly all of these households sold some or all of their tree production at both baseline and midterm.

Comparing household production, yields and gross margins for all seasons combined, the average percent of total production lost prior to harvesting decreased from baseline to midterm for corn, rice, pigeon peas, peanuts, yams, sweet cassava, and bananas. Average yields decreased for all crops except for peanuts. Gross margins increased for corn, beans, pigeon peas, peanuts, sweet potatoes, sweet cassava, and sugarcane, but decreased for sorghum, yams, cassava, and bananas. There was no change in the gross margin for rice.

Input costs per hectare decreased between baseline and midterm for nearly all crops; the exceptions being tomatoes and sugarcane. The cost categories that made up the bulk of the total input costs, at both baseline and midterm, are (i) seeds (ii) labor and equipment for land preparation and (iii) all labor other than for land preparation; in all three, input costs per hectare decreased for most crops. Reductions in labor costs are seen at midterm (excluding land preparation labor) compared to baseline for all but sugarcane. Associations as a source of paid labor appears to have decreased contrasting the increased use of oneself for labor. Land preparation costs decreased for most of the crops. Use of improved seeds decreased in all three corridors between baseline and midterm. The use of paid labor increased in the Northern corridor (only). The GOH as a source of irrigated or pump water, increased from baseline to midterm while the marketplace decreased as a source of pesticides.

Households that did *not* have a primary buyer decreased to zero or near zero levels between baseline and midterm for Corn, Rice, Sorghum/Millet, Beans, Pigeon peas, Sweet potato, Yams, Sweet cassava, sugarcane and bananas. The percentage of households with the local market as a primary buyer for several crops increased over the same time period.

Pillar C (Health and Basic Services): Nearly one-third of household members (ages 6 or older) reported being ill at least once in the prior 12 months at midterm whereas about one-tenth reported being ill at baseline. All corridors exhibit similar levels of illness. The overall prevalence of disability among household members ages 6 or older is low (less than 2 percent) at baseline and midterm. About one-quarter of People with disabilities, age 15 or above, are currently employed.

A majority of women reported encountering at least one problem accessing health care. Problems getting permission to go to the doctor declined since baseline for St. Marc and Cul-de-Sac. Problems getting treatment money declined in St. Marc, but is still the most frequently reported problem across all corridors.

More women at midterm than baseline reported they preferred to have another child two or more years later (for women with zero to two children). There was a decrease in the number of women who were undecided about delaying childbirth at baseline. About one-third of

women of reproductive age reported use of a modern contraceptive method, with no observable change from baseline. Of the women not using contraception, fewer than six percent report opposition to contraception and 95 percent are knowledgeable about family planning. More than one-third of married or cohabiting women, ages 15-49, who wish to limit or delay future pregnancies reported not using any form of contraception. The total fertility rate (TFR) is higher in St. Marc (3.2 children/woman) than in the other two corridors (2.3 and 2.4 children/woman). If there was no observable change in TFR.

Most women received antenatal care (ANC) from a skilled provider in all corridors at baseline and midterm. Between baseline and midterm, there was a sharp increase in the use of a doctor – rather than a nurse - in St. Marc and Northern corridors. Women reporting four or more antenatal care visits (the gold standard) increased dramatically since baseline in St Marc, Northern and Cul-de-Sac for an overall level of greater than 75 percent.

Place of delivery remained unchanged between baseline and midterm, and the percentage of women reporting being assisted by a skilled provider for their last birth also remained unchanged. Strong increases since baseline were seen in the percentage of women being seen by a medical doctor for their post-delivery checkup. The percentage of eligible women who reported no post-delivery checkup decreased dramatically, dropping from about 95 to 20 percent.

With respect to the timing of the mother's first post-delivery checkup, there was no change between baseline and midterm and the percent of women who did not receive any post-natal checkup - or received it 42 days or more after childbirth – remains at about 50 percent. At midterm, there are no differences between corridors with respect to the timing of the child's first postnatal checkup. HIV/AIDS testing during pregnancy was high at baseline and remained high at midterm with an overall level of nearly 90 percent.

The percentage of mothers whose child received the first DPT vaccination increased in all corridors to 100 percent. The third round of DPT vaccination also increased substantially in St. Marc and Cul-de-Sac resulting in an overall increase in coverage by about 30 percentage points, bringing the coverage to nearly 60 percent. The same pattern emerged with Polio as seen with DPT, but with lower coverage for Polio at baseline and weaker improvements (in all but St. Marc) for the 3rd round brought the overall coverage to just over 35 percent. The difference in coverage between DPT and Polio vaccinations –usually administered together - suggest that there are problems with the health care delivery system or the cold chain. There was no change in measles or BCG vaccine coverage between baseline and midterm, with coverage for measles at about 75 percent and BCG coverage at about 94 percent.

Pillar C (subsection Education): From baseline to midterm, there are increases in infant mortality in all three corridors. Under-5 mortality increased in Cul-de-Sac. St. Marc has the

highest post neonatal mortality rate and the Northern corridor has an under-5 mortality rate much higher than in the other two corridors.

School attendance, as measured in this survey, is extremely high at midterm (greater than 90 percent for all age groups) for ever attending school and attending in the 215-2016 school year. *This indicator only demonstrates that a child is registered for school and has attended sometime(s) during the year; it does not indicate if the child attends regularly throughout the entire school year*. All children's literacy measures at midterm are lower than their baseline estimates. Creole graphemes per minute decreased in Cul-de-Sac overall with the 6-9-year-olds and 14-17-year-olds contributing mostly to that decrease. Creole graphemes per minute also decreased, in the Northern corridor. Creole connected words per minute decreased in Cul-de-Sac for 6-9-year-olds and over all the corridors.

Pillar D, Democracy and Rule of Law: An increase in the use of public transportation since baseline was reported across all corridors. Between baseline and midterm, households reporting electricity usage increased in the Northern corridor (and possibly in Cul-de-Sac). There were substantial disparities in electricity use between the corridors, with Cul-de-Sac being the highest and St. Marc lowest. The percentage of households using public schools decreased overall. At midterm, Northern Corridor households used public schools the most. St. Marc, households' satisfaction with public transportation, schools, tap water, electricity, markets, sports facilities, and morgues or cemeteries also declined at midterm.

The population's confidence in the government is very low in all corridors at midterm. Citizens do not believe that Haiti is moving in the right direction. The population similarly has little confidence that human rights are protected. Since baseline, perceptions of corruption increased to about 70-75 percent. Only in Cul-de-Sac has the perception of elections being fair decreased substantially, although the other two corridors are also at very low at midterm.

A lack of water was ranked the most serious problem at midterm for about one-half of the respondents. The proportion of respondents that felt the municipal government has done a lot to solve their problems is negligible (two percent or less) across all corridors and types of problems. In all three corridors, respondents reported feeling that the municipality diverts much more money through corruption at midterm than at baseline.

Only in Cul-de-Sac did respondents' experiences of violence appear to have declined. Among the Haitians that used police service(s), there was a decrease in the percent rating it as good or very good, although there was an increase in reported knowledge of police support services available for victims of violence or abuse.

Survey results showed strong increases in knowledge of the availability of legal support services.

In Cul-de-Sac, there was a strong increase reporting that the police are their preferred legal assistance to resolve conflicts. All three corridors show strong increases in preferring the local court for legal assistance. For respondents whose households solved a dispute in the last two years without formal courts, friends and family involvement in dispute resolution increased.

Midterm estimates of participation in meetings (of any sort) have risen since baseline in all corridors; religious organization and parent associations for schools are the most common type of meetings attended. The percentages of respondents who reported they voted in the last elections decreased in St. Marc.

1.INTRODUCTION

The effects of the devastating 2010 earthquake and additional economic and climatic stresses in Haiti are felt by Haitians in their daily lives and identifiable via various development indicators. In January 2011, the United States Government (USG) published the document Post-Earthquake USG Haiti Strategy: Toward Renewal and Economic Opportunity. The USG Strategy goal is, therein, stated to help Haiti become stable and economically viable by achieving the objectives to:

- Catalyze economic growth through investments in agriculture, energy and infrastructure
- Ensure long-term stability through investments in public institutions

This document lays out the USG's near (18 months) and medium term (5 years) development strategy for Haiti and identified four core development pillars:

A. Infrastructure and Energy
B. Food and Economic Security
C. Health and Other Basic Services
D. Democracy and Rule of Law

The USG Strategy states: "USAID is working to build the capacity of government officials in Haiti so they can lead their country's development, and is training Haitians in areas like construction and health, providing them the skills they need to participate in their country's reconstruction and development". Rigorous oversight mechanisms – of which the baseline survey and midterm assessment are part - ensure that U.S. taxpayer funds are spent wisely and effectively in these programs.

1.1 SELECTION OF THE 3 DEVELOPMENT CORRIDORS

To support the GOH territorial rebuilding priority and to consolidate gains in the four core development pillars, the USG, in partnership with Haitian stakeholders, targeted and integrated investments across three geographic development corridors identified by the GOH as priority growth poles for development and designated by the GOH's plan of action as poles for growth[2]. These corridors are:

1. Port-au-Prince corridor (aka Cul-de-Sac corridor)
2. Saint Marc corridor
3. Cap Haïtien corridor (aka Northern corridor)

[2] Post-Earthquake USG Haiti Strategy: Toward Renewal and Economic Opportunity, January 3, 2011 and the USAID/Haiti website, https://www.usaid.gov/Haiti

For the Cul-de-Sac corridor, many agricultural value chains are supported but the focus, identified through analysis and community consultation, was on corn, rice, and beans. In the St. Marc Corridor, plantains, corn, and beans had the potential for significant increases in productivity and reaching a large number of Haitian households. They are also calorie and nutrient dense foods that help improve nutrition outcomes. These crops are targeted for production in the plains. In the Northern corridor, analysis indicated that focusing on rice, plantains, and corn was appropriate[3]

The baseline and midterm surveys were conducted in the three development corridors and collected information relevant to the four core development pillars. While USAID/Haiti supported beneficiaries in both urban and rural populations in these development corridors, Haiti's Feed-the-Future (FTF) activities focus only on the rural population in these three development corridors[4]. Therefore, while most of the midterm (and baseline) survey was conducted in both rural and urban populations[5], the Agriculture and Women's Empowerment in Agriculture Index (WEAI) components were conducted only within the predominately rural populations of the three corridors.

In 2012, the Mission completed the data collection of a survey that provided baseline values to numerous indicators across the four development pillars. The results of that survey are presented in the document Haiti 2012 Baseline Survey[6]. The midterm assessment, completed in 2016, used the same survey instruments (with only minor changes) and a similar sampling technique[7] as that in the baseline. This report presents the baseline and midterm results side-by-side[8]. There are some new tables in this report: tables not found in the baseline for which there are no baseline values.

[3] Feed the Future Haiti FY2011-2016 multiyear Strategy, May 2011

[4] The FTF strategy – along with some other mission documents - incorrectly lists both urban and rural populations within the three development corridors as equal to the FTF zone of influence (ZOI)

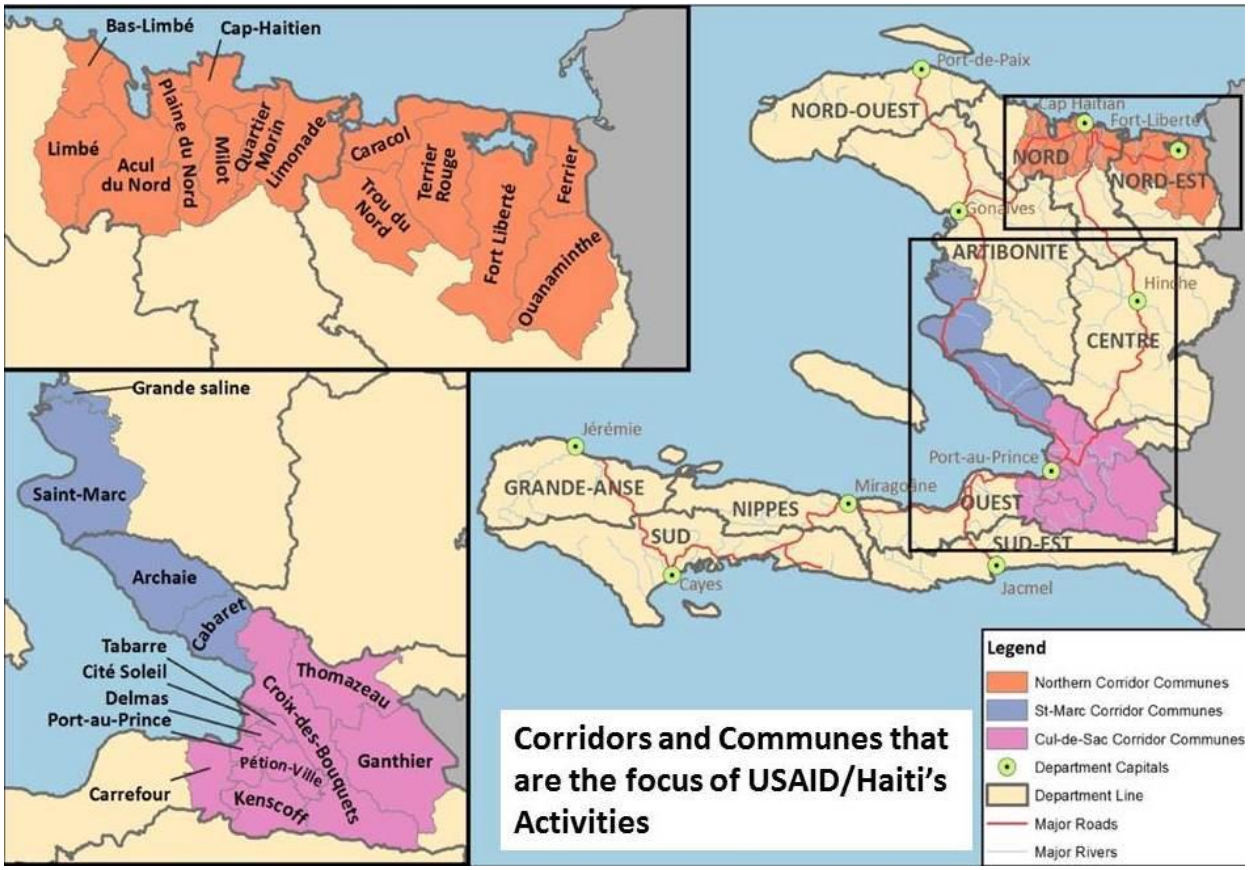
[5] Indicators for Pillars A, Portions of B and C and D

[6] Published as the Haiti Baseline Survey, Contract #: AID-521-M-12-00001, ICF International, May 2013

[7] The first stage of the cluster selection at midterm was identical to the baseline but the other stages of the sampling differed. The Midterm assessment used an improved, probability based sampling method.

[8] When tables are presented with both baseline and midterm results, the number of the baseline table (from which those values come) is in brackets following the midterm table number. (e.g. for Table 3.4.4 [3.2.2] Satisfaction with public services, baseline values are found in the baseline report table 3.2.2)

Figure 1: Communes within USAID Haiti's Three Development Corridors (3DCs)



1.2 PURPOSE OF THIS REPORT

The purpose of this midterm survey is to provide the USG and, in particular, the USAID Mission to Haiti – along with the Government of Haiti (GOH) and development partners - with information about the current status of the Mission's development activities. This survey was designed for monitoring and, as such, provides point estimates for the many indicators organized within the four development pillars. This report compares the midterm with the baseline estimates for the 3DCs as a whole and by each of the 3DCs. The sample was not designed to support conclusions of causality or program attribution or to measure change from the baseline to midterm with statistical precision.

2. METHODOLOGY

This section describes the Haiti Midterm Survey methodology including discussion of the sample design, questionnaire customization, fieldwork, response rates, and limitations of the survey. All data used for midterm estimates in this report are primary data (i.e., no secondary data were used). The Haiti 2012 Baseline Report, May 2013 also reported only on primary data

that were collected for that purpose. Because midterm estimates are presented side-by-side with baseline estimates (for those on which the baseline reported), the baseline methodology is also discussed when it differed from the midterm methodology.

2.1 STUDY DESIGN

2.1.1 SAMPLING AND WEIGHTING

SURVEY SAMPLE DESIGN

The Haiti Midterm Survey was conducted in three corridors of Haiti. The three corridors are: 1) the Cul-de-Sac corridor which consists of 10 communes, 2) the North corridor composed of 14 communes, and 3) the Saint-Marc Corridor which includes four communes. The enumeration areas (EAs) are the primary sampling units (PSUs) of the survey. Stratification was by corridor. A total of 48 EAs were selected from each of the three corridors separately using a probability proportional to estimated size (PPS). The number of households from the 2003 census was used as the estimated measure of size. A listing of the selected communes (*sections communales)* for each of the 3DCs is presented in appendix A3.

SAMPLE SIZE CALCULATION

The midterm survey sample sizes were calculated to provide point estimates of indicator values rather than calculating sample sizes to detect change in indicator values over time. Point estimates measure indicators for a point in time with a given amount of precision, whereas measuring change over time would compare differences in indicator values between baseline and midterm to see if they were statistically different. A sample size based on point estimates was preferable to a sample designed to measure change over time because point estimates required a smaller sample size.

In sample size calculations, the margin of error determines the amount of precision the indicator estimates will have. For continuous variables, the margin of error was based on the mean indicator value times 0.10; the margin of error for proportions such as stunting, and wasting was also equal to 0.10.

Standard deviations (SDs) and design effects (DEFFs) for sample size calculation were estimated using baseline survey data. We calculated sample sizes using projected midterm indicator values based on the 2015 targets in the Feed the Future Monitoring System. In cases where indicators have no targets, projected midterm values were calculated based on a 10 percent change from baseline.

All sample sizes were further adjusted for non-response using the non-response rate from the baseline survey or a 10 percent non-response rate if the former was not provided or was greater than 10 percent. For all indicators, the sample sizes are for the populations associated

with the indicator. The proportion of the population of interest (e.g., children under 5 years of age for underweight children and women of reproductive age for underweight women) in the total population and the average number of household members (4.8 members per household) were estimated from baseline survey data and used to calculate the number of households needed for an indicator.[9]

Sample sizes were calculated for the key indicators shown in table 2.1 below. Using estimates from the baseline survey of the average number of children 0-5 months per household, the sample size was calculated for capturing 70 children in this age range. Collecting data on at least 70 children was chosen to be large enough to provide some precision in measurement, but not so large as to greatly increase the sample size. Exclusive breastfeeding in general requires a large sample size because there are few children of breastfeeding age.

Table.1 shows the minimum sample sizes required for the most commonly used indicators for FTF population-based survey sample size determination. The minimum sample size required to calculate the exclusive breastfeeding indicator also is included in the table. The minimum number of households required to capture 70 infants aged 0-5 months was 910 households. This number exceeds the largest number of households required for the other indicators. The number of households selected for the sample was determined by the exclusive breastfeeding indicator. It was assumed that at least 21 eligible households (EHH) exist and could be reached in each EA. To allow for the possibility of incomplete responses, inaccessible EAs, or the actual number of EHH in each EA was not known, four additional EAs per DC were chosen bringing the total number of EAs to 144 (see appendix A3 for list of all EAs by corridor).

Table 1 Sample Size Estimate for the Key Indicators and Exclusive Breastfeeding

Indicator	Baseline value	*DEFF*	Estimated midterm value	Sample size	Number of households needed
Prevalence of poverty	12.4	*2.0*	11.16	<100	<100
Prevalence of underweight children	10.5	*2.0*	9.45	<100	227
Prevalence of stunted children	18.7	*2.0*	16.83	108	372
Household hunger	48.9	*2.0*	47.70	192	213
Prevalence of exclusive breastfeeding (minimum sample size)	22.8	*2.0*	25.30	70	910
WEAI	84.6	*2.0*	76.14	140	156

[9] Stukel and Deitchler. (2012).

SAMPLE SELECTION

Sampling was based on a three-stage design to the selection of the household. In the first stage, 144 EAs were chosen from among all EAs in the three corridors using PPES sampling. Each corridor was sampled independently. The 2003 census frame, projected to the 2015 population, was used to select the sample of EAs.

In the second stage, all "Structures" within all EAs were identified using satellite (aerial) images. These structures were enumerated from which a random sample was drawn. The number of structures found in an EA varied from 87 to 770. A total of 3,092 structures were selected for the survey: 1,006 structures in the Saint-Marc corridor, 1,008 Structures in the Cul-de-Sac corridor and 1,078 Structures in the North corridor.

Just prior to the fieldwork, the randomly selected structures (3,092) were visited by an advance team that identified which structures were definitively commercial or completely destroyed and attempted to identify the number of HH in each that were inhabited. The advance team did not have the resources to assure that all the selected structures were inhabited or what number of EHHs they had; this was finalized by the field teams when they arrived to conduct the interviews. The selected structures which remained after the advance team had eliminated the definitively commercial or destroyed HHs were visited by the field teams who kept a inventory of the type of structures found as well as the number of HH in each of these. (see Appendix A4). If the advance team had not been used, the field teams would have had to visit all of the selected structures so the advance team reduced the amount of time it took the field teams to complete data collection.

In the third stage, the number of households to be interviewed was selected from all of the EHH in a structure. The average number of households anticipated per EA was 21. When the surveyors reached a structure, they first determined if it was inhabited and, if yes, how many EHHs were within that structure. Then, a determined number of the EHHs were selected using the Kish grid and interviewed. The number of EHHs in a structure that were selected and interviewed depended upon the total number of EHHs within the structure

- If a structure had 1 EHH, that EHH was interviewed.
- If a structure had 2 and only 2 EHH, both were interviewed.
- If a structure had 3-5 EHH, 2 were randomly selected using a Kish grid
- If a structure had 6 or more EHH, 3 were randomly selected using a Kish grid

The number of households found in a structure varied from zero to nine.
In the fourth stage, when only certain members of the household were to be interviewed and/or measured for anthropometry, literacy testing, etc., a Kish grid was used to select members to be interviewed when more than one was eligible.

SAMPLE WEIGHTS

Data required for statistical weighting of survey data were collected throughout the sampling process. These data included, but were not limited to: (1) number of households from the sampling frame used for selection of EAs, (2) population of the strata (i.e. the 3DCs) from which EAs are drawn, (3) number of structures in each EAs (4) number of households in the selected structures (5) number of households interviewed and (6) response rates at the household and individual (women, men, and children) levels.

Computations based on the survey sample were weighted so that the results accurately reflected the proportions of the sampled elements within the overall sample frame of the population in the Zone of Influence (ZOI). Details of how weights were computed are provided in Appendix A2.1. Appendix A1.1B presents the unweighted sample sizes, point estimates, standard deviations, confidence intervals, design effects (DEFF), and nonresponse rates for some key indicators collected during the midterm assessment; these were used to determine sampling needs.

2.1.2 QUESTIONNAIRE DESIGN

The questionnaire used at baseline was used at midterm with very few changes which were almost exclusively vocabulary and syntax changes.

The questionnaire is organized into four modules;

1. household module,
2. woman's module,
3. Agriculture module
4. WEAI module.

Each of these modules was further organized in topic-specific sections.
For a complete description of the questionnaire design and how it was designed, refer to the Haiti 2012 Baseline Survey Report, May 2013.

The midterm version of the questionnaire was translated into Creole, pretested and revised based on the pretest results.

2.1.3 TRAINING AND PILOTING

A Training of Trainers (TOT) was conducted by the team leader[10]. rainers were identified in both of the Nongovernmental organizations (NGOs) contracted to conduct the fieldwork l'Institut Hatien de la Enfance (IHE) and Bureau de Recherche en Informatique et en Developpement Economique et Social (BRIDES). Training manuals for enumerators, supervisors and field editors were developed, translated, and used in the (field) training. At the end of the field training, all of the field teams went to a nearby area (but not in the sample) and conducted a pilot test. After the pilot, an assessment was done of the trainees, which found that the supervisors and enumerators had not mastered all of the material so an additiioinal 2 days of training was conducted before they went into the field.

2.1.4 FIELDWORK

Personnel from two Haitian NGOs collected the data for this survey. IHE collected the data for the Household and Woman's modules while BRIDES collected data for the Agriculture and WEAI modules.[11]

IHE had 13 teams with each team consisting of a supervisor, a field editor, an anthropometric specialist, and three interviewers. The IHE teams conducted interviews in 144 clusters within the three corridors. BRIDES teams interviewed only the households in the rural EAs that had been interviewed by IHE and practiced agriculture. IHE had additional supervisors that moved between the teams for quality control.

BRIDES had six teams with each team consisting of a supervisor, a field editor and four interviewers. BRIDES teams conducted interviews in the 63 predominately rural clusters of the 144 clusters. BRIDES teams interviewed only the households that practiced agriculture that had been interviewed by IHE. BRIDES also had additional supervisors that moved between the teams for quality control.

The IHE teams preceded the BRIDES teams by two weeks. The staggered approach was necessary because the estimated time required for IHE interviewers to complete their survey instrument was much longer than for the BRIDES teams, and the BRIDES teams surveyed in only 63 of the 144 clusters surveyed by IHE. Fieldwork by IHE took place between April 25 and June 6, 2016 while the BRIDES fieldwork took place between May 8 and June 8, 2016. The teams collected data using paper survey instruments. The field editors and the supervisors (one of each per team) monitored data quality while the teams were in the field. Completed

[10] The team leader when the contract was awarded left Westat after the TOT.

[11] IHE also collected non-Feed the Future data on governance, public services, health, and literacy; BRIDES also collected data on agriculture production.

instruments were sent back to IHE headquarters where a small team of office editors reviewed each completed questionnaire and, in consultation with senior staff, resolved any issues found.

2.1.5 DATA PROCESSING

Once the office editors had completed their work, the questionnaires were passed on to a team of 30 data clerks that entered the data in a CSPro® application prepared for this purpose. Double data entry was done on 100 percent of the questionnaires and the two entries were compared. If there were discrepancies between the two entries, an office editor reviewed the discrepancies and identified if the values in the 1st entry or the 2nd entry were correct and modified the incorrect entry. Once there was 100% agreement between the 1st and 2nd data entry, that questionnaire module was marked as completed.

2.2 METHODS FOR DATA ANALYSIS

2.2.1 HANDLING OUTLIERS

Outliers are defined as values for a particular indicator that a grossly smaller/larger than the following/preceding values for which there is only one case or, if multiple cases of that value it is highly improbable to have been observed with that frequency. For example, if systolic blood pressure among 96% of 100 otherwise healthy subjects is in the range 88.1 to 165.7; one is 40.0 and three are 200.0, The 40.0 and three 200.0 are outliers.

A few agriculture-related variables were reviewed for outliers that could affect average plot size, average losses, average harvested quantities, average input costs and computed agriculture indicators such as average yield and average gross margins. These values were reviewed on a value chain-specific basis.

In the agriculture data sample, a few outliers were found and removed[12] only for that variable or computed indicators that use that variable.

For pre-harvest loss:

- a case13 was found that exceeded 5,000 Kg
- a case14 was found that exceeded 1000 Kg
- a case15 was found that exceeded 500 kg

[12] Nine cases had plot sizes > 30 hectares but removing the cases above also removed these.
[13] Found this case for crops 2, 16, 18, 19
[14] Found this case for crops 4 and 5
[15] Found this case for crops 3, 9, 11, 13

- a case[16] was that exceeded 2,000 kg
- a case[17] was found that exceeded 10,000 kg
- For combined input costs:

Five cases were exceeded 100,000 HTG (one exceeded 400,000 HTG)

For plot size:

- Seven cases were found that were less than 0.002 hectares.

2.2.2 COMPARABILITY OF BASELINE AND MIDTERM POINT ESTIMATES

Because all data used for this report is primary data originating from the same survey, there is only one issue of comparability of the two data sets. The sampling method done at baseline for the household selection was done by identifying several possible starting points and selecting one. From that starting point, a direction was chosen and a straight line was walked interviewing all EHHs found along the way until the desired number of EHHs were reached. Because this method was not based on probability of being selected proportionate to all the EHHs in that EA, statistical comparison of its' point estimates with the midterm point estimates are not possible unless (a) more is known about the other EHHs in the EA so that an adjustment can be made or (b) the assumptions as to why the baseline data can be treated statistically as if the EHH selection was done such that all EHHs had a non-zero probability of being selected.

SEASONALITY

There are some issues around the seasonal fluctuation of some indicators' point estimates that should be considered when comparing the interim point estimates to other survey point estimates, including the Haiti Baseline Survey. The Haitian agricultural calendar[18] is presented on the next page. The period when the baseline data (2012) and interim data (2016) were collected has been added to this calendar, as has the period when public schools are on summer vacation.

In Haiti, the agricultural calendar is a 12-month calendar with three growing seasons, for seasonal crops.[19] For this survey, were identified as the:

1. great/primary rainy season from February through August 2016;

[16] Found this case for crops 1, 10
[17] For crop 19
[18] Haitian Agricultural Calendar source: Famine Early Warning Systems Network (FEWSNET). (2016). http://www.fews.net/central-america-and-caribbean/haiti.
[19] Some crops do not have a defined growing season such as bananas which can be planted and harvested year round.

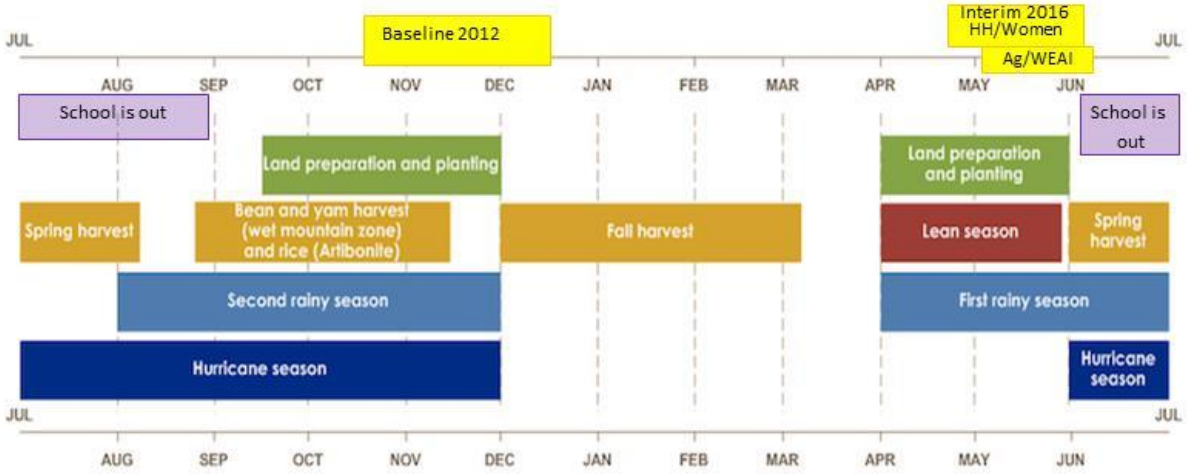
2. dry season from October 2015 – February 2016; and
3. small/secondary rainy season from July to December 2015.

The rainy seasons identified for this survey differ slightly from the seasons shown below because they allow for the annual variability of when rains actually start and end as well as the regional variability in the agricultural seasons within Haiti due to its many micro-climates. The calendar is, however, still applicable when describing the limitations in comparability of surveys due to seasonality.

Baseline data were collected from October – December which is not a hungry (lean) season for most farmers. The interim data were collected during the hungry season, which are the months just before the harvest for the great/primary rainy season crops. The timing affects the ability of farmers to recall crop yields and farm expenses over the past 12 months, as well as the comparability of other FTF indicators such as health, hunger, diet and, especially, those using anthropometry. The difference in timing of the two surveys might also affect indicators related to household income and expenditures, which likely increase post-harvest and decrease just prior to and during the lean season. As interviewee recall is best for the most recently past agricultural season – and the most recently past season at baseline was not the same as the most recently past season at midterm – differential recall bias might exist when comparing the results of the midterm to baseline.

It was not anticipated in the survey design or possible ex-post to make adjustments for seasonality between baseline and midterm because there are many variables that would have had to be controlled including, but not limited to, i) the specific mix of crops planted by the farmers, ii) the seasons during which crops were planted, iii) how much of the crops were sold vs consumed, iv) the variability in climatic conditions such as rainfall as well as the v) start/end dates of the agricultural seasons due to global, regional and micro-climate variations from year to year. Other factors that should be considered when comparing data are natural and manmade shocks such as tropical storms, Es inflation and changes in the consumer price index (CPI).

Figure 2 Agricultural Season in Focus Corridors



2.2.3 ANALYSIS OF CHANGE BETWEEN BASELINE AND MIDTERM

A 20 percentage point difference between baseline and midterm point estimates was adopted[20] as the threshold for stating in this report that an observed difference was most likely real if (a)

[20] The 20 percentage point threshold was adopted because: (1) For a comparison of two groups to be able to detect a 10% change where one expected point estimate is 35% and the other is 45% with power of 0.9 and a DEFF of 2.2, a sample of 1,164 is needed for each group being compared (about the size of the samples in each of the three corridors at both measures) but this assumes that the samples at both measures were probabilistic proportionate to size which was not the case. (2) The actual DEFF varies by indicator in the samples and was found to be as high as 10 for some indicators. (3) The effect on the baseline point estimate variance due to the non-probabilistic, 2nd stage sampling used is unknown and, therefore, impossible to adjust so that significance testing. (4) It is prudent to assume that the baseline sampling method would have increased the sample variance such as is done when a larger design effect is calculated and used (e.g. when larger clusters sizes (and fewer clusters) are used when there is a substantial amount of interclass correlation. Thus, it was felt that doubling and tripling the DEFF – as would happen with a larger interclass correlation - to identify what magnitude of change might be detectable with the baseline and midterm corridor-specific sample sizes was a good way to set the threshold for estimating the likelihood that a significance test would return a significant difference if it could be applied. The sample sizes needed for a DEFF of 5.0 and 10.0 to detect a 10 percentage point change (0.45 to 0.55 with power = 0.9 are, respectively, 2,755 and 5,509 both of which are larger than the corridor-specific sample sizes. To detect a 20 percentage point difference with the same parameters, samples sizes of 1,347 (DEFF of 5.0) and 2,694 (DEFF of 10.0) in each group being compared would be needed; these sample sizes are roughly equivalent to the corridor-specific samples and the overall (total) samples at both baseline and midterm. Therefore, a 20 percentage point threshold was adopted for changes between baseline and midterm.

Note: It is possible to detect differences between measures smaller than 20 percentage points for between-corridor differences at midterm doing significance testing on the midterm data is outside the contractual scope of work. Also, developing multiple thresholds depending on what is being compared (between corridors at midterm vs corridor-specific estimates at baseline and midterm), the actual number of cases for that comparison and estimated (if not known) DEFF is complicated and certainly not in this contract's scope of work, In fact, the contact TOR stated that no statistical comparisons of any kind would be performed. Thus, a single threshold was adopted – but relaxed, at times, when felt to have potential programmatic importance, and therefore, meriting attention and further research.

it was tested statically and (b) an assumption is made that the EHH selection stage of the baseline sampling resulted in a distribution that was close to a Gaussian distribution and (b) there was minimal bias due to the selection method. When sample sizes for the point estimates are high, this 20- percentage point threshold was relaxed but at no time was a difference of less than 10 percentage points considered likely to be real (so it was not reported as a "change"). For other types of point estimates such as the mean and median, a 50 percent change was generally considered substantial enough to report on it. At no time is attribution of a noted change to any programmatic intervention made or implied.

2.2.4 ANALYSIS OF BETWEEN CORRIDOR DIFFERENCES

The methodology and thresholds used to document baseline to midterm changes (increases or decreases) were also used to document between corridor differences.

2.2.5 LIMITATIONS OF THE ASSESSMENT

There are three notable limitations to this survey although the first does not affect this midterm report. The first limitation is related to the last stage of the sample design which has been described in section 2.2.2.

The second limitation is related to the period of data collection. Because data collection for the midterm survey was conducted during the hungry season, this must be considered when comparing the estimates of certain indicators to other surveys conducted during a different time period – such as the Haiti Baseline Survey, 2012 - which was conducted before the hungry season.

The third limitation is relative to agricultural indicators that depend upon accurate estimates of plot sizes. Recent evidence demonstrated that self-reported estimates of agricultural plot areas has substantial measurement error and that error may be associated with be systematic and associated with key variables of interest with smaller plots being overestimated and larger plots being underestimated[21]. Crop yield, input costs per hectare and gross margins are all influenced by the accuracy of estimating farmers plot sizes. If systematic bias exists differentially in the two data sets, comparison without adjustment (for which an adjustment factor cannot be calculated with existing data) could incorrectly influence interpretation of the results.

[21] Cheaper, Faster, and More Than Good Enough: Is GPS the New Gold Standard in Land Area Measurement?, Calogero, Carletto et. al., World Bank Policy Research Working Paper 7759, July 2016

2.3 REPORTING CONVENTIONS

2.3.1 STANDARD DISAGGREGATES

A standard set of disaggregate variables are used in tables throughout this report. This section lists each of the standard disaggregate variables and defines how the variable is calculated.

AGE IN MONTHS

The age of children in months was collected in the child nutrition-focused module of the questionnaire, rather than in the household roster, so that the child's parent or primary caregiver could be prompted to provide the most accurate age possible. Children's age in months is presented by monthly age groups as appropriate for the children's dietary intake and anthropometry tables. For example, for the minimal acceptable diet (MAD) table (Table 6.6), which presents the MAD indicator for children age 6-23 months, children's age in months is disaggregated into six-month age groups as follows: 6-11 months, 12-17 months, and 18- 23 months. For the children's anthropometry tables (Tables 7.2, 7.3, and 7.4), which present the prevalence of stunting, wasting, and underweight for all children under 5 years of age, children's age in months is disaggregated into 12-month age groups as follows: 0-11 months, 12-23 months, 24-35 months, 36-47 months, and 48-59 months.

AGE IN YEARS

Data on respondent's age in years were collected in the household roster. For women age 15-49 and children under age 6, more detailed age data were collected in subsequent questionnaire modules to confirm eligibility to respond to the module questions; these more detailed age data were used where available. Age is generally presented in the tables in 5- or 10-year age groups.

SEX OF CHILD

The sex of the child – male or female – is a standard disaggregate for the tables presenting children's indicators, e.g., children's anthropometry (Tables 7.2, 7.3, and 7.4).

EDUCATIONAL ATTAINMENT (HOUSEHOLD)

Household educational attainment reflects the highest level of education attained by any member of the household, as reported in the household roster of the corresponding questionnaire. This variable is used in tables that present household-level data, and is comprised of four categories: no education (households where no member has received any formal education); less than primary (households with at least one member who has entered the formal schooling system, but with no member who has completed primary); primary (households with at least one member whose highest educational attainment is completed primary, but with no member who has completed secondary); and secondary or more (households with at least one member whose highest educational attainment is completed secondary education or more). Households are categorized in only one of the four categories.

EDUCATIONAL ATTAINMENT (INDIVIDUAL)

Educational attainment at the individual level reflects the highest level of education attained by individual household members, as reported in the household roster of the corresponding questionnaire. This variable is comprised of four categories: no education (those who have not received any formal education), less than primary (those who have entered the formal schooling system but whose educational attainment is less than completed primary); primary (those who have completed primary but have not completed secondary); and secondary or more (those who have completed secondary education or more).

GENDERED HOUSEHOLD TYPE

Feed the Future Monitoring and Evaluation Guidance Series Volume 6: *Measuring the Gender Impact of FTF* notes that household-level indicators should be disaggregated by *gendered household types* – that is: (1) households where members include both male and female adults;[22] (2) households where members include male adult(s), but no female adults; (3) households where members include female adult(s), but no male adults; and (4) households with only members under age 18 (children), i.e., households with children only and no adult members. This approach to conceptualizing household type is distinct from the standard *head of household* approach, which is embedded with presumptions about household gender dynamics and may perpetuate existing social inequalities and prioritization of household responsibilities that may be detrimental to women (USAID 2014:1).[23]

This variable is calculated using data on age and sex collected in the household roster of the survey questionnaire.

HOUSEHOLD HUNGER

As described in greater detail in Section 6.1 of this report, the Household Hunger Scale (HHS) characterizes households according to three categories of hunger severity: little to no household hunger, moderate household hunger, and severe household hunger. For the purposes of serving as a disaggregate in selected tables, the HHS is converted to a dichotomous measure reflecting households that report little to no household hunger, and households that report moderate or severe household hunger.

HOUSEHOLD SIZE

For the surveys, household size is defined as the total number of people who: (1) are reported to be usual members of the household; and (2) who have spent the night in the household within the past six months. This ordinal household size variable is recoded into a categorical variable as follows: small households (1-5 members), medium households (6-10 members), and large households (11 or more members). Note that other household survey programs may use a slightly different definition of household member from that used in the surveys.

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[22] Adult is defined as age 18 or older.

[23] USAID. (2014).

2.3.2 OTHER REPORTING CONVENTIONS[24]

This section provides an overview of the conventions used in reporting.

- In the tables throughout this report, weighted point estimates and unweighted sample sizes (denoted by *n*) are presented.
- Most estimates are shown to one decimal place, with the specific exceptions of per capita expenditures and the women's dietary diversity indicators, which are shown to two decimal places. Unweighted sample sizes in all tables and the population estimates in Tables 1.1 and 1.2 are shown as whole numbers.
- Values in the tables are suppressed when the unweighted sample size is insufficient to calculate a reliable point estimate (n<30); this is denoted by the use of the caret (**^**) symbol in the designated row and an explanatory footnote[25].
- Not applicable (n/a) in this report, is used: (i) in cells for baseline values in all tables labeled with [New] such as Table 3.1.10 [NEW] Household energy access (ii) in cells where the survey instrument was expanded/modified at midterm such that no value is available for baseline (iii) in cells where the baseline report did not present the additional level

3.RESULTS

Table 2 shows that Haiti's 3DCs have a combined, estimated 2016 population of 4.48 million. Women of reproductive age (WRA), children age 0-59 months, and youth age 15-29 years account for 29.9 percent, 11.1 percent, and 32.6 percent of the total 3DCs population, respectively. The subpopulation estimates of the 498,953 children age 0-59 months into 0-5 month, 6-23 month, and 6-59-month age groups were based on the corresponding proportions of the children by months.

The distributions across the 3DCs populations of individuals and households by gendered household type were estimated from the Haiti Midterm Survey. As indicated by Table A, the estimated percentages of the population residing in male and female adult(s), female adult(s) only, and male adult(s) only household types are 82.1 percent, 13.8 percent, and 4.1 percent,

[24] The Haiti Baseline Report, 2012 used a dash line rather than '0' to indicate zero. In transposing the baseline values to this report's tables, the dash lines were replaced with zeros.

[25] For a few tables < 50 cases were suppressed; this is noted.

respectively. From the sample, it is estimated that the number of child-headed households is negligible (displayed as zero).

Table 2. Population of Individuals, by Category, in Haiti's Three Development Corridors (3DCs) 2016

Category of individuals	Estimated population
Total population	**4,480,843**
Total population, by sub-population	
Women of reproductive age (15-49 years)	1,341,135
Children 0-59 months	498,953
Children 0-5 months	51,931
Children 6-23 months	150,980
Children 6-59 months	447,022
Youth 15-29 years	1,459,151
Total population, by area type	
Urban	3,757,530
Rural	723,313
Total population, by gendered household type	
Male and female adult(s)	3,676,618
Female adult(s) only	619,365
Male adult(s) only	184,860
Child(ren) only (no adults)[1]	0
WRA, by pregnancy status	
Pregnant	57,360
Non-pregnant	1,283,775
Children 0-59 months, by child sex	
Male	249,967
Female	248,986
Children 0-5 months, by child sex	
Male	26,028
Female	25,903
Children 6-23 months, by child sex	
Male	75,730
Female	75,250
Children 6-59 months, by child sex	
Male	223,939
Female	223,083
Youth 15-29 years, by sex	
Male	672,131

Category of individuals	Estimated population
Female	787,020

Source: Population figures were projected to 2016 using the 2012 and 2015 population estimates prepared by the IHSI. The 2015 populations were projected using the implied growth rate between 2012 and 2015. Projections were performed by commune and aggregated to the total DCs population. The projected population was then disaggregated into the subgroups reported here using the population characteristics recorded in the Haiti Midterm Survey 2016.

Table 3 indicates that the Haiti 3DCs has an estimated total number of 961,533 households, which is based on the average household size of 4.66 persons from the Haiti Midterm Survey. The estimated percentages of households in male and female adult(s), female adult(s) only, and male adult(s) only household types are 71.5 percent, 18.8 percent, and 10.6 percent, respectively.

Table 3. Estimated number of gendered household types in Haiti's 3DCs 2016

Category of households by gender	Estimated population
Total number of households in 3DCs	961,533
Number of households, by gendered household type	
Male and female adult(s)	687,981
Female adult(s) only	180,957
Male adult(s) only	102,209
Child(ren) only, (no adults)[1]	0

[1] The subgroup populations were estimated from the Haiti Midterm Survey. All households included in the survey had at least one adult. The estimated percentage of households with no adults is < 1% so is displayed as 0 percent.

Source: Population figures were projected to 2016 using the 2012 and 2015 population estimates prepared by the IHSI (2012). The 2015 populations were projected using the implied growth rate between the 2012 and 2015 populations. Projections were performed by commune and aggregated to the total 3DCs population. The projected population was then disaggregated into the subgroups reported here using the population characteristics recorded in the Haiti Midterm Survey 2016

Table 4 presents the response rates for the sampled households, WRA (15-49), primary adult female decision makers (for the WEAI module), as well as children under 5 years. Rates are presented by rural/urban residence as well as for the total sample.

Table 4. Results of the Household and Individual Interviews for the Midterm Assessment in Haiti 2016

Response rates[1,2] and components	Residence		Total
	Urban	Rural	
Households			
Households selected	1,710	1,182	2,892
Households occupied	1,697	1,161	2,858
Households interviewed	1,656	1,133	2,789
Household response rate[2,3]	97.6	97.6	97.6
Women's module (Women 15-49 years)			
Number of eligible women	1,984	1,093	3,077
Number of eligible women interviewed	1,924	1,069	2,993
Eligible women response rate[3,4]	97.0	97.8	97.3
Child anthropometry (Children <5 years)			
Number of eligible children	772	647	1,419
Number of children measured	758	637	1,395
Eligible children response rate[3,4]	98.2	98.5	98.3
Child literacy (Children 6-17 years)			
Number of eligible children	1,010	1,000	2,010
Number children tested	675	669	1,344
Eligible children response rate[3,4]	99.1	99.0	99.1
Agriculture module[5,6,7]			
Number of eligible households	n/a	1,133	1,133
Number of household respondents interviewed	n/a	1,017	1,017
Eligible household response rate[6]	n/a	89.8	89.8
Primary adult female decision makers (age 18+ years)			
Number of eligible women	n/a	997	997
Number of eligible women interviewed	n/a	862	862
Primary adult female response rate[3,4]	n/a	86.5	86.5

Households are only those inhabited. Because of the type of sampling used in the USAID Haiti FTF ZOI Interim Survey, there were many structures visited (i.e. "possible" households) all of which had the cover sheet of the questionnaire completed to document if the structure was, in fact, a household. Structures that were not households were coded as "Other" in the [results section] of the survey questionnaire. A later version of the cover page included an additional result code for "not a household" but that version was not printed. About 60% of the cases in the ZOI with "Other" listed as the result code are not households; they are either commercial structures, cellars, storage areas, garages, partially constructed houses, destroyed, partially destroyed and uninhabited houses.

Household response rates are calculated as the number of households interviewed divided by the number of households occupied. Unoccupied households were excluded from the response rate calculations. The unoccupied households were those that were found to be vacant, not a dwelling unit, dwelling unit destroyed, or with an extended absence, or other result code.

[3] The explanations, written by the enumerators, in a sample of the questionnaires that had a results code of "Other" were reviewed and two percent of these should have been recoded as "refused". Thus, the computed response rate of 97.6% for the HH module is 95.6% when adjusted; For the women's module, the computed rate of 97.3% is 95.3% when adjusted; for the child anthropometry module, the computed response rate of 98.3% is 96.3% when adjusted; for the child literacy module, the computed response rate of 99.1% is 97.1% when adjusted; for the primary adult female decision maker, the computed response rate of 86.5% is 84.5% when adjusted.

[4] The eligible count is based on the sampling rate of the individuals. For example, only one child 6-17 was sampled for the literacy module per household. Thus, there is only one eligible child per household used for response rate even if there were > 1 children age 6-17.

[5] The agriculture and women's empowerment in agriculture modules were administered to rural households during a separate sitting by different enumeration teams after the HH/Women data were collected. HHs that were not interviewed during the HH/Women survey (visited by the IHE teams) were not revisited for the agriculture and WEAI modules (by the BRIDES teams). These non-response HHs are not counted among the HH that were eligible for the agriculture and WEAI module.

[6] All HH visited for the HH/Women survey were visited for the agricultural survey but prior to starting the interview, the respondent was asked if anyone in the HH does any agricultural work. If the reply was "no", the interview was stopped and the result code was marked as "Other" or as "Not Applicable" because the Ag questionnaire cover page did not have a code for this situation. HH that did not do any agriculture are considered as "interviewed" and "completed" because they accepted to be interviewed and responded to question #1 in Agriculture questionnaire but since the "no" response to that question terminates the interview, there are no more data for that HH.

About 30% of the (rural) HHs in the agricultural survey did not do any agricultural work (i.e. they were not farmers; this includes sharecroppers who were not able to respond to questions in the survey).

Also note that the questionnaire did not make provisions for sharecroppers, about two percent of the sampled farmers were sharecroppers and they could not respond to the agricultural survey as they had no idea how much was spent on inputs, amounts lost pre and post-harvest, etc.

[7] The explanations, written by the enumerators, in a sample of the completed agricultural questionnaires that had a results code of "Other" were reviewed: four percent of these should have been recoded as "refused". Thus, the computed response rate of the agricultural module of 89.8 percent was adjusted to 85.8 percent.

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

Table 5. Household Demographic Characteristics

Characteristic	Total (All HHs)	By gendered household typea			
		Male and female adult	Female adult(s) only	Male adult(s) only	Child only
Mean household size	4.4	5.1	3.3	1.8	0
Mean number of adult female household members[1,2]	1.5	1.7	1.7	0.0	0
Mean number of children (<2 years)[1]	0.2	0.2	0.1	0.0	0
Mean number of children (0-4 years)[1]	0.5	0.6	0.4	0.0	0
Mean number of children (5-17 years)[1]	1.2	1.3	1.2	0.3	0
Mean percentage of adults who are female[1,2]	55.6	51.7	100.0	0.0	0
Highest education level attained					
No education	4.0	2.4	8.0	8.0	0
Less than primary	13.5	11.4	19.3	17.1	0
Primary	44.3	43.2	51.6	38.1	0
Secondary or more	38.3	43.0	21.1	36.8	0
n[3]	2,787	1,935	557	295	0

[1] The count is based on HH members with known age.

[2] Feed the Future defines adult as an individual age 18 or older. Females age 15-17 are of reproductive age, but are not considered adults by this definition.

[3] Sample 'n' is the unweighted count of all households that responded to the survey.

Source: USAID Haiti Midterm Assessment, 2016

3.1 PILLAR A: INFRASTRUCTURE AND ENERGY

This section of the assessment report addresses key infrastructure indicators, such as household composition, dwelling types, earthquake recovery, assets, water and sanitation, as well as access to energy sources. The estimates for these key indicators from the Haiti Baseline Survey, 2012 report, and the comparable estimates from the Haiti Midterm Assessment, 2016, are shown in Tables 3.1.1 through 3.1.10.

3.1.1 HOUSEHOLD COMPOSITION AND CHARACTERISTICS

Table 6 provides information on household composition in the 3DCs at baseline and midterm. There were no changes of 20 percent or more, but there appeared to be a slight shift toward more female-only and male-only households, with a corresponding decrease in male and female

gendered households. This was seen in all corridors. There were no changes in any of the corridors in the: (a) number of usual household members; (b) the mean size of the household; or (c) mean number of persons per sleeping room.
At both baseline the number of households with Restavek[26] children was extremely low; at midterm, it was zero or near-zero in all three corridors.

Table 6 [3.1.2]: Household Composition in the 3DCs [27]

Percent distribution of households[1] by sex of head of household and by household size; mean size of household								
	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
Characteristic	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Gendered household type								
Adult Female no Adult Male	13.3	23.9	13.1	19.9	13.9	17.4	13.6	18.6
Adult Male no Adult Female	4.9	12.7	3.0	10.8	3.7	9.2	3.7	9.9
Male and Female Adults	81.5	63.4	83.9	69.3	82.2	73.4	82.5	71.6
Child No Adults	0.3	0.0	0.0	0.0	0.3	0.0	0.2	0.0
Total	100	100	100	100	100	100	100	100
Number of usual members								
1	5.6	11.8	3.3	8.4	3.0	6.7	3.9	7.6
2	10.6	15.0	8.4	12.5	9.9	12.3	9.6	12.7
3	19.5	16.1	13.9	14.8	18.3	16.4	17.3	16.1
4	19.0	16.9	16.9	16.8	22.5	20.6	19.5	19.6
5	16.8	14.5	16.4	16.1	17.2	16.4	16.8	16.1
6	10.3	10.5	15.8	10.5	12.1	12.1	12.7	11.6
7	6.9	7.4	10.8	7.8	6.3	7.3	8.0	7.4
8	5.8	4.0	6.0	6.0	5.1	4.3	5.6	4.5
9+	5.5	3.9	8.4	7.2	5.6	3.9	6.5	4.4
Total	100	100	100	100	100	100	100	100
Mean size of HH	4.5	4.2	5.1	4.7	4.7	4.4	4.8	4.4
Mean number of persons per sleeping room	2.7	2.8	2.5	2.7	2.9	3.0	2.8	2.9

[26] A Restavek (from the French for "one who stays with", (*reste avec*) is a child who is sent or sold by their parents to work for a host household as a domestic servant because the parents lack the resources required to support the child. Restavek may refer to any child staying with a host family, but usually refers specifically to those who are abused (http://haitianstreetkids.co/Restavek_Child_Slavery.html), accessed 8/29/2016.

[27] The number in brackets is the number of the parallel table in the 2012 Haiti Baseline Report.

Percent distribution of households[1] by sex of head of household and by household size; mean size of household								
	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
Characteristic	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percentage of HHs with Restavek children2	2.7	0.1	2.5	0.1	2.9	0.0	2.8	0.0
Number of households	1,198	914	1,199	949	1,179	924	3,576	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] Table is based on de jure household members, i.e., usual residents.

[2] Restavek children are inferred from their relationship to the primary adult decision maker. Children aged 6 to 17 years old who are listed as a "worker" or children who are both listed as a "child in guardianship" and have at least one living parent are considered to be probable Restavek children.

Table 7 presents dwelling characteristics of population housing. Only the type of flooring material and number of rooms used for sleeping were collected at both baseline and midterm, and could be compared. The distribution of number of rooms used for sleeping appears to have shifted downward from baseline to midterm. In St. Marc, households using only one room for sleeping increased from 31.5 percent at baseline to 52.3 percent at midterm. The other two corridors also showed an increase in the number of households using only one room for sleeping, but the changes were slightly less than 20 percent. The proportion of households with cement or brick flooring changed in only St. Marc though this is less than 20 percent: at midterm, there is no difference between corridors in this regard.

A marked difference between St. Marc and Cul-de-Sac is shown in the proportion of households observed with metal roofing in the midterm survey, 81.2 percent and 58.2 percent, respectively with the inverse being the case for cement roofs.

Table 7 [3.1.7] Housing Characteristics

Percent distribution of households by housing characteristics								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Baseline	Midterm	Baseline	Midterm	Baseline	Midterm	Baseline	Midterm
Flooring material								
Earth/sand	29.1	29.7	20.4	22.3	13.1	12.1	16.8	15.9
Dung	7.5	1.6	2.2	0.4	2.4	0.1	3.0	0.3
Wood/ palm	4.7	0.0	9.0	0.2	6.6	0.1	6.8	0.1
Parquet or polished wood	9.6	0.1	2.0	0.2	1.0	0.0	2.4	0.1

Percent distribution of households by housing characteristics								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Baseline	Mid term	Baseline	Mid term	Baseline	Mid term	Baseline	Mid term
Concrete, cement, brick	46.5	63.0	58.6	69.4	68.1	72.8	63.1	71.0
Ceramic	2.1	4.9	3.3	7.4	6.5	14.7	5.2	12.3
Other	0.5	0.7	4.5	0.2	1.8	0.3	2.2	0.3
DK/NR/Missing	0.1	0.0	0.0	0.0	0.5	0.0	0.3	0.0
Total	100	100	100	100	100	100	100	100
							Roofing material	
No roof	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Thatch/palm leaf	n/a	0.5	n/a	0.2	n/a	1.0	n/a	0.8
Bamboo	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Wood/plank	n/a	0.0	n/a	0.1	n/a	0.0	n/a	0.0
Cloth/tent	n/a	0.1	n/a	0.0	n/a	1.1	n/a	0.8
Metal	n/a	81.2	n/a	71.2	n/a	58.2	n/a	63.1
Wood	n/a	0.4	n/a	0.6	n/a	0.1	n/a	0.2
Cement	n/a	17.8	n/a	27.9	n/a	39.1	n/a	34.7
Brick	n/a	0.0	n/a	0.0	n/a	0.1	n/a	0.1
Other	n/a	0.0	n/a	0.1	n/a	0.4	n/a	0.3
DK/NR/Missing	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Total	n/a	100	n/a	100	n/a	100	n/a	100
Wall material								
No walls	n/a	0.0	n/a	0.1	n/a	0.0	n/a	0.0
Cane/palm trunks	n/a	0.3	n/a	3.6	n/a	0.2	n/a	0.8
Dirt	n/a	5.6	n/a	1.4	n/a	1.1	n/a	1.7
Bamboo with mud	n/a	3.6	n/a	4.4	n/a	1.3	n/a	2.1
Stone with mud	n/a	7.8	n/a	1.6	n/a	0.4	n/a	1.5
Reused wood	n/a	0.0	n/a	1.0	n/a	0.6	n/a	0.6
Cloth/tent	n/a	0.6	n/a	0.0	n/a	1.7	n/a	1.3
Cardboard	n/a	0.0	n/a	0.1	n/a	0.1	n/a	0.1
Cement	n/a	16.3	n/a	24.4	n/a	32.5	n/a	29.2
Stone with lime/ cement	n/a	18.6	n/a	8.7	n/a	3.2	n/a	5.9
Cement blocks	n/a	43.4	n/a	50.4	n/a	51.5	n/a	50.4
Wood planks or shingles	n/a	0.0	n/a	2.6	n/a	2.0	n/a	1.9
Other	n/a	3.8	n/a	1.7	n/a	5.3	n/a	4.5
DK/NR/Missing	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Total	n/a	100	n/a	100	n/a	100	n/a	100

Percent distribution of households by housing characteristics								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Baseline	Midterm	Baseline	Midterm	Baseline	Midterm	Baseline	Midterm
Rooms used for sleeping								
One	31.5	52.3	23.2	41.5	40.8	54.7	35.9	52.2
Two	46.2	35.8	35.5	32.5	36.8	29.7	37.8	30.9
Three or more	22.2	11.8	41.3	25.7	21.4	15.3	25.7	16.7
DK/NR/Missing	0.1	0.2	0.0	0.3	0.9	0.2	0.6	0.2
Total	100	100	100	100	100	100	100	100
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

Table 8 shows information collected only at midterm on earthquake damage and repairs to housing. Consistent with their locations relative to the epicenter, the median amount of money spent per household to repair damages in the Northern corridor (1,700 Haitian Gourdes (HTG)) and St. Marc (2,500 HTG) were substantially less than Cul-de-Sac (10,000 HTG). The average for this indicator is skewed but, when used, gives a slightly different image of the cost of repairs per household with the Northern corridor (8,694 HTG) being substantially less than St. Marc (235,845 HTG) which in turn is substantially less than Cul-de-Sac (355,802 HTG).

Most of the houses destroyed in Cul-de-Sac and St. Marc have been repaired (ranging from a low of 60.8% to a high of 86.9% for floors, walls and roofs). However, between one-tenth and less than one-half of those houses light to severely damaged have been repaired (ranging from a low of 9.3% to a high of 41.3% for floors, walls and roofs)

Whether households lost or gained members – and how many were lost or gained on average – because of the earthquake was only measured at midterm. There is no difference between corridors and the values for both are very low overall (4.6 percent lost an average of 3.0 members and 4.2 percent gained an average of 2.2 members). y

Table 8 [NEW] Earthquake Recovery

Percentage of households with type and level of house repairs post earthquake								
	St. Marc		Corridor Northern		Cul-de-Sac		Total	
Characteristic	Base-line	Mid-term	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term
Percent of households losing household members	n/a	5.5	n/a	*2.0*	n/a	5.2	n/a	4.6
Average number of household members who left the household because of the earthquake[1]	n/a	3.1	n/a	*1.6*	n/a	3.1	n/a	3.0
Percent of households gaining household members	n/a	5.3	n/a	1.7	n/a	4.6	n/a	4.2
Average number of household members who joined the household because of the earthquake2	n/a	2.5	n/a	2.0	n/a	2.2	n/a	2.2
Percent of households moving due to earthquake								
Did not move	n/a	65.2	n/a	65.8	n/a	51.4	n/a	55.4
Moved because of earthquake damage	n/a	6.9	n/a	2.9	n/a	12.7	n/a	10.4
Moved in search of work	n/a	3.8	n/a	2.9	n/a	3.5	n/a	3.4
Other		23.9		28.4		32.3		30.7
DK/NR/Missing		0.2		0		0.1		0.1
Total	n/a	100	n/a	100	n/a	100	n/a	100
Number of households	n/a	914	n/a	949	n/a	924	n/a	2,787
Damage and repair to the roof								
No damage	n/a	54.7	n/a	48.4	n/a	50.8	n/a	51.3
Light to severe damage	n/a	40.7	n/a	51.6	n/a	37.2	n/a	38.8
Totally destroyed	n/a	4.7	n/a	0.0	n/a	12.0	n/a	9.9
Total	n/a	100	n/a	100	n/a	100	n/a	100
Damage and repair to the walls								
No damage	n/a	7.3	n/a	16.3	n/a	4.5	n/a	5.8
Light to severe damage	n/a	86.1	n/a	82.4	n/a	83.1	n/a	83.6
Totally destroyed	n/a	6.6	n/a	1.2	n/a	12.4	n/a	10.6
Total	n/a	100	n/a	100	n/a	100	n/a	100
Damage and repair to the floors								
No damage	n/a	80.9	n/a	74.5	n/a	72.0	n/a	73.7
Light to severe damage	n/a	16.1	n/a	24.3	n/a	20.9	n/a	20.3
Totally destroyed	n/a	3.0	n/a	1.2	n/a	7.1	n/a	6.0
Total	n/a	100	n/a	100	n/a	100	n/a	100
Average spent on repairing earthquake damage (Gourdes)	n/a	235,845	n/a	8,694	n/a	355,802	n/a	311,765
Number of households	**n/a**		**n/a**		**n/a**		**n/a**	

Percentage of households with type and level of house repairs post earthquake								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Base-line	Mid-term	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term
Median spent on repairing earthquake damage (Gourdes)	n/a	2,500	n/a	1,700	n/a	10,000	n/a	5,000
Number of households in same resident at time of earthquake	n/a	605	n/a	642	n/a	483	n/a	1,730

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] The average is only calculated for households who reported that a household member left the household after the earthquake.

[2] The average is only calculated for households who reported that a person joined the household after the earthquake.

[3] Those who reported that "no repairs" or "minor repairs" were considered "not repaired" while those who reported that there have made "major repairs" or "totally repaired" their house are considered "repaired."

3.1.2 HOUSING: OWNERSHIP, ASSETS, WATER, SANITATION

Housing ownership status is presented in **Table 9.** Again, this was collected only in the midterm survey. Ownership status was similar across the three corridors. However, more households in St Marc reported having no official title for their property than did the other two corridors: 63.6 percent in St. Marc compared to 43.4 percent in Northern corridor and 39.3 percent in Cul-de-Sac.

Table 9 [NEW] Housing Ownership

Percent distribution of households by home ownership characteristics								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Base-line	Mid term	Base-line	Midterm	Base-line	Mid term	Base-line	Mid term
Ownership status of residence								
Owned by household member	n/a	55.1	n/a	55.3	n/a	47.9	n/a	50.0
Rented from the owner	n/a	26.4	n/a	29.5	n/a	35.5	n/a	33.4
Provided for free by the owner	n/a	17.0	n/a	14.3	n/a	15.4	n/a	15.4
Other	n/a	1.5	n/a	0.9	n/a	1.2	n/a	1.2
Total	n/a	100	n/a	100	n/a	100	n/a	100
Number of households	n/a	914	n/a	949	n/a	924	n/a	2,787
Possession of title to house								
Household member has official title	n/a	29.8	n/a	48.0	n/a	46.2	n/a	44.4
Household member has informal title	n/a	6.6	n/a	8.5	n/a	14.3	n/a	12.2
Household member has no title	n/a	63.6	n/a	43.4	n/a	39.3	n/a	43.2
DK/NR/Missing		0		0.2		0.2		0.2
Total	n/a	100	n/a	100	n/a	100	n/a	100

Percent distribution of households by home ownership characteristics								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Base-line	Mid term	Base-line	Midterm	Base-line	Mid term	Base-line	Mid term
Percent of households with a mortgage	n/a	10.8	n/a	5.8	n/a	9.3	n/a	8.8
Number of households who own house	n/a	511	n/a	547	n/a	467	n/a	1,525
Average rental value among renters	n/a	1.02	n/a	1.18	n/a	1.59	n/a	1.47
Number of households who rent home	n/a	219	n/a	252	n/a	303	n/a	774
Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.								

Table 10 shows a list of assets owned by households. For several items in the category of non-agricultural assets, Cul-de-Sac shows that a greater percentage of households reported they have the item than other corridors. The greatest difference between Cul-de-Sac versus Northern and St. Marc corridors occurred for televisions (63.9 percent for Cul-de-Sac versus 29.5 percent for St. Marc and 42.6 percent for Northern). Other differences of greater than 20 percent were for refrigerators/freezers, with reported ownership being 28.3 percent in Cul-de-Sac and only 6.3 percent in St. Marc; for fans, with 34.7 percent reported ownership in Cul-de-Sac and only 11.9 percent in St. Marc and for cell phones with reported ownership in Cul-de-Sac is higher than St. Marc although not quite at 20 percent. At mid-term, the average asset-based wealth index for St. Marc, Northern and Cul-de-Sac are 2.6, 3.0 and 3.5 respectively.

For productive and agricultural assets among rural households, there is only one change of nearly 20 percent between the corridors and that is regarding ownership of small livestock, with ownership being about 17-19 percent higher in St. Marc than in the other two corridors. Likewise, ownership of agricultural land was higher in St. Marc than in Cul-de-Sac (81.2 percent versus 64.1 percent, respectively).

Table 10 [NEW] Household Assets

Percent distribution of household assets by corridor and type								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Type of asset	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term
Non-agricultural assets								
Oven	n/a	7.7	n/a	5.5	n/a	17.9	n/a	14.6
Stove	n/a	74.4	n/a	84.2	n/a	90.0	n/a	87.2
Boiler	n/a	94.0	n/a	96.2	n/a	97.8	n/a	97.1
Television	n/a	29.5	n/a	42.6	n/a	63.9	n/a	56.3
Radio	n/a	39.0	n/a	38.7	n/a	45.5	n/a	43.6
Stereo system	n/a	2.2	n/a	2.0	n/a	2.8	n/a	2.6
Cellphone	n/a	70.9	n/a	83.2	n/a	88.8	n/a	85.8

Percent distribution of household assets by corridor and type								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Type of asset	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term
Fixed phone	n/a	0.8	n/a	0.0	n/a	0.3	n/a	0.3
Refrigerator/freezer	n/a	6.3	n/a	15.0	n/a	28.3	n/a	23.5
Generator	n/a	3.9	n/a	5.2	n/a	4.3	n/a	4.4
Inverter/accumulator	n/a	5.9	n/a	2.5	n/a	5.4	n/a	4.9
Computer	n/a	3.7	n/a	6.3	n/a	11.9	n/a	10.0
Fan	n/a	11.9	n/a	22.2	n/a	34.7	n/a	29.9
Bicycle	n/a	4.2	n/a	7.2	n/a	3.0	n/a	3.9
Motorcycle	n/a	7.6	n/a	8.1	n/a	3.5	n/a	4.7
Car, truck	n/a	2.6	n/a	2.6	n/a	7.5	n/a	6.1
Average asset-based wealth index1	n/a	2.6	n/a	3.0	n/a	3.5	n/a	3.3
Number of households	n/a	914	n/a	949	n/a	924	n/a	2,787
Productive and agricultural assets (rural households only)								
Sewing machine	n/a	3.2	n/a	1.7	n/a	3.7	n/a	3.0
Agricultural land	n/a	81.2	n/a	75.7	n/a	64.1	n/a	72.0
Large livestock (oxen, cattle)	n/a	30.4	n/a	30.5	n/a	13.8	n/a	22.9
Small livestock, (goats, pigs, sheep)	n/a	64.3	n/a	47.5	n/a	44.9	n/a	51.2
Chickens, ducks, turkeys, pigeons	n/a	52.7	n/a	44.8	n/a	38.8	n/a	44.4
Fish pond/fishing equipment	n/a	4.5	n/a	3.0	n/a	0.7	n/a	2.4
Non-mechanized farm equipment (hoe, machete, axe, shovel)	n/a	74.6	n/a	70.6	n/a	61.2	n/a	67.5
Mechanized farm equipment (tractor-drawn plough, power tiller, treadle pump)	**n/a**	**2.2**	**n/a**	**0.7**	**n/a**	**2.4**	**n/a**	**1.9**
Number of rural households2	n/a	422	n/a	291	n/a	115	n/a	828

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016.

Table 11 shows the access to drinking water by type of water and distance to the source. The proportion of households with access to improved drinking water as defined at baseline was relatively high in all three corridors with St. Marc, the lowest, at 68.2 percent while Cul-de-Sac and Northern are 89.2 and 88.2 percent, respectively. Only the Northern corridor shows a large increase in access to improved water sources between baseline and midterm (69.2 to 89.2 percent). The only difference between corridors at midterm is with respect to using bottled water where Cul-de-Sac is 45.1 percent and St. Marc is 23.2 percent. Though weaker in magnitude, there appears to be a shift from using public tap water in favor of bottled and/or a water selling society; this is most prominently seen in Cul-de-Sac although it might also be happening in the other corridors. There are neither changes between time periods nor differences between corridors relative to the time it takes to obtain drinking water.

There is an increase between baseline and midterm in households *not* treating their water in the Northern and Cul-de-Sac corridors but because percentage includes those HHs that increased use of bottled water (or water from a vendor) in the denominator, it should not be

automatically interpreted as a negative change. For those who do treat their water, there was a modest increase in St. Marc in the use of chlorine/bleach from baseline to midterm.

There appears to be a decreased use of Aquatabs® in the Northern corridor although this is not quite 20 percent. This too, should not, necessarily, be interpreted as a bad sign because it might be that the population that was using Aquatabs® now has a source of water that does not need treatment; this should be explored in secondary analysis.

A decrease in the use of appropriate water treatment methods appears to have happened in the Northern and Cul-de-Sac corridors but the denominator used is all households including those with improved water sources (that do not need to treat their water). Thus, this apparent decrease in water treatment might be partially explained by more people drinking bottled water or water from a vending company. Whether or not this is a real change should also be investigated through secondary analysis.

The results at baseline categorized water as *improved* vs *non-improved* using the Demographic and Health Survey (DHS) criteria (ICF international, 2012). These results, when presented alone, give the impression that Haiti does not have a problem with access to improved water yet Haiti is typically described as a water-stressed country[28] with low access to *safe* drinking water especially among lower income households. The difference between "*safe*" and "*improved*" should be considered because *improved* does not guarantee the water is *safe* and having either of these does still not guarantee that the household members have *continuous* access to *improved* or *safe* water.

UNICEF and the World Health Organization's (WHO) 2012 report on water in Haiti used their Joint Monitoring Program (JMP),[29] criteria. It shows the proportion of Haiti's population that has access to improved drinking water has remained the same or somewhat increased in urban populations since 1990 with levels between 70 and 80 percent in 2012. In the rural population, only the wealthiest quintile has relatively high levels of improved drinking water (78 percent). The rest of the rural population ranges from 55 percent (second highest wealth quintile) to 32 percent (lowest wealth quintile) having improved drinking water.
When JMP criteria were applied to the baseline and midterm data, only 55 percent of the population in the 3DCs have access to improved drinking water with corridor-specific values ranging from 48 percent (St. Marc) to 62 percent (Northern) at midterm.

Table 11 [3.1.5] Household Drinking Water

[28] Haiti's water crisis, Water.org, http://water.org/country/haiti/, accessed 25 August 2016

[29] WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation.

Percent distribution of households by source of drinking water, time to obtain drinking water, and treatment of drinking water								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	**Base -line**	**Mid term**	**Base -line**	**Mid term**	**Base -line**	**Mid term**	**Base -line**	**Mid term**
Source of drinking water								
Improved Source[1]	68.3	68.2	69.2	89.2	87.2	88.2	74.8	85.8
Piped water into dwelling	1.8	0.8	2.4	1.6	6.0	1.2	3.4	1.2
Piped water into yard	2.8	2.4	2.2	3.2	8.6	1.8	4.5	2.1
Standpipe	8.9	8.4	3.1	8.5	15.0	9.0	9.0	8.8
Public tap	13.6	4.4	21.3	10.5	10.9	4.1	15.3	5.2
Protected well in the courtyard	1.5	0.7	3.3	1.3	1.4	0.2	2.1	0.4
Other protected well	1.9	4.9	3.3	7.7	0.7	2.0	2.0	3.3
Protected spring	11.9	5.6	1.7	0.8	3.6	1.5	5.7	1.8
Rainwater	1.7	0.6	0.2	1.0	0.7	0.2	0.8	0.4
Bottled water	17.8	23.2	19.7	36.0	28.9	45.1	22.1	41.0
Water selling society	6.4	17.2	12.2	18.6	11.5	23.1	10.0	21.6
Improved source - JMP[2] criteria	56.1	48.0	53.3	61.9	67.0	54.1	58.8	54.5
Non-Improved Source	29.5	30.3	17.4	10.6	11.8	10.2	19.6	12.6
Unprotected well in the courtyard	2.5	1.0	1.3	0.5	1.2	0.1	1.6	0.3
Public well or other open well	1.3	0.3	9.2	0.7	1.3	0.1	3.9	0.2
Unprotected spring	14.9	13.4	5.8	5.5	3.3	3.4	8.0	4.9
Tanker truck	0.8	1.1	0.6	0.2	2.1	2.0	1.2	1.6
Water seller	0.6	3.6	0.2	2.6	2.5	3.5	1.1	3.4
Surface water (river/dam/lake/ponds/stream/canal/irrigation channel)	9.4	10.9	0.4	1.1	1.4	1.1	3.7	2.2
Non-improved source - JMP criteria	43.9	52.0	46.7	38.1	33.0	45.9	41.2	45.5
Other Source	2.2	1.5	13.3	0.4	1.0	1.5	5.5	1.3
DK/NR/Missing	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)								
Water on premises	10.2	5.5	9.3	7.6	17.8	3.6	12.4	4.5
Less than 30 minutes3	67.0	64.5	87.7	82.5	80.8	85.3	78.5	82.4
30 minutes or longer	24.2	35.5	10.3	17.5	9.7	14.7	14.7	17.6
DK/NR/missing	8.8	0.0	2.0	0.0	9.5	0.0	6.8	0.0
Total	100	100	100	100	100	100	100	100
Type of water treatment								
APPROPRIATE: Boil	1.0	1.4	1.9	1.8	3.9	1.5	3.1	1.6
APPROPRIATE: Bleach/chlorine added	9.7	25.9	15.6	21.4	19.8	18.1	17.5	19.6
APPROPRIATE: Strained through cloth	0.7	0.2	0.5	0.0	0.4	0.2	0.5	0.2
APPROPRIATE: Ceramic, sand or other filter	1.3	5.7	0.4	0.5	0.7	1.2	0.7	1.6
APPROPRIATE: Solar disinfection	0.4	0.4	0.6	0.3	0.2	0.0	0.3	0.1
APPROPRIATE: Aquatabs	42.2	39.2	43.8	26.1	31.4	23.2	35.5	25.6
Let it stand and settle	2.1	0.9	1.8	0.1	3.4	0.4	2.9	0.4
Other	3.7	1.4	4.9	1.3	4.3	0.6	4.4	0.8
DK/NR/Missing	3.3	0.3	4.6	0.0	14.1	0.1	10.6	0.1
Don't know	0.7	0.0	0.6	0.0	1.5	0.0	1.2	0.0
Missing	2.6	0.0	4.0	0.0	12.6	0.0	9.4	0.0
No treatment	40.7	53.2	38.0	67.6	35.7	71.1	36.9	68.4

Percent distribution of households by source of drinking water, time to obtain drinking water, and treatment of drinking water								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	**Base-line**	**Mid term**	**Base-line**	**Mid term**	**Base-line**	**Mid term**	**Base-line**	**Mid term**
Percentage using an appropriate treatment method5	53.7	46.2	53.5	31.8	48.2	28.7	50.1	13.3
Total Number of Households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1]Typically, bottled water is only considered an improved source when the household has an improved secondary water source. However, to maintain comparability with baseline, bottle water is considered an improved water source as is water selling society.

[2] WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme (JMP) for Water Supply and Sanitation. To estimate access to safe water using JMP criteria, we assumed that 50 percent of bottled water uses and those using a water selling society have access to a second, improved water source and 50 percent do not have a second, improved source.

[3]Households with water on premises are included in the < 30-minute group.

[4] Respondents may report multiple treatment methods so the sum of treatments may exceed 100 percent.

[5]Appropriate water treatment methods include boiling, bleaching, straining, filtering, solar disinfecting and Aquatabs.

Sources of non-drinking water are shown in **Table 12**. This information was not collected at baseline so no comparisons over time can be made. The comparison between the three corridors is consistent with that seen for drinking water, with a lower percentage of households using improved water in St. Marc than in the other two corridors, with Northern and Cul-de-Sac having similar percentages. These differences do not reach our usual 20 percent criterion, but they are in the 13-16 percent range. There are a few major differences in the types of non-improved water sources, with Cul-de-Sac reporting greater use of tanker trucks compared to St. Marc reporting greater use of surface water as non-improved water sources.

Table 12 [NEW] Household Non-Drinking Water

Percent distribution of households by source of non-drinking water								
	Corridor							
	St. Marc		**Northern**		**Cul-de-Sac**		**Total**	
Characteristic	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term	Base line	Mid term
Source of non-drinking water								
Improved Source	n/a	43.5	n/a	59.1	n/a	56.2	n/a	55.2
Piped water into dwelling	n/a	3.5	n/a	2.6	n/a	3.6	n/a	3.4
Piped water into yard	n/a	7.1	n/a	4.7	n/a	9.5	n/a	8.4
Standpipe	n/a	8.2	n/a	9.5	n/a	13.4	n/a	12.2
Public tap	n/a	2.3	n/a	14.0	n/a	6.0	n/a	6.9
Protected well in the courtyard	n/a	7.4	n/a	8.7	n/a	3.4	n/a	4.8

Other protected well	n/a	5.6	n/a	15.4	n/a	6.8	n/a	8.1
Protected spring	n/a	4.2	n/a	0.5	n/a	0.8	n/a	1.1
Rainwater	n/a	1.5	n/a	0.8	n/a	5.2	n/a	4.0
Bottled water	n/a	0.5	n/a	0.0	n/a	0.0	n/a	0.1
Water selling society	n/a	3.2	n/a	2.9	n/a	7.5	n/a	6.2
Non-Improved Source	n/a	54.5	n/a	39.9	n/a	41.1	n/a	42.4
Unprotected well in the courtyard	n/a	3.6	n/a	10.5	n/a	0.6	n/a	2.6
Public well or other open well	n/a	2.5	n/a	9.0	n/a	1.0	n/a	2.5
Unprotected spring	n/a	9.5	n/a	3.7	n/a	2.8	n/a	3.7
Tanker truck	n/a	2.9	n/a	3.4	n/a	24.8	n/a	18.6
Water seller	n/a	1.8	n/a	2.0	n/a	7.2	n/a	5.7
Surface water (river/dam/lake/ ponds/stream/canal/irrigation channel)	n/a	34.2	n/a	11.3	n/a	4.7	n/a	9.3
Other Source	n/a	2.1	n/a	0.9	n/a	2.9	n/a	2.4
DK/NR/Missing	n/a	0.1	n/a	0.0	n/a	0.0	n/a	0.0
Total	n/a	100.0	n/a	100.0	n/a	100.0	n/a	100.0
Total Number of Households	n/a	914	n/a	949	n/a	924	n/a	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

Table13. shows data regarding household sanitation facilities. Few large or consistent differences emerge overall relative to having improved, facilities that are not shared with other households. Within Cul-de-Sac, data show some increase in the use of flush to septic tanks between baseline and midterm (7.6 percent and 21.3 percent, respectively), but less than 20 percent. Data show a difference between St. Marc (20.5 percent) and Cul-de-Sac (43.5 percent) in access to any improved, not shared, facility.

Table 13 [3.1.6] Household Sanitation Facilities

Percent distribution of households by type of toilet/latrine facilities								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Type of toilet /latrine facility	Base-line	Mid-term	Base-line	Mid-term	Base-line	Midterm	Baseline	Mid term
Improved, not shared facility	27.6	20.5	39.5	3-.3	41.4	43.5	39.1	38.8
Flush to piped sewer system	1.0	2.2	1.8	1.4	6.5	3.5	4.8	3.0
Flush to septic tank	2.7	2.8	3.1	7.9	7.6	21.3	6.0	16.9
Flush to a pit latrine	3.6	0.5	0.2	0.9	1.3	0.0	1.4	0.2
Flush, don't know where	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1

Ventilated improved pit latrine	4.2	4.5	1.3	5.8	4.2	3.5	3.6	4.0
Pit latrine with slab	14.1	10.3	32.5	15.2	20.2	15.0	21.9	14.5
Composting toilet	1.6	0.2	0.6	0.0	1.0	0.1	1.0	0.1
Portable chemical toilet	0.2	0.0	0.1	0.1	0.5	0.0	0.4	0.0
Shared facility[1]	18.0	36.6	26.2	35.1	38.2	34.1	32.9	34.9
Flush to piped sewer system	0.1	0.7	0.4	0.4	1.7	0.8	1.2	0.7
Flush to septic tank	0.3	0.7	0.5	2.9	3.0	4.3	2.1	3.7
Flush to a pit latrine	1.8	0.0	0.0	0.2	1.4	0.3	1.1	0.3
Flush, don't know where	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Ventilated improved pit latrine	5.0	9.9	1.0	5.8	3.6	3.0	3.3	4.6
Pit latrine with slab	9.3	25.1	24.0	25.7	27.1	25.6	24.0	25.5
Composting toilet	1.2	0.2	0.2	0.0	0.8	0.1	0.8	0.1
Portable chemical toilet	0.3	0.0	0.0	0.1	0.4	0.0	0.3	0.0
Non-improved facility	51.2	39.7	31.5	30.9	18.3	20.1	25.6	24.1
Flush to somewhere else	0.2	0.6	0.1	0.5	0.6	0.9	0.4	0.8
Pit latrine without slab/ Open pit	21.1	14.3	15.3	14.3	11.7	6.4	13.8	8.6
Bucket	0.5	0.0	0.0	0.2	0.1	0.0	0.1	0.0
No facility/bush/field	29.2	24.8	15.9	15.8	5.9	12.8	11.2	14.7
Hanging latrine	0.2	0.0	0.2	0.1	0.0	0.0	0.1	0.0
Other	3.1	0.4	2.8	1.2	1.2	0.5	1.8	0.6
DK/NR/Missing	0.1	0.1	0.0	0.0	0.8	0.0	0.6	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016. 1 Facilities that would be considered improved if they were not shared by two or more households

Table 14 shows waste disposal methods, collected only at midterm. A few differences between corridors are worth noting: disposal of waste water in the courtyard is much higher in St. Marc (47.0 percent) than Cul-de-Sac (23.2 percent) with Northern falling between (36.3 percent). Disposal of solid waste into a ravine is reported by a substantially higher percentage of respondents in Cul-de-Sac than the other two corridors, whereas periodic incineration is reported by a higher percentage of respondents in the St. Marc corridor than in the Cul-de-Sac corridor.

Table 14 [NEW] Waste-Water and Solid Waste Disposal

Percent distribution of households by waste-water disposal and solid waste disposal								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term
Waste-water disposal								
Channel/sewers	n/a	3.7	n/a	5.6	n/a	9.4	n/a	8.1
Septic tank	n/a	5.5	n/a	4.1	n/a	15.9	n/a	12.6
River/creek	n/a	3.4	n/a	2.2	n/a	1.5	n/a	1.8
Fields, meadows, ravine, empty lot	n/a	19.2	n/a	12.7	n/a	17.2	n/a	16.7
Courtyard	n/a	47.0	n/a	36.3	n/a	23.2	n/a	28.2
Street	n/a	14.5	n/a	30.2	n/a	23.4	n/a	23.5
Other	n/a	6.7	n/a	9.1	n/a	9.5	n/a	9.1
DK/NR/Missing	n/a	0	n/a	0	n/a	0	n/a	0
Total	n/a	100.0	n/a	100.0	n/a	100.0	n/a	100.0
Solid waste disposal								
Municipal truck/SMCRS	n/a	2.6	n/a	10.1	n/a	8.0	n/a	7.7
Collected by private service	n/a	5.4	n/a	9.8	n/a	12.2	n/a	11.0
Thrown into an empty lot, field, backyard	n/a	28.8	n/a	29.9	n/a	18.5	n/a	21.6
Thrown into a ravine	n/a	12.4	n/a	10.8	n/a	29.3	n/a	24.2
Thrown into the sewers	n/a	0.9	n/a	0.7	n/a	0.6	n/a	0.7
Thrown into the street	n/a	1.7	n/a	4.5	n/a	6.5	n/a	5.6
Thrown into the ocean	n/a	3.4	n/a	4.2	n/a	3.6	n/a	3.7
Periodic incineration	n/a	36.2	n/a	20.3	n/a	15.3	n/a	18.6
Put in a landfill	n/a	2.2	n/a	5.1	n/a	3.9	n/a	3.9
Other	n/a	6.5	n/a	4.7	n/a	.9	n/a	2.9
DK/NR/Missing	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Total	n/a	100.0	n/a	100.0	n/a	100.0	n/a	100.0
Total Number of Households	n/a	914	n/a	949	n/a	924	n/a	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

3.1.3 ACCESS TO IMPROVED ENERGY SOURCES

Table 15 shows access to energy sources. Data show a decrease in the percentage of households that reported no access to electricity in the home, especially in the Northern corridor (from 74.3 percent at baseline to 44.3 percent at midterm). The disparity between the corridors remains high at midterm with Cul-de-Sac having the most electrified households reported in the survey and St. Marc having the least.

Data on the type of fuel used for cooking showed only small changes between baseline and midterm in all three corridors. Between the corridors, Cul-de-Sac reported higher usage of charcoal than St. Marc (76.8 percent versus 57.9 percent), just slightly below a 20 percent difference, and lower usage of wood than St. Marc (9.5 percent versus 35.7 percent), with an almost 20 percent difference with Northern as well consistent with differences across corridors in baseline data.

Care should be taken interpreting these results because a decrease in homes without electricity does not imply that that electricity is constant, reliable and affordable. Also seen in the Table 3.1.10 is that most of the electrified households are without a meter. For low-income families that do have a meter, they might share it with neighbors.

Table 15 [NEW] Household Energy Access

Percent distribution of households by housing electricity access and cooking fuel type								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Characteristic	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Electricity								
No electricity in home	70.3	62.9	74.3	4 4.3	28.7	19.6	44.0	28.9
Individual access/power meter	n/a	5.2	n/a	12.7	n/a	17.6	n/a	15.3
Collective access/power meter	n/a	6.2	n/a	5.2	n/a	13.0	n/a	10.9
Access with no meter	n/a	20.9	n/a	36.2	n/a	48.7	n/a	43.3
Counter pre-pay	n/a	0.1	n/a	0.1	n/a	0.3	n/a	0.2
Generator (Delco)	n/a	0.7	n/a	0.4	n/a	0.1	n/a	0.2
Solar panel	n/a	2.1	n/a	0.7	n/a	0.6	n/a	0.8
Other	n/a	1.9	n/a	0.2	n/a	0.1	n/a	0.3
DK/NR/Missing	n/a	0.0	n/a	0.2	n/a	0.0	n/a	0.0
Total	n/a	100	n/a	100	n/a	100	n/a	100
Cooking fuel								
Electricity	0.2	0.0	0.5	0.1	0.7	0.0	0.6	0.0
Propane gas	2.1	3.4	1.6	1.8	7.7	9.9	5.7	7.8
Natural gas	0.1	0.6	0.0	0.0	0.8	0.1	0.6	0.1
Biogas	0.0	0.0	0.1	0.0	0.4	0.1	0.3	0.1
Kerosene	0.1	0.3	0.2	0.5	1.4	1.6	0.9	1.2
Coal, lignite	0.2	0.0	0.3	0.2	0.8	0.0	0.6	0.0
Charcoal	54.2	57.9	56.6	66.8	76.1	76.8	69.0	72.9
Wood	41.9	35.7	39.9	27.5	10.9	9.5	21.2	15.6
No food cooked in household	0.5	1.9	0.1	2.6	0.4	1.7	0.4	1.9
Other	0.7	0.0	0.7	0.0	0.6	0.1	0.6	0.1
DK/NR/Missing	0.1	0.4	0.0	0.5	0.3	0.2	0.2	0.3
Total	100	100	100	100	100	100	100	100
Percentage using solid fuel for cooking[1]	96.3	93.5	96.9	94.5	87.7	86.3	90.8	88.5
Total number of households	**1,200**	**914**	**1,199**	**949**	**1,179**	**924**	**3,578**	**2,787**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] Includes coal/lignite, charcoal and wood.

3.2 PILLAR B: FOOD AND ECONOMIC SECURITY

This section of the survey addressed nutrition status and diet of infants, children up to five years old and their mothers. The estimates for key indicators from the baseline survey in 2012 and the comparable estimates from the 2016 midterm survey are shown in Tables 3.2.1 through 3.2.6.

3.2.1 FOOD SECURITY

Table 16 provides information on households by hunger status, using the Household Hunger Scale.[30] This scale categories the household (all its usual members) as being:

- Little to no hunger in the household (score of 0-1);
- Moderate hunger in the household (score of 2-3); and
- Severe hunger in the household (score of 4-6).

There were most probably decreases in the level of moderate and severe hunger in the Northern corridor between baseline and midterm: decreasing from 64.0 to 49.8 percent most of which came from a decrease in severe hunger. No change was observed in Cul-de-Sac remaining at about 45 percent with moderate or severe hunger at baseline and midterm. At midterm, there are no distinguishable differences among the corridors.,

[30] Ballard, Terri; Coates, Jennifer; Swindale, Anne; and Deitchler, Megan. Household Hunger Scale: Indicator Definition and Measurement Guide. Washington, DC: Food and Nutrition Technical Assistance II Project, FHI 360.

Table 16 Household Hunger

Percent distribution by hunger status								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term	Base-line	Mid term
Little to no hunger in the household	30.0	43.0	33.9	50.1	50.6	54.8	44.2	52.7
Moderate hunger in the household	43.3	48.5	47.5	45.3	34.9	40.1	38.7	42.0
Severe hunger in the household	19.1	8.5	12.8	4.5	8.8	5.0	11.1	5.3
DK/NR/Missing	7.6	0.0	5.8	0.1	5.7	0.0	6.0	0.0
Total	100	100	100	100	100	100	100	100
Total with moderate or severe hunger[1]	67.5	57.0	64.0	49.8	46.4	45.2	52.9	47.3
Median Household Hunger Score	3.0	2.0	2.0	1.0	1.0	1.0	2.0	1.4
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: USAID Haiti Baseline Survey 2012, USAID Midterm Assessment, 2016.
Note: Hunger reports from women, ages 15-49 were used whenever available. When not available, repots from other household informants were used. The Household Hunger Scale (HHS) was derived using FANTA guidelines. See
http://www.fantaproject.org/downloads/pdfs/HHS_Indicator_Guide_Aug2011.pdf
[1] The percentage of with moderate or severe hunger does not include records that are DK/NR/Missing. Therefore, the percentages will not total. Baseline estimates have been adjusted to exclude DK/NR/Missing cases.

Table 17 provides information on the nutritional status of children under five years old via three internationally used anthropometric measurements for stunting (chronic malnutrition), wasting (acute malnutrition) and underweight (composite)[31][32]. There was virtually no change between baseline and midterm when using underweight as an indicator.

There might have been a modest improvement relative to the level of wasting in the Northern corridor between baseline and midterm with a decrease from 12.0 percent to 1.6 percent. The other two corridors showed no change in wasting with midterm levels being at about 5 percent. The levels of stunting do not appear to have changed between baseline and midterm .

Across all the corridors, wasting is relatively low; 4.2 percent at midterm, with virtually no children (0.5 percent) severely wasted. Stunting, however, remains at a relatively high level

[31] Underweight: weight for age < –2 standard deviations (SD) of the WHO Child Growth Standards median; underweight is a composite of stunting and wasting
- Stunting: height for age < –2 SD of the WHO Child Growth Standards median; stunting reflects the cumulative effects of undernutrition and infections since and even before birth.
- Wasting: weight for height < –2 SD of the WHO Child Growth Standards median; wasting indicates acute weight loss

[32] Nutrition Landscape Information System (NLIS), Country Profile Indicators Interpretation Guide, World Health Organization, 2010, ISBN 978 92 4 159995 5,

(17. 6%) with about a third of these being severely stunted. At midterm, there are no discernable differences between the corridors relative to these three indicators.

Table 17 Nutritional Status of Children

Percentage of children < five years classified as malnourished according to three indices of nutritional status: height for age, weight for height, and weight for age

	Corridor							
	St. Marc		Northern		Cul-de-sac		Total	
Nutritional status	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Height-for-age (Stunting)								
Percentage below -2SD[1]	25.2	17.4	18.3	19.3	17.4	17.2	18.7	17.6
Percentage below -3SD	11.5	5.3	9.1	5.6	8.1	5.3	8.8	5.3
Mean z-score (SD)	-0.6	-0.8	-0.5	-0.8	-0.7	-0.7	-0.6	-0.7
Weight-for-height (Wasting)								
Percentage below -2SD[1]	10.1	5.2	12.0	1.6	7.6	4.6	9.0	4.2
Percentage below -3SD	4.8	0.4	5.7	0.2	3.3	0.6	4.1	0.5
Mean z-score (SD)	-0.1	-0.2	-0.3	0.0	-0.1	-0.2	-0.2	-0.2
Weight-for-age (Underweight)								
Percentage below -2SD[1]	11.8	9.5	9.6	7.6	10.5	10.2	10.5	9.7
Percentage below -3SD	3.6	1.3	2.2	1.6	2.9	3.4	2.8	2.8
Mean z-score (SD)	-0.4	-0.6	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Number of children	416	478	508	451	419	440	1343	1369

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016.

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

[1] Includes children who are below -3 standard deviations from the WHO Child Growth Standards median.

Table 18 provides information on the nutritional status of women of reproductive age (15 – 49 years old) using Body Mass Index (BMI) and categorizing them as underweight, normal or overweight/obese. BMI is a measure of weight as a function of height. Height is also used as a nutritional status indicator for adult women; those under 145cm are considered stunted, which increases the risk of adverse fetal, neonatal and child health outcomes.

There are no discernable differences between corridors for women's BMI measures, nor are there any changes between baseline and midterm greater than or equal to 20 percentage points.

Table 18 Nutritional Status of Women

Percentage of children<five years classified as malnourished according to three indices of nutritional status: height for age, weight for height, and weight for age								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Nutritional status	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Height								
Percentage < 145 cm	1.5	0.4	1.3	0.5	2.9	0.9	2.4	0.8
Body Mass Index[1]								
Mean Body Mass Index (BMI)	23.2	23.5	22.8	23.7	23.7	24.1	23.4	24.0
Normal								
18.5-24.9 (total normal)	67.0	55.7	58.7	56.2	59.5	55.7	60.2	55.8
Underweight								
<18.5 (total underweight)	6.8	13.4	13.5	12.0	8.2	8.9	9.1	9.8
17.0-18.4 (mildly underweight)	1.9	10.4	4.6	9.5	1.7	5.9	2.3	6.9
<17 (moderately and severely underweight)	4.8	3.0	8.8	2.5	6.5	3.0	6.8	2.9
Overweight/obese								
≥25 (total overweight or obese)	26.2	30.9	27.8	31.8	32.3	35.4	30.7	34.4
25.0-29.9 (overweight)	21.0	18.6	21.2	18.5	23.4	22.6	22.7	21.5
≥30.0 (obese)	5.2	12.3	6.6	13.4	8.9	12.8	8.0	12.8
Total	100	100	100	100	100	100	100	100
Number of non-pregnant women	863	835	903	991	911	977	2677	2803

Source: USAID Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment 2016

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2).

[1]Excludes pregnant women

Table 19 provides information on breastfeeding in children under two years old. Exclusive breastfeeding in children less than 6 months old is the primary indicator which is critical to infant health during the first six months of their lives. There appears to be no change in the proportion of women who are exclusively breastfeeding up to 5 months old between the two-time periods nor are there between-corridor differences. There is neither an appreciable difference between baseline and midterm nor between corridors in breastfeeding practices for 6-23-month-old children.

Table 19 Breastfeeding Status of Children

Percent distribution of children 6-23 months and under 6 months who are living with their mother, by breastfeeding status								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
	Children 6-23 months							
Breastfeeding status								
Not breastfeeding	28.6	38.4	28.5	29.9	35.5	44.1	33.4	41.6
Exclusively breastfed	0.0	0.0	1.9	1.2	3.8	1.7	3.0	1.4

Percent distribution of children 6-23 months and under 6 months who are living with their mother, by breastfeeding status								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Breastfeeding and consuming plain water only	1.3	0.0	1.9	2.1	2.2	0.0	2.0	0.3
Breastfeeding and consuming non-milk liquids[1]	2.6	2.5	1.9	0.0	0.5	0.6	1.0	0.8
Breastfeeding and consuming other milk	1.9	2.2	3.8	1.4	1.1	0.7	1.7	1.0
Breastfeeding and consuming complementary foods	61.0	56.9	52.5	65.4	49.7	52.8	51.6	54.9
DK/NR/Missing	4.5	0.0	9.5	0.0	7.1	0.0	7.2	0.0
Total	100	100	100	100	100	100	100	100
Total currently breastfeeding	66.9	61.6	62.0	70.1	57.4	55.9	59.4	58.4
Number of children 6-23 months	125	129	121	87	117	119	363	335
	Children 0-5 months							
Breastfeeding status								
Not breastfeeding	6.3	^	7.4	^	11.9	^	10.2	1.1
Exclusively breastfed	27.8	^	27.4	^	20.2	^	22.8	34.0
Breastfeeding and consuming plain water only	6.3	^	3.2	^	7.1	^	6.1	6.3
Breastfeeding and consuming non-milk liquids[1]	0.0	^	5.3	^	2.4	^	2.7	8.5
Breastfeeding and consuming other milk	6.3	^	10.5	^	13.1	^	11.7	17.0
Breastfeeding and consuming complementary foods	50.6	^	41.1	^	45.2	^	45.0	33.0
DK/NR/Missing	2.5	^	5.3	^	0.0	^	1.5	0.0
Total	100	^	100	^	100	^	100	100
Total currently breastfeeding	91.1	^	87.4	^	88.1	^	88.3	98.9
Number of children 0-5 months	65	35	59	42	60	32	184	109

Source: Haiti Baseline Survey 2012, USAID Haiti Mid-term Assessment 2016. **Note**: Only includes youngest child currently living with the mother. Breastfeeding status refers to a retrospective 24-hour period ("yesterday and last night"). Children classified as breastfeeding and consuming plain water, only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages sum to 100 percent. Children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also receive plain water. Any children who receive complementary food are classified in that category as long as they are breastfeeding as well.[1] Non-milk liquids include juice, juice drinks, clear broth or other liquids

Table 20 provides information on the foods and liquids consumed by children 6-23 months old. The food groups used for this indicator allow additional presentation of the results as a proportion of these children receiving a minimum acceptable diet. There are multiple changes between baseline and midterm that meet or exceed the 20 percentage point threshold adopted. Because the corridor-specific sample sizes for 6-23 month old children are small, caution should be taken when interpreting these results.

In the diet diversity food group two, children's consumption of legumes and nuts, increased more than 20 percentage points in all three corridors for an overall increase from 20.5 to 49.8 percent from baseline to midterm. There was an even greater increase in food group six, Vitamin A-rich foods, between baseline and midterm with an overall increase from 31.3 percent

to 64.0 percent. There were also increases since baseline in the consumption of grains, roots and tubers only in Northern (63.9 to 88.9 percent) and Cul-de-Sac (62.8 to 88.9 percent). There was also a sharp increase in the consumption of eating foods that did not fall into the pre-determined categories (an overall increase from 11.7 to 91.2 percent with similar changes in all three corridors[33]. At midterm, there are no differences between corridors except for, perhaps, dairy products where the consumption in Cul-de-Sac appears to be higher than in the Northern corridor.

The absolute levels of consumption in food group one was high at midterm (88.9 percent) and food groups two, three and six were moderate (49.8, 56.1 and 64.0 percent respectively), food groups four, five and seven remain relatively low: Flesh foods (32.1 percent), eggs (10.5 percent) and other fruits and vegetables (27.0 percent). Children receiving a minimum acceptable (diverse) diet was very low at baseline and remains very low (overall 15.2 and 14.7 percent at baseline and midterm respectively)

Table 20 Foods and Liquids Consumed by children 6-23 Months

Percentage of children 6-23 months by food groups consumed in the day or night preceding the interview

Foods and liquids consumed	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Grains, roots and tubers, including commercially fortified foods	78.6	88.3	63.9	88.9	62.8	88.9	65.0	88.9
Legumes and nuts	20.1	57.7	21.5	55.0	20.2	47.3	20.5	49.8
Dairy products (milk, infant formula, yogurt, cheese)	39.6	46.5	42.4	41.5	67.8	60.4	59.6	56.1
Flesh foods (meat, fish, poultry and liver/organ meats)	28.6	38.0	34.2	40.3	22.4	29.6	25.4	32.1
Eggs	10.4	17.9	13.9	16.3	12.0	8.1	12.2	10.5
Vitamin-A rich fruits and vegetables	40.3	69.8	38.0	74.5	27.9	61.1	31.3	64.0
Other fruits and vegetables	6.5	36.6	22.2	24.6	21.3	25.5	19.7	27.0
Other	7.1	88.3	11.4	90.0	12.6	92.0	11.7	91.2
DK/NR/Missing	5.2	3.7	9.5	6.0	7.1	7.0	7.3	6.4
Prevalence of children 6-23 months receiving a minimum acceptable diet (MAD) [1]	12.6	23.4	13.5	11.5	16.3	13.5	15.2	14.7
Number of children	125	129	121	87	117	119	363	335

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: Only includes youngest child 6-23 months currently living with the mother.

[33] Because the proportion falling into the Other category was so low at baseline, the instrument was not modified for midterm, but this category should be examined for potential changes for the next survey

[1] MAD is defined per FTF guidance, based on the minimum meal frequency and minimum dietary diversity during the previous day, adjusted for breastfeeding status and age:
Non-breastfed children 6-23 months who had 4 or more out of 6 food groups & 4 or more feedings of solid, semi-solid, soft food, or milk feeds & at least 2 milk feeds
Breastfed children 6-8 months who had 4+ out of 7 food groups & 2+ feedings of solid, semi-solid, soft food
Breastfed children 9-23 months who had 4+ out of 7 food groups & 3+ feedings of solid, semi-solid, soft food

Table 21 provides information on foods and liquids consumed by women. The food groups used for this indicator allow additional presentation of the results of women receiving a women's diet diversity (WDD).

Only in the WDD food group two, legumes and nuts, were increases seen between baseline and midterm in all three corridors. Decreases of 18.1 percentage points in St. Marc and 18.8 percentage points in Cul-de-Sac for the consumption of meats, seafood and other flesh foods happened between baseline and midterm making them similar to the levels in the Northern corridor (all corridors having midterm values around 75 percent). Consumption of flesh foods decreased by 21.1 percentage points St. Marc. The consumption of Vitamin A rich foods and the mean WDD score increased substantially only in the Northern corridor whereas Other fruits and vegetables likely made modest gains only in St. Marc (from 24.9 percent at baseline to 40.3 percent at midterm).

With respect to WDD, all three corridors moved up from mean scores in the threes to scores in the fours (3.7 to 4.2 percent; 3.3 to 4.2 percent, and 3.8 to 4.0 percent in St. Marc, Northern and Cul-de-Sac respectively). Consumption of WDD foods groups one and two are at very high levels at midterm; food groups three, five, seven, eight and nine are at low to moderate levels and groups four and six, eggs and organ meat, are at very low levels (14.3 and 15.2 percent respectively). There are no differences at midterm between the corridors in the percent of women reaching minimum diet diversity which is under 50 percent for all corridors at baseline.

Table 21 Foods and Liquids Consumed by Women

Percentage of women who consuming various food groups, the average dietary diversity score, the percent of women consuming a minimum dietary diversity, and the mean dietary diversity score among women in the top quartile

WDD group	Foods groups consumed	Corridor						Total	
		St. Marc		Northern		Cul-de-Sac			
		Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
1	Grains, roots and tubers[1,2]	95.0	96.0	91.9	97.4	91.0	97.5	91.6	97.3
2	Legumes and nuts[1]	50.8	78.2	50.7	76.8	45.9	73.9	47.5	74.8
	Legumes and beans[2]	n/a	77.4	n/a	75.3	n/a	73.4	n/a	74.1
	Nuts and seeds[2]	n/a	7.4	n/a	5.9	n/a	6.6	n/a	6.6
3	Dairy products (milk, yogurt, cheese)[1,2]	23.0	33.5	32.3	30.4	41.2	26.1	37.3	27.5
4	Eggs[1,2]	10.2	19.4	11.3	19.2	19.7	12.5	16.9	14.3
	Meats, seafood, and other fleshfoods[2]	69.6	51.5	59.2	54.7	71.2	52.4	68.6	52.7

Percentage of women who consuming various food groups, the average dietary diversity score, the percent of women consuming a minimum dietary diversity, and the mean dietary diversity score among women in the top quartile

WDD group	Foods groups consumed	Corridor						Total	
		St. Marc		Northern		Cul-de-Sac			
		Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
5	Flesh foods and other misc. small animal protein[1]	61.6	40.5	52.1	44.8	56.4	42.1	56.2	42.4
6	Organ meat[1]	8.0	17.9	7.0	15.7	14.8	14.7	12.4	15.2
7	Vitamin A dark green leafy vegetables[1,2]	40.6	34.7	11.6	30.8	22.5	32.7	22.4	32.6
8	Other Vitamin A rich vegetables and fruits[1,2]	51.2	63.3	32.9	68.4	50.3	65.9	46.9	66.0
9	Other fruits and vegetables[1]	24.9	40.3	33.5	38.1	32.8	35.2	32.0	36.2
	Other fruits[2]	n/a	18.4	n/a	11.9	n/a	8.8	n/a	10.3
	Other vegetables[2]	n/a	28.8	n/a	33.2	n/a	30.2	n/a	30.5
	Other	1.3	0.0	1.5	0.0	1.1	0.0	1.2	0.0
	DK/NR/Missing	0.2	0.1	1.0	0.0	0.6	0.0	0.7	0.0
	Mean Women's Dietary Diversity[1]	3.7	4.2	3.3	4.2	3.8	4.0	3.7	4.1
	Percent Women's **Minimum** Dietary Diversity [2]	n/a	43.8	n/a	40.2	n/a	37.5	n/a	38.6
	Number of women	902	892	954	1040	960	1032	2816	2964

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] The women's dietary diversity score is based on a 9-category scale. The food groups making up the 9-category scale are marked with a 1.

[2] The percentage of women with minimum dietary diversity is defined as women who consume 5 or more food categories on a 10-category scale. The food groups making up the 10-category scale are marked with a 2. [3] Mean number of food groups consumed among women in the top dietary diversity quartile of the scale.

3.2.2 ECONOMIC SECURITY

This section of the survey addressed overall employment status of persons 15 years of age and older, employment characteristics and sector, household expenditures, types of food consumed, and women's empowerment in agriculture, as measured by the Women's Empowerment in Agriculture Index (WEAI). The estimates for key indicators from the baseline survey in 2012 and the comparable estimates from the 2016 midterm survey are shown in Tables 3.2.7 through 3.2.15**.** For the baseline survey, data could be disaggregated only by corridor and sex, but not by age. Thus, comparisons between baseline and midterm can be made only for corridor and sex.

Table 22 provides information on employment status of the age 15+ population. There was a change between baseline and midterm in the percentage of adults who were economically active at sometime within the past month and who expect to be employed in the coming month. These changes were seen in all three corridors – St. Marc, Northern, and Cul-de-Sac – and in both males and females. The increase in employment status was nearly double or more for all of the sub-measures of employment and in the overall summary measure of employment. For example, for the changes in the summary measure of employment, total economically active, from baseline vs midterm are: 36.1 percent vs 63.1 percent in St. Marc; 23.0 percent vs 54.6 percent in the Northern corridor; 25.7 percent vs 55.2 percent in Cul-de-Sac. The increases disaggregated by sex are also impressive being 31.8 percent at baseline to 63.3 percent at midterm for males and 22.1 percent at baseline to 49.8 percent at midterm for females. While not reaching the 20 percent difference threshold - but given the very large sample size - the female employment percentage was likely lower than male employment by about the same margin at baseline as at midterm (31.8 percent for males vs 22.1 percent for females at baseline and 63.3 percent for males vs 49.8 percent for females at midterm).

Table 22 [3.1.3] Employment Status

Percent distribution of household members age 15 or older by employment status											
	Corridor			**Sex**		**Age**					**Total**
	Saint Marc	North-ern	Cul-de-Sac	Male	Fe-male	15-19	20-24	25-29	30-59	60+	
	BASELINE										
Economically active population [1]											
Worked in the last 7 days (total)	35.6	22.4	24.3	30.5	21.2	n/a	n/a	n/a	n/a	n/a	25.3
Worked in the last 7 days (without probes)	27.9	16.5	16.1	24.0	12.5	n/a	n/a	n/a	n/a	n/a	17.7
Worked in the last 7 days (with probes) [2]	24.7	14.5	15.8	17.6	15.9	n/a	n/a	n/a	n/a	n/a	16.6
Worked in the last 12 months	36.0	23.0	25.2	31.6	21.6	n/a	n/a	n/a	n/a	n/a	26.1
Will work next month	19.7	9.7	11.6	15.8	9.3	n/a	n/a	n/a	n/a	n/a	12.2
Total economically active	36.1	23.0	25.7	31.8	22.1	n/a	n/a	n/a	n/a	n/a	26.4
Number of individuals	3,631	4,074	3,961	5,348	6,308	n/a	n/a	n/a	n/a	n/a	11,666
	MIDTERM										

Percent distribution of household members age 15 or older by employment status											
	Corridor			Sex		Age					Total
	Saint Marc	North-ern	Cul-de-Sac	Male	Fe-male	15-19	20-24	25-29	30-59	60+	
Economically active population [1]											
Worked in the last 7 days (total)	58.4	51.0	51.1	59.8	45.2	8.4	28.9	55.4	75.4	54.6	51.8
Worked in the last 7 days (w/o probes)	52.5	47.3	47.2	55.7	41.2	7.3	25.7	49.5	70.5	51.0	47.8
Worked in the last 7 days (w/ probes) [2]	53.9	46.2	46.2	52.9	42.1	7.7	25.3	50.3	68.6	50.1	47.0
Worked in the last 12 months	57.4	52.4	53.4	61.2	47.4	8.5	29.9	58.2	77.9	56.7	53.7
Will work next month	51.3	48.0	47.3	54.8	42.1	7.1	26.6	49.1	70.9	49.0	47.8
Total economically active	63.1	54.6	55.2	63.3	49.8	9.4	31.9	60.5	80.7	58.9	55.9
Number of individuals	2,420	2,990	2,845	3,779	4,476	1,396	1,356	1,096	3,504	903	8,255

Source: Baseline Haiti ZOI Survey 2012, USAID Haiti Midterm Assessment 2016

[1] Includes de jure (usual) household members 15 and older.
[2] Probes consisted of a 13-item battery from the 2012 ECVMAS covering a wide range of economic activities to probe if the household member had performed any economic activity in the last seven days. Measures with probes and without probes overlap, and do not add up to the total who worked in the last 7 days.

For the employment characteristics presented in **Table 23**, possible changes from baseline to midterm are less clear. The distributions by each type of employment are fairly similar. Self-employment remains the primary type of job, especially for women, with less than one-quarter of the female household members working for a registered enterprise. The major difference noted is in the median weekly earnings (in HTG), which doubled between baseline and midterm in the Northern corridor and increased by over 50 percent in Cul-de-Sac, resulting in an overall increase for the three corridors of 50 percent (from 1,000 to 1,500 HTC/wk). Median weekly earnings also increased for both males and females but at very different magnitudes with males doubling (from 1,000 to 2,000 HTG) and females increasing by 25 percent (1,000 to 1,250 HTG). That difference at midterm between males (2,000 HTG) and females (1,250 HTG) is substantial. As seen in table 3.2.7, the gains in employment for both men and women are

impressive but the disparity between male and female earnings seen in table 3.2.8 should be the subject of secondary analysis and additional research to control for type of employment which may be a confounder.

Self-employed remains the principal characteristic of employment during both time periods. Only at the midterm measure is a difference of more than 20 percent between male and females noted, with the former being 48.7 percent and the latter 76.0 percent.

Table 23 [3.1.3] Employment Characteristics

Employment characteristics											
Percent distribution of household members age 15 or older by employment status											
	Corridor			**Sex**		**Age**					
	Saint Marc	Northern	Cul-de-Sac	Male	Female	15-19	20-24	25-29	30-59	60+	Total
	BASELINE										
Characteristics of Employment [1]											
Percent working for a registered enterprise [2]	15.1	16.8	35.6	33.1	23.3	n/a	n/a	n/a	n/a	n/a	28.6
Percent working under written contract	15.9	16.6	25.1	26.8	15.9	n/a	n/a	n/a	n/a	n/a	21.7
Percent working for a family member	6.7	10.7	6.4	7.7	6.8	n/a	n/a	n/a	n/a	n/a	7.3
Percent working for someone else	25.8	31.7	45.9	45.9	32.1	n/a	n/a	n/a	n/a	n/a	39.5
Percent self-employed	67.6	57.6	47.7	46.4	61.2	n/a	n/a	n/a	n/a	n/a	53.2
Percent working on other job	18.5	16.9	11.5	17.2	10.0	n/a	n/a	n/a	n/a	n/a	13.8
Average number of hours worked per day	8.2	8.0	8.8	8.6	8.4	n/a	n/a	n/a	n/a	n/a	8.5
Average number of days worked per week	5.7	5.5	5.5	5.6	5.5	n/a	n/a	n/a	n/a	n/a	5.5
Average number of months worked per year	10.1	9.1	8.9	9.1	9.2	n/a	n/a	n/a	n/a	n/a	9.2
Median number of coworkers	0.0	0.0	0.0	0.0	0.0	n/a	n/a	n/a	n/a	n/a	0.0
Median weekly earnings (in HTG)	1,000	600	1,000	1,000	1,000	n/a	n/a	n/a	n/a	n/a	1,000
Number of economically active individuals	1,311	939	1,017	1,849	1,415	n/a	n/a	n/a	n/a	n/a	3,267

Employment characteristics

Percent distribution of household members age 15 or older by employment status

	Corridor			Sex		Age					
	Saint Marc	Nort hern	Cul-de-Sac	Male	Fe-male	15-19	20-24	25-29	30-59	60+	Total
MIDTERM											
Characteristics of Employment [1]											
Percent working for a registered enterprise [2]	14.1	17.5	25.3	30.0	15.0	4.1	17.6	25.1	25.4	12.6	22.7
Percent working under a written contract	8.6	12.5	19.6	22.7	11.2	1.7	11.3	18.8	19.6	9.1	17.1
Percent working for a family member	6.5	3.3	2.1	2.7	2.9	15.2	4.5	4.1	1.9	1.6	2.8
Percent working for someone else	21.2	29.7	38.4	48.4	20.8	31.3	46.2	39.3	35.5	14.7	35.0
Percent self-employed	71.7	66.8	59.3	48.7	76.0	52.5	49.0	56.3	62.5	83.2	62.0
Percent working on other job	21.8	16.9	13.5	19.3	10.6	6.8	11.4	10.1	17.1	15.8	15.1
Average number of hours worked per day	7.8	8.1	8.5	8.5	8.2	6.1	8.1	8.5	8.6	7.7	8.3
Average number of days worked per week	5.7	5.6	5.6	5.7	5.6	6.0	5.7	5.7	5.6	5.6	5.7
Average number of months worked per year	9.4	9.6	9.6	9.6	9.6	8.0	8.6	9.4	9.8	9.8	9.6
Median number of coworkers	3.0	3.0	5.0	5.0	3.0	3.0	3.0	5.0	4.0	3.0	4.0
Median weekly earnings (in HTG)	1,250	1,250	1,687	2,000	1,250	600	1,000	1,500	2,000	1,000	1,500
Percent formal employees[3]	6.8	10.6	16.4	18.6	9.7	0.0	7.7	16.8	16.6	6.4	14.3
Percent full-time[4]	61.1	68.1	75.5	77.1	67.7	45.4	64.4	71.6	76.2	66.8	72.6
Number of economically active individuals	1,544	1,653	1,564	2,439	2,322	169	469	695	2,872	556	4,761

Employment characteristics

Percent distribution of household members age 15 or older by employment status

	Corridor			Sex		Age					
	Saint Marc	Northern	Cul-de-Sac	Male	Female	15-19	20-24	25-29	30-59	60+	Total

Source: Baseline Haiti ZOI Survey 2012, USAID Haiti Mid-term Assessment 2016

1 Includes de jure (usual) household members 15 and older that are economically active. The economically active are those who have worked within the past week, plan to work within the next month, and/or worked for at least a month during the past year.
2 Registered enterprises were defined for this survey as enterprises with either a 'Patente' from the Direction Générale des Impôts (DGI), an 'Immatriculation fiscale' (MEF/DGI) or a Professional identity card of the Ministère du Commerce et de l'Industrie (MCI). Information on registration status was collected as reported by household respondents.
3 Individuals were considered to be employed formally when they worked with a registered enterprise with a written contract. Registered enterprises were defined for this survey as enterprises with either a 'Patente' from the Direction Générale des Impôts (DGI), an 'Immatriculation fiscale' (MEF/DGI) or a Professional identity card of the Ministère du Commerce et de l'Industrie (MCI). Information on registration status was collected as reported by household respondents. Self-employed and those working with family members were not considered formal employees.
4 Full time is based on the average number of hours worked per week in a usual week. Individuals are considered full time if they work 35 or more hours.

Data by sector of employment are presented in **24**. The predominant sectors of employment in both the baseline and the midterm surveys were agriculture and retail trade, but there is a suggestion of a slight shift out of agriculture and into retail over time. These differences should be interpreted very cautiously because the differences do not reach the 20 percent point threshold adopted and there was a moderate increase in the number of jobs classified as "other" from baseline to midterm. The surveys focused on these primary employment sectors: agriculture, textiles, and construction. As can be seen in Table 3.2.9, there were virtually no workers identified in the textile industry (approximately 2 percent) and very few workers in construction in both the baseline and the midterm surveys (about 6-7 percent), so examination for major changes is not possible, with the exception of the overall difference in median weekly earnings, which appears to have increased in both the textile and construction sector (1,000 HTC vs 1,500 HTC/week and 2,000 vs 3,000 HTC/week respectively).

The Agricultural sector is similar to the other sectors with respect to the change in median weekly earnings from baseline to midterm but the increase in median earnings is only from the Northern corridor (400 HTG to 1,000 HTG) which is consistent with the same indicator in Table 3.2.8 for a much larger sample size. The Cul-de-Sac corridor results of this table are, however, not consistent with Table 3.2.8 for which an increase, albeit not as large as with Northern, is noted. It is possible that workers in the retail trade and "other" categories which are a high proportion of Cul-de-Sac corridor are responsible for this discordance because their income is not captured in Table 3.2.9. Another possible explanation is that the median is not a

very sensitive measure of income for agriculture, since it was the same for all three corridors, and identical to the median for St. Marc and Cul-de-Sac at baseline.

There might be a difference between Cul-de-Sac and the other corridors in the agriculture sector with a shift down from working for registered enterprises and/or working for someone else to being self-employed whereas the inverse relationship is seems to be the case for the construction sector (note: there is a low number of individuals involved in Agriculture in Cul-de-Sac compared to the other corridors so these data might not reflect a real change).

Table 24 [3.1.3/3.1.4] Characteristics of Employment by Sector

Employment sectors and characteristics of employment in three focus sector								
	Corridor							
	St. Marc		**Northern**		**Cul-de-Sac**		**Total**	
Sector of Employment [3]	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Growing crops	44.9	34.9	32.2	19.8	8.8	6.0	19.3	11.7
Animal husbandry	1.1	1.3	0.5	0.8	0.4	0.5	0.5	0.6
Fishing	0.6	1.3	0.7	1.5	0.3	0.0	0.4	0.4
Food process-sing/ manufacturing	0.4	0.4	1.0	0.9	0.5	0.2	0.6	0.4
Manufacturing of garments/textiles	0.5	0.7	2.1	2.5	2.4	2.7	2.0	2.4
Other manufacturing	0.8	1.0	2.1	2.5	1.8	1.0	1.7	1.2
Human health and social work activities	1.7	1.3	1.4	2.0	2.6	2.7	2.2	2.4
Accommodation and food service activities	1.1	1.4	0.5	0.9	1.4	1.4	1.2	1.3
Administrative and support service	2.0	0.8	5.0	1.4	9.4	4.3	7.3	3.4
Construction	5.0	3.9	3.6	5.9	7.2	8.6	6.1	7.6
Education	5.5	5.7	6.2	4.2	7.6	4.7	7.0	4.7
Retail trade	24.2	32.3	28.0	37.2	31.6	39.9	29.6	38.6
Domestic service	0.9	1.2	1.6	2.0	3.0	4.1	2.4	3.4
Other	6.9	13.6	10.9	18.0	16.3	23.8	13.7	21.6
DK/NR/Missing	4.5	0.2	4.2	0.3	6.9	0.0	6.0	0.1
Economic-ally active individuals	1,311	1,544	939	1,653	1,017	1,564	3,267	4,761
Agriculture [1]								
Percent working for registered enterprise	4.9	3.1	3.0	1.9	50.6	2.4	17.6	2.5
Percent working under a written contract	4.8	0.8	0.7	0.3	1.1	1.3	2.5	0.8
Percent working for a family member	5.8	11.9	14.5	5.8	10.3	9.7	9.8	9.3
Percent working for someone else	13.4	9.3	17.2	9.7	43.7	7.2	23.3	8.6
Percent self-employed	80.8	78.8	68.2	84.5	46.0	82.1	66.9	81.7
Percent working on other job	15.9	23.8	18.9	22.9	5.8	24.4	13.9	23.8
Weighted mean number of hours worked per day	7.7	7.3	7.9	7.5	7.8	7.0	7.8	7.2

Employment sectors and characteristics of employment in three focus sector Corridor	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Weighted mean number of days worked per week	5.9	5.5	5.7	5.6	5.8	5.1	5.8	5.4
Weighted mean number of months worked per year	0.3	9.0	9.2	9.7	9.8	9.7	9.8	9.5
Weighted Median number of coworkers	0.0	3.0	0.0	3.0	0.0	5.0	0.0	4.0
Weighted Median weekly earnings (in HTG)	1,000	1,000	400	1,000	1,000	1,000	600	1,000
Percent formal employees[3]	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Percent full-time[4]	n/a	64.0	n/a	68.6	n/a	53.5	n/a	61.5
Textile[5]								
Percent working for a registered enterprise[2]	^	^	^	^	^	^	33.5	29.3
Percent working under a written contract	^	^	^	^	^	^	17.8	23.8
Percent working for a family member	^	^	^	^	^	^	4.2	1.7
Percent working for someone else	^	^	^	^	^	^	37.7	32.0
Percent self-employed	^	^	^	^	^	^	58.1	66.2
Percent working on other job	^	^	^	^	^	^	18.1	7.0
Average number of hours worked per day	^	^	^	^	^	^	8.8	7.9
Average number of days worked per week	^	^	^	^	^	^	5.1	5.9
Average number of months worked per year	^	^	^	^	^	^	8.4	9.9
Median number of coworkers	^	^	^	^	^	^	0.0	2.0
Median weekly earnings (in HTG)	^	^	^	^	^	^	1,000	1,500
Percent formal employees[3]	n/a	^	n/a	^	n/a	^	n/a	21.5
Percent full-time[4]	n/a	^	n/a	^	n/a	^	n/a	85.7
# individuals working in textile	6	10	20	45	24	42	50	97
Construction[6]								
Percent working for a registered enterprise[2]	21.2	12.0	^	17.6	23.3	21.1	23.3	20.1
Percent working under a written contract	20.3	8.8	^	10.3	14.3	16.3	17.5	15.0
Percent working for a family member	7.8	1.8	^	0.0	4.2	1.4	5.3	1.3
Percent working for someone else	59.4	65.9	^	79.0	49.3	80.0	51.6	79.0
Percent self-employed	32.8	32.3	^	21.0	46.5	18.6	43.1	19.7
Percent working on other job	23.1	41.3	^	22.0	20.8	13.5	20.5	16.2
Average number of hours worked per day	9.3	8.2	^	8.9	8.5	8.8	8.6	8.7

Employment sectors and characteristics of employment in three focus sector Corridor								
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Average number of days worked per week	5.5	5.6	^	5.4	5.0	5.7	5.1	5.6
Average number of months worked per year	7.6	6.5	^	7.4	7.1	7.5	7.2	7.4
Median number of coworkers	2.5	5.0	^	6.0	0.5	6.0	1.0	6.0
Median weekly earnings (in HTG)	2,250	3,000	^	2,000	2,000	3,000	2,000	3,000
Percent formal employees[3]	n/a	7.4	n/a	10.3	n/a	11.3	n/a	10.9
Percent full-time[4]	n/a	75.8	n/a	80.1	n/a	87.6	n/a	85.9
# individuals working in construction	66	60	34	100	73	135	173	295

Source: Haiti Baseline Survey, 2012, USAID Haiti 3DCs Midterm Assessment. 2016.

[1] Inludes economically active individuals that described their industry as growing crops.

[2] Registered enterprises were defined for this survey as enterprises with either a 'Patente' from the Direction Générale des Impôts (DGI), an 'Immatriculation fiscale' (MEF/DGI) or a Professional identity card of the Ministère du Commerce et de l'Industrie (MCI). Information on registration status was collected as reported by household respondents.

[3] Individuals were considered to be employed formally when they worked with a registered enterprise with a written contract. Registered enterprises were defined for this survey as enterprises with either a 'Patente' from the Direction Générale des Impôts (DGI), an 'Immatriculation fiscale' (MEF/DGI) or a Professional identity card of the Ministère du Commerce et de l'Industrie (MCI). Information on registration status was collected as reported by household respondents. Self-employed and those working with family members were not considered formal employees.

[4] Full time is based on the average number of hours worked per week in a usual week. Individuals are considered full time if they work 35 or more hours.

[5] Includes economically active individuals that described their industry as manufacturing of garments/textile.

[6] Includes economically active individuals that described their industry as construction.

Characteristics of household enterprises are presented in **Table 25** by type of enterprise and corridor.

These data show that there has been no change between baseline and midterm – nor are there any differences between corridors for enterprises that are related to (a) the sale of products and services to farmers (b) Agribusiness such as food processing, storage and sale (c) Construction (d) or textiles and garments.

There does appear to have been a change between baseline and midterm in farming enterprises in St. Marc and Northern (from 17.0 to 40.3 percent and 8.7 to 28.1 percent respectively).

There also appears to be a change during the same time period in households operating enterprises "other" than farming or those in the categories listed in the preceding paragraph. This is true for all three corridors with a change of 2.8 to 45.4 percent for St. Marc; 14.0 to 54.1 percent for Northern; and 13.3 to 57.5 percent for Cul-de-Sac resulting in an overall

change from 10.0 to 55.0 percent from baseline to midterm. The changes recorded between baseline and midterm in the farming and "other" enterprise categories is reflected in the change in the total number of households operating any type of enterprise: St. Marc increased from 21.3 to 72.0 percent, Northern from 14.0 to 72.4 percent and Cul-de-Sac from 23.3 to 73.8 percent between baseline and midterm.

These changes seem abnormally large to have occurred in a four year time frame and might be an artifact of the questionnaire and the way that the respondents interpreted the definition of "enterprise". Secondary analysis should be performed to validate these findings before dissemination these results.

Table 25 [3.1.11] Household Enterprises

Percent distribution of households by type of enterprise operated								
	Corridor							
	St. Marc		**Northern**		**Cul-de-Sac**		**Total**	
Sector of activity	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Agricultural enterprise	17.0	40.3	8.7	28.1	7.0	11.2	8.7	18.1
Sale of products and services to farmers	0.3	1.8	0.3	1.2	0.3	0.2	0.3	0.6
Boutique/input and equipment sales	0.0	0.6	0.1	1.2	0.2	0.2	0.1	0.2
Land preparation/tractor rental	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Other sale of products or services to farmers	0.0	1.0	0.0	0.0	0.1	0.0	0.1	0.4
DK/NR/Missing	0.3	0.0	0.2	0.0	0.1	0.0	0.1	0.0
Agribusiness - Food processing, distribution and sale	2.2	3.1	0.4	4.8	0.9	1.9	1.0	2.7
Processing	0.1	1.1	0.1	1.3	0.0	0.1	0.0	0.5
Packing	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0
Storage and transportation	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Sale	1.5	1.8	0.3	3.3	0.5	1.8	0.6	2.1
Other food processing, distribution and sale	0.0	0.2	0.1	0.2	0.1	0.0	0.1	0.1
DK/NR/Missing	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Construction	0.1	1.4	0.3	2.7	1.3	1.5	0.9	1.7
Construction of buildings, roads, railways, utility projects or other	0.0	0.1	0.2	0.1	0.3	0.0	0.3	0.1
Specialized construction activities (demolition, electrical, plumbing….)	0.0	0.1	0.0	0.7	0.3	0.4	0.2	0.4
Retailer of construction materials	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.1
Importer of construction materials	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engineering / architecture services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturer of blocks and bricks	0.1	0.0	0.0	0.3	0.1	0.1	0.1	0.1
Stone/sand/clay extraction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other construction	0.0	1.0	0.0	1.4	0.3	0.8	0.2	1.0
DK/NR/Missing	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0

Percent distribution of households by type of enterprise operated								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Sector of activity	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Textile/garment	0.2	1.3	0.4	3.5	1.3	2.8	0.9	2.7
Large scale manufacturing	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
Tailoring	0.0	0.8	0.2	2.3	0.3	1.7	0.3	1.7
Sewing, knitting, embroidery	0.0	0.2	0.0	0.1	0.3	0.4	0.2	0.3
Other textile/garment	0.0	0.2	0.0	1.0	0.1	0.8	0.1	0.7
DK/NR/Missing	0.2	0.0	0.1	0.0	0.4	0.0	0.3	0.0
Other sector	2.8	45.4	4.5	54.1	13.3	57.5	10.0	55.0
Total households operating any enterprise *(excluding "other sector")*	21.3	72.0	14.0	72.4	22.3	73.8	20.4	73.3
Number of households	1,200	910	1,199	938	1,179	911	3,578	2,759

Source: Haiti Baseline Survey 2012, USAID Haiti Mid-term Assessment 2016

Characteristics of household enterprises are presented in **Table 26** by type of enterprise and corridor. The data show that the number of households with enterprises at midterm is much larger than at baseline both in absolute terms and proportionate to the sample size. At baseline, only 751 households stated they had one or more enterprises while at midterm 2,290 households had enterprises.

For Agribusiness, such as food processing, distribution and sale enterprises, the sample sizes are very small so caution should be taken with interpreting these data. It appears, however, that the average revenue (in the week, month) preceding the survey is less at midterm than at baseline (4,440 HTG vs 2,171 HTG) and 13,352 HTG vs 5,961 HTG respectively). The average revenue in the last planting season increased between baseline and midterm (7,250 HTG vs 1,5475 HTG). These differences might be real but they also might be explained by the fact that the data collection period for the baseline was not the same as at midterm relative to the agricultural seasons. Manager training also appeared to have decreased between baseline (57.4 percent) and midterm (6.7 percent) but this might be due to project cycles because, frequently, the quantity of people trained is fewer in the first and last years of a five-year project. The percentage of the enterprises which are registered also went down between the two-time periods (14.0 vs 0.8 percent). There also appears to be less average revenue in Northern than in St. Marc at midterm. The average age of the enterprises across all corridors is higher at midterm than baseline by more than the four-year gap between the two surveys (but, again, sample sizes are small so these might not reflect real differences).

For agriculture enterprises, the average revenue at the last planting season increased from baseline to midterm in St. Marc (from 2,566 HTG to 16,875 HTG) and Northern (from 1,530

HTC to 12,468 HTG) but Cul-de-Sac did not change. Average revenue in St. Marc was higher than the other two corridors at baseline. There was in increase in the number of managers receiving training between baseline and midterm (increase of 40 and 34 percent for St. Marc and Northern respectively) and in Cul-de-Sac which had a > 500% increase (but, again, the sample size is particularly small for Cul-de-sac so this might not represent real change). The average age of the enterprises in the Northern corridor is higher at midterm than baseline by more than the four-year gap between the two surveys; it is the same for the other two corridors. There is no change in the percent of registered enterprises whereas the average number of full-time employees in the past 12 months decreased in St. Marc (8.2 to 6.2), increased in Cul-de-Sac (2.0 to 4.5) and did not change in Northern.

For all Enterprises, the average age of the enterprises is more or less the same at midterm as at baseline once adjusted for the four-year gap between surveys. The average revenue in the past week increased between baseline and midterm only in Northern (by 40%) whereas the other two corridors did not change. This contrasts with revenue during the past month for which St. Marc and Northern show decreases between the two-time periods (by 49 and 34 percent respectively) whereas Cul-de-Sac shows a 53 percent increase. The average number of full time employees appears to have increased in St. Marc but decreased in the other two corridors. The percent of managers that received training decreased in St. Marc but increased in Northern whereas Cul-de-Sac did not change between the two-time periods. Revenue during the past week was higher in St. Marc and Cul-de-Sac than in Northern but revenue the past month is higher in Cul-de-Sac than in the other two corridors. The data do not explain the incongruence between revenues the past week and past month.

Again, because baseline data were collected during a different time period than the midterm data relative to the agricultural seasons – which could influence revenue especially in the Agriculture and Ag-related enterprises - care should be taken when interpreting any documented changes.

Table 26 [3.1.12] Characteristics of Household Enterprises

Characteristics of household enterprises **Age, revenue, number of employees, business training and registration status of enterprises by sectors of focus**[1]								
	Corridor							
	St. Marc		**Northern**		**Cul-de-Sac**		**Total**	
Sector of activity	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Agribusiness - Food processing, distribution and sale								
Average age of enterprise (in years)	^	14.8	^	15.4	^	^	5.4	14.9
Average revenue in the last week (in HTG)	^	2,467	^	1,812	^	^	4,440	2,171

Characteristics of household enterprises

Age, revenue, number of employees, business training and registration status of enterprises by sectors of focus[1]

Sector of activity	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Average revenue in the last month (in HTG)	^	6,701	^	4,875	^	^	13,352	5,961
Average revenue in the last planting season (in HTG)	^	17,534	^	12,175	^	^	7,250	15,475
Average number of full-time employees in the last month	^	1.6	^	1.5	^	^	1.1	1.5
Average number of full-time employees in the last 12 months	n/a[4]	2.5	n/a	2.5	n/a	^	n/a	2.4
Manager received any business training	^	12.2	^	3.2	^	^	57.4	6.7
Registered enterprises [2]	^	0.0	^	0.0	^	^	14.0	0.8
Number of Food processing, distribution and sale Enterprises	**26**	**40**	**5**	**56**	**11**	**15**	**42**	**111**
Agriculture								
Average age of enterprise (in years)	13.7	20.3	16.7	25.7	16.5	23.1	15.5	22.7
Average revenue in the last week (in HTG)	2,979	3,349	529	1,538	1,762	4,307	1,843	2,726
Average revenue in the last month (in HTG)	17,550	7,047	14,782	4,444	1,671	7,979	8,576	6,132
Average revenue in the last planting season (in HTG)	2,566	16,875	1,530	12,468	13,894	11,677	8,485	14,574
Average number of full-time employees in the last 12 months	8.2	6.2	3.7	3.6	2.0	4.5	4.0	5.1
Manager received any business training	9.8	13.7	9.6	12.9	3.7	23.4	6.6	14.6
Registered enterprises [2]	3.4	0.9	1.9	0.4	1.2	1.3	2.0	0.8
Number of Agriculture Enterprises	**204**	**217**	**104**	**171**	**82**	**43**	**390**	**431**
All enterprises								
Average age of enterprise (in years)	10.8	13.5	12.0	13.7	9.0	10.4	9.6	12.6
Average revenue in the last week (in HTG)	2,636	3,069	1,385	2,316	2,407	3,007	2,301	2,777
Average revenue in the last month (in HTG)	14,833	7,600	11,175	7,350	6,138	9,379	8,074	8,063
Average revenue in the last planting season (in HTG)	n/a	16,956	n/a	12,404	n/a	13,712	n/a	14,726
Average number of full-time employees last month[3]	2.9	3.5	4.3	1.4	2.3	1.2	2.7	1.9
Manager received any business training	20.1	16.0	9.9	14.2	21.2	18.4	19.5	16.1
Registered enterprises [2]	5.5	4.6	2.8	4.0	12.1	4.9	9.9	4.5
Number of enterprises	**273**	**751**	**181**	**829**	**297**	**710**	**751**	**2,290**

Characteristics of household enterprises

Age, revenue, number of employees, business training and registration status of enterprises by sectors of focus[1]

Sector of activity	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term

Source: Baseline Haiti ZOI Survey 2012, USAID Haiti Mid-term Survey 2016

An enterprise was defined as an organization (with 1+ employees) engaged in the trade of goods, services, or both to customers, either for profit or not. It does not include self-employed or own-account workers. A household enterprise was recorded if a household member owned an enterprise within the last 12 months.

[1] Sample size sufficient for two focus sectors. Insufficient sample size (n < 30) for construction, textile and farmer product or service suppliers.

[2] A household enterprise was considered to be registered if it had a 'Patente' from the Direction Générale des Impôts (DGI).

[3] Excludes employees from the agricultural sector, which are measured for the last 12 months.

[4] N/A = Not Applicable and indicates that this question was not asked for this type of enterprise or was not asked at baseline

Types and amounts of household expenditures, presented in 2010 US dollars, are shown in **Table 27** There was a higher median monthly total expenditure (across all expenditure types) between baseline and midterm in St. Marc and the Northern corridor but not in Cul-de-Sac, which showed a slightly reduced median monthly expenditure. The same was true for average monthly expenditure in St. Marc and Northern, but in Cul-de-Sac, the average expenditure also showed a large increase, contrasting with the median expenditure decrease. The inconsistency in Cul-de-Sac suggests that a few large reported incomes may be skewing the average at midterm. Average monthly expenditures were higher than median monthly expenditures in all three corridors, which confirm a skewed distribution of incomes for all corridors for both baseline and midterm.

Based on the median, there were overall increases in some types of expenditure between baseline and midterm, such as with occasional expenses, utilities and education. Expenditures on food increased only in the Northern corridor, whereas usual expenses decreased only in Cul-de-Sac. Housing increased in Cul-de-Sac and very marginally in St. Marc.
Based on the mean, expenditures on utilities have increased but, based on the median, assets and housing have also increased over all the corridors, yet health care, education, and exceptional expenses have only increased in St. Marc and the Northern corridors. Sharp decreases in remittances and moderate increases in housing expenditures are also observed via the mean. Again, the data suggest a skewed distribution.

The most pronounced difference between baseline and midterm, though less than a 20 percent change, was the decrease in the number of households reported to be living in poverty in St. Marc and the Northern corridor; from 21.9 to 12.4 percent and from 26.8 to 14.6 percent respectively. Contrasting to St. Marc and Northern is Cul-de-Sac where the prevalence of

poverty did not change though it remains at a very low rate and is still half the rate as the other corridors. These data are consistent with the increases in inflation and the CPI over the past few years in Haiti.

Table 27 [3.1.8] Daily Per Capita Consumption by Corridor

Median and mean daily per capita consumption by type of expenditure, in 2010 USD								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Type of Expenditure	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
(MEDIAN, values in 2010 USD)								
Food[1]	1.27	1.43	0.97	1.24	1.52	1.56	1.33	1.47
Usual expenses[2]	0.60	0.59	0.50	0.50	0.93	0.72	0.76	0.67
Occasional expenses[3]	0.09	0.14	0.07	0.13	0.13	0.17	0.11	0.15
Utilities[4]	0.03	0.11	0.03	0.10	0.13	0.22	0.09	0.18
Health care[5]	0.00	0.04	0.00	0.05	0.00	0.04	0.00	0.04
Education[6]	0.13	0.23	0.13	0.23	0.31	0.40	0.21	0.34
Exceptional expenses[7]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Assets[8]	0.01	0.01	0.01	0.01	0.03	0.03	0.02	0.02
Remittances[9]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Housing	0.07	0.09	0.12	0.14	0.22	0.26	0.18	0.21
Median Total Expenditures (in 2010 USD)[10]	2.54	3.07	2.17	2.69	4.09	3.76	3.43	3.50
Type of Expenditure (MEAN, values in 2010 USD)								
Food[1]	1.60	1.65	1.16	1.45	1.81	1.72	1.63	1.66
Usual expenses[2]	0.92	0.81	0.75	0.73	1.40	1.04	1.19	0.96
Occasional expenses[3]	0.16	0.20	0.13	0.19	0.24	0.25	0.20	0.23
Utilities[4]	0.11	0.20	0.09	0.20	0.21	0.30	0.17	0.27
Health care[5]	0.05	0.11	0.07	0.12	0.13	0.10	0.11	0.11
Education[6]	0.28	0.37	0.25	0.37	0.59	0.57	0.47	0.51
Exceptional expenses[7]	0.10	0.14	0.09	0.13	0.20	0.20	0.16	0.18
Assets[8]	0.04	0.05	0.03	0.06	0.07	0.13	0.06	0.11
Remittances[9]	0.30	0.02	0.51	0.03	0.77	0.03	0.65	0.03
Housing	0.15	0.19	0.19	0.23	0.31	1.95	0.26	1.45
Mean Total Expenditures (in 2010 USD)[10]	3.29	3.56	2.65	3.30	4.74	6.02	4.06	5.26
Prevalence of Poverty[11]	21.9	12.4	26.8	14.6	5.2	6.7	12.4	8.7
Number of persons	5375	3813	6044	4455	5274	4087	16693	12355

For urban vs. rural expenditures (**Table 28**) , the same patterns are true, with modest increases in monthly expenditures in both categories. Urban expenditures are higher than rural expenditures, but, whereas most expenditure appears to have increased proportionately

between rural and urban, urban housing appears to have increased much more than rural when using the mean expenditure (with no increase in the rural areas).[34] When based on mean expenditures, there was a dramatic drop in remittances between baseline and midterm in both the rural and urban populations.

Disaggregation by rural and urban does not reveal major corridor-specific changes in the prevalence of poverty seen in Table 3.2.10a; moderate decreases are seen in both urban and rural settings.

Table 28 [3.1.8] Daily Per Capita Consumption by Urban/Rural Status

Median and average daily per capita consumption by type of expenditure, in 2010 USD						
	Rural		Urban		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Type of Expenditure (Median values in 2010 USD)						
Food[1]	1.03	1.25	1.49	1.55	1.33	1.47
Usual expenses[2]	0.57	0.46	0.85	0.73	0.76	0.67
Occasional expenses[3]	0.06	0.10	0.13	0.18	0.11	0.15
Utilities[4]	0.02	0.04	0.13	0.24	0.09	0.18
Health care[5]	0.00	0.04	0.00	0.04	0.00	0.04
Education[6]	0.11	0.18	0.29	0.40	0.21	0.34
Exceptional expenses[7]	0.00	0.00	0.00	0.00	0.00	0.00
Assets	0.01	0.01	0.03	0.03	0.02	0.02
Remittances[9]	0.00	0.00	0.00	0.00	0.00	0.00
Housing	0.08	0.06	0.23	0.28	0.18	0.21
Median Total Expenditures (in 2010 USD)[10]	2.29	2.50	3.96	3.83	3.43	3.50
Type of Expenditure (Average values in 2010 USD)						
Food[1]	1.32	1.47	1.76	1.73	1.63	1.66
Usual expenses[2]	0.89	0.72	1.31	1.04	1.19	0.96
Occasional expenses[3]	0.11	0.16	0.24	0.26	0.20	0.23
Utilities	0.06	0.11	0.22	0.33	0.17	0.27
Health care	0.06	0.11	0.13	0.10	0.11	0.11
Education	0.29	0.35	0.54	0.56	0.47	0.51
Exceptional expenses[7]	0.13	0.13	0.18	0.20	0.16	0.18
Assets[8]	0.03	0.04	0.07	0.14	0.06	0.11
Remittance	0.40	0.02	0.75	0.04	0.65	0.03

[34] Although it only takes a few unusually large reported daily rental expenditures to skew this indicator so caution should be used until this can be confirmed.

Median and average daily per capita consumption by type of expenditure, in 2010 USD	Rural		Urban		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Housing	0.11	0.11	0.33	1.89	0.26	1.45
Average Total Expenditures (in 2010 USD)[10]	2.86	3.04	4.57	6.00	4.06	5.26
Prevalence of Poverty[11]	25.0	21.9	7.1	4.4	12.4	8.7
Number of persons	7,183	4,960	9,510	7,395	16,693	12,355

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.\
[1] Includes a total of 58 different food items and meals consumed outside of the household.
[2] Includes soap and cleaning products, fuel for cooking and lighting, hygiene and cosmetic products, domestic work and transport.
[3] Includes small household items, clothing and entertainment.
[4] Includes water, telephone, electricity and internet.
[5] Includes consultations, drugs, hospitalization, examinations and medical care, glasses and prosthetics and treatment materials.
[6] Includes school fees, books and other supplies, school transport fees, school uniforms, shoes and other school clothing and other school-related expenses.
[7] Includes construction expenses, ceremonies, parties, taxes, fines, tax contraventions, ornaments, durable furniture and equipment's, vehicle purchases.
[8] Includes annual rental equivalent of 18 different durable goods.
[9] Includes remittances sent.
[10] Remittances, exceptional health expenditures, and other exceptional expenditures excluded (as recommended by Deaton & Zaidi, 2002)
[11] Percent of people living below the poverty line.

For the type of food expenditures (**Table 29**), Cul-de-Sac and the Northern corridor spend more on imported rice – but less on local rice – than in St. Marc. Although there are a few commodities for which expenditures have increased or decreased since baseline, none are notable. Also, using the sum of the average expenditures across all food groups, there has been no change since baseline in St. Marc and Northern and only a slight decrease in expenditures in Cul-de-Sac from $0.93 to $0. 79 per day per capita.

Expenditures on usual non-food items appear to have decreased from baseline to midterm for all items studied much more substantially than food items. This is true for charcoal, soap/cleaning products, hygienic products, and (especially) vehicle expenses in Cul-de-Sac whereas these same expenditures for the same commodities in the other two corridors slightly decreased or even remained the same. Using the sum of the average expenditures across all non-food groups, only slight decreases in expenditures between baseline and midterm are revealed in St. Marc ($0.70 to $0.52) and Northern ($0.57 to $0.49 whereas there was a larger decrease ($1.43 to $0.66) in Cul-de-Sac. We do not have an explanation for these declines in Cull de Sac. One hypothesis that might explain the decline in expenditures in Table 3.2.11 is based on the results presented in Tables 3.2.10a and 3.2.10b that show Cul-de-Sac (predominately urban) having somewhat higher expenses in housing, assets and utilities than the

other two corridors; it could be, therefore, that Cul-de-Sac (and urban) residents are reducing expenditures in some expense categories (Table 3.2.11) to compensate for higher expenses in other expense categories (Table 3.2.10a and 3.2.10b).
The data do show (in the previous tables), however, that poverty has decreased in the Northern (26.8 to 14.6 percent) and St. Marc (21.9 to 12.4 percent) corridors but not in Cul-de-Sac.

Table 29 [3.1.9] Itemized Daily Per Capita Food and Usual Non-Food Consumption

Average daily per capita consumption on specific items, in 2010 USD								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Food Expenditures (Average values for top 10 expenditures, in 2010 USD)								
Imported rice	0.05	0.07	0.16	0.14	0.18	0.14	0.16	0.13
Beans	0.16	0.14	0.12	0.12	0.16	0.15	0.15	0.14
Chicken/duck/goose	0.07	0.08	0.05	0.10	0.09	0.11	0.08	0.10
Oil, butter or lard	0.08	0.07	0.08	0.07	0.08	0.07	0.08	0.07
Local rice	0.14	0.14	0.05	0.02	0.07	0.04	0.07	0.05
Pasta	0.05	0.06	0.05	0.05	0.07	0.06	0.07	0.06
Sugar/honey	0.06	0.05	0.05	0.05	0.07	0.05	0.06	0.05
Bread	0.05	0.06	0.05	0.06	0.07	0.07	0.06	0.07
Corn	0.05	0.04	0.04	0.02	0.06	0.04	0.06	0.03
Milk	0.05	0.05	0.03	0.05	0.06	0.06	0.05	0.06
Usual non-food expenditures (Average values for top 5 expenditures, in 2010 USD)								
Charcoal	0.18	0.12	0.13	0.11	0.50	0.16	0.37	0.15
Transport – local	0.16	0.17	0.13	0.13	0.25	0.20	0.21	0.18
Soap and cleaning products	0.16	0.11	0.13	0.09	0.24	0.10	0.21	0.10
Hygiene –, deodorant, etc.	0.15	0.11	0.09	0.13	0.25	0.15	0.20	0.14
Other vehicle-related expenses .	**0.05**	**0.01**	**0.08**	**0.03**	**0.17**	**0.05**	0.20	0.14
Sum of average for all categories non-food expenditures	0.70	0.52	0.57	0.49	1.43	0.66	1.20	0.71
Number of persons	5,375	3,813	6,044	4,455	5,274	4,087	16,693	12,355
Percent who feel the cost of food as risen a lot or moderately in the last year.	n/a	92.7	n/a	96.1	n/a	99.0	n/a	97.6
Percent feeling transport costs have risen a lot or moderately in the last year.	n/a	61.9	n/a	52.9	n/a	51.7	n/a	53.1
Number of HHs	**n/a**	**914**	**n/a**	**949**	**n/a**	**924**	**n/a**	**2,787**

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016.

Table 30 reveals that the percentage of households with access to a bank account and the percentage that had taken a loan in the last twelve months were about the same between baseline and midterm. The proportion of households taking loans remained rather small at 13.1 and 15.6 percent for baseline and midterm, respectively. Within these loan-taking households, however, there are some changes between baseline and midterm and differences

between corridors. The average amount of the loan received is higher by at least 20 percent at the midterm than baseline for all corridors with the largest change being in the Northern corridor (from 13,818 to 20,423 HTG), Of all three corridors, Cul-de-Sac had the largest average loan value at both baseline and midterm (20,691 and 25,089HTG, respectively). At baseline, Cul-de-Sac's average loan value was more than 20 percent higher than Northern which was more than 20 percent higher than St. Marc.

The use of cooperatives and community savings/credit groups appear to have nearly doubled between baseline and midterm (12.4 vs 22.1 percent overall) as the source of the loan. Loan-taking households that took loans *to expand the family business* increased from 16.7 to 36.0 percent in the St. Marc Corridor from baseline to midterm, while in the same corridor loans for farm production appear to have decreased from 26.5 to 12.1 percent. The most dramatic difference between baseline and midterm is in the Cul-de-Sac corridor for households that took a loan for farm production being 24.6 percent at baseline and only 2.1 percent at midterm. There were more loans recorded for *other purposes,* especially in St. Marc and the Northern corridors between baseline and midterm, but this may be simply a shift from a large percentage of reasons being coded "unknown" at baseline. Loan repayment does not appear to have changed between baseline and midterm

Table 30 [3.1.10] Household's Access to Banking and Credit

Household's access to banking and credit								
	Corridor							
	St. Marc		**Northern**		**Cul-de-Sac**		**Total**	
	Base-line	Mid-term	Base-line	Mid-term	Baseline	Mid-term	Base-line	Mid-term
Access to Banking and Credit								
Percentage of households with access to a bank account	26.1	24.2	31.8	30.5	39.1	39.6	34.1	36.2
Percentage of households that received a credit or loan in the last 12 months	17.9	18.3	16.8	18.4	11.0	14.6	13.1	15.6
Number of households	1,200	899	1,199	942	1,179	918	3,578	2,759
Characteristics of Loan [1]								
Average amount of loan received (in HTG)	11,177	14,820	13,818	20,423	20,691	25,089	17,030	22,259
Percentage of households that have repaid the loan	40.0	33.4	40.9	27.6	41.5	37.8	41.1	35.4
Source of Loan [1]								
Friend/family member	51.6	46.8	30.3	39.7	42.3	43.7	40.9	43.4
Bank/finance company	15.3	14.9	30.8	26.6	21.5	14.7	22.8	16.9

Household's access to banking and credit

	St. Marc		Corridor Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Baseline	Mid-term	Base-line	Mid-term
Cooperative/community organization/ saving/ credit group	11.6	26.5	11.6	23.1	13.1	21.0	12.4	22.1
Local money lender	1.4	8.1	5.6	6.4	10.8	9.2	7.6	8.6
Employer	2.3	1.6	1.5	0.5	3.1	7.2	2.5	5.2
Individual from which purchase was made	0.9	0.0	0.0	2.0	1.5	0.0	1.0	0.4
Store from which purchase was made	0.0	1.0	0.5	0.6	0.8	0.0	0.6	0.3
Other	3.3	1.0	4.5	1.1	1.5	4.2	2.7	3.2
DK/NR/Missing	13.5	0.0	15.2	0.0	5.4	0.0	9.5	0.0
Total	100	100	100	100	100	100	100	100
Reasons for Taking Loan [2]								
To expand family business	16.7	36.0	38.4	47.2	29.2	42.8	29.3	42.6
For farm production	26.5	12.1	2.5	3.8	24.6	2.1	19.2	3.8
To buy food	11.2	11.5	8.1	6.7	10.0	7.2	9.7	7.7
To pay for school-related expenses	3.7	n/a	7.6	n/a	7.7	n/a	6.9	n/a
To purchase a domestic appliance	2.3	n/a	1.0	n/a	8.5	n/a	5.3	n/a
To pay off another debt	4.7	10.9	3.0	9.1	5.4	18.0	4.6	15.4
To purchase a vehicle	2.3	0.6	3.5	0.0	3.8	0.0	3.5	0.1
For house improvement or reparation	5.6	3.4	2.0	5.4	3.1	4.1	3.3	4.2
To celebrate a festival, wedding	4.2	3.5	3.5	3.8	2.3	3.6	3.0	3.6
To pay for health-related expenses	3.7	n/a	4.0	n/a	2.3	n/a	3.0	n/a
To purchase land	2.8	0	1.5	0.5	3.1	8.6	2.6	5.9
To go abroad	1.9	0	0.5	0.6	2.3	0.7	1.8	0.6
To purchase house	0.9	0.5	1.0	0.0	1.5	0.0	1.3	0.1
Other	6.0	21.4	2.0	23.0	6.9	13.0	5.5	16.0
DK/NR/Missing	21.9	0	23.7	0.0	12.3	0.0	17.1	0.0
HH that received credit or loan in last 12 months	215	172	198	173	130	138	543	485

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] Includes households that received a loan in the last 12 months

[2] Multiple responses possible at baseline. Only one response provided at midterm

The WEAI was administered fully with both men and women during the baseline survey but at midterm it was administered only with women and excluded the Autonomy in Production module. Without these components of WEAI at midterm, a comparison cannot be made to baseline. The results from the WEAI conducted at the midterm survey are shown in **Table 31**.

Haiti has relatively high domain and domain-specific indicator scores compared to many other developing countries. Input into productive decisions and control over the use of income is extremely high (both having 95 percent or greater with achieving adequacy) and ownership of assets, speaking in public, workload and leisure are somewhat high (all having >= 75 percent achieving adequacy). The areas which were relatively low and need reinforcement are purchase, sale or transfer of assets, access to and decisions on credit, and group membership.

The only WEAI indicator that appears to be substantially different between the corridors is purchase, sale or transfer of assets, for which St. Marc has a much larger proportion of women achieving adequacy than the other two corridors (77.1 percent for St. Marc versus 54.0 and 53.8 percent for the other two).

Although by a less pronounced difference, St. Marc also scored higher in ownership of Assets, whereas it scored less than the other two corridors relative to group membership.

Table 31 [NEW] Achievement of Adequacy on Women's Empowerment in Agriculture Index indicators[1]

Percent of women who achieve adequacy on the Women's Empowerment in Agriculture Index indicators, also known as the raw headcounts								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Production Domain[2]								
Input in productive decisions	n/a	92.6	n/a	94.6	n/a	97.0	n/a	95.0
Autonomy in production	n/a		n/a		n/a		n/a	
Resources Domain[3]								
Ownership of assets	n/a	91.4	n/a	83.4	n/a	81.6	n/a	85.2
Purchase, sale or transfer of assets	n/a	77.1	n/a	54.0	n/a	53.8	n/a	61.2
Access to and decisions on credit	n/a	58.1	n/a	49.8	n/a	57.2	n/a	55.4
Income Domain[4]								
Control over use of income	n/a	97.0	n/a	99.5	n/a	100.0	n/a	98.9
Leadership Domain[5]								
Group member	n/a	46.5	n/a	56.8	n/a	59.1	n/a	54.6
Speaking in public	n/a	82.6	n/a	81.9	n/a	75.0	n/a	79.3
Time Domain[6]								
Workload	n/a	71.1	n/a	76.7	n/a	76.3	n/a	74.8
Leisure	n/a	86.4	n/a	88.2	n/a	78.8	n/a	83.8
Number of primary adult female decision makers	n/a	248	n/a	179	n/a	62	n/a	489

Percent of women who achieve adequacy on the Women's Empowerment in Agriculture Index indicators, also known as the raw headcounts								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] The midterm survey includes an abridged version of the empowerment instrument, and the midterm survey did not include information to measure women's autonomy in agricultural production. Due to this omission, censored headcounts and the 5DE cannot be calculated.

[2] Sole or joint decision making over food and cash crop farming, livestock, and fisheries, and autonomy in agricultural production

[3] Ownership, access to, and decision making power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit

[4] Sole or joint control over income and expenditures

[5] Membership in economic or social groups and comfort in speaking in public

[6] Allocation of time for productive & domestic tasks and satisfaction with the available time for leisure activities

3.2.3 SECURITY THROUGH AGRICULTURE[35]

This section of the survey addressed different indicators related to the production of seasonal crops that USAID and the GOH are supporting within the three development corridors. These indicators include yield, inputs, gross margins, processing, losses, storage and others. They are disaggregated by the planting and harvest seasons and development corridors. The estimates for key indicators from the baseline survey in 2012 and the estimates from the same indicators from the 2016 midterm survey are shown in Tables 3.2.14 through 3.2.30.

Table 32 provides information about the percentage of farmers that planted each of 19 different seasonal crops during the primary rainy season: comparing baseline to midterm estimates in the three corridors. In the St. Marc corridor, only the cultivation of sweet potatoes increased from 8.6 to 28.5 percent from baseline to midterm. In the Northern corridor, cultivation of four crops increased; corn (from 44.6 to 66.5 percent), beans (from 23.2 to 45.9 percent), sweet potatoes (from 21.0 to 42.0 percent), and sweet cassava (from 26.6 to 48.8 percent). In Cul-de-Sac, beans and bananas increased from 36.0 to 68.6 percent and from 13.2 to 33.5 percent, respectively. Because the corridor -specific sample size is

[35] For the agricultural component of this assessment, there is a notable difference in the number of households in the baseline sample compared to midterm sample. This is due, for the most part, to the different sampling methods used and the questionnaire itself. When a rural household was approached, the first question asked was if that household was directly engaged in farming. If the household was not farming, no more questions were asked. The baseline used a random walk, quota sampling method so non-farming households were skipped and the interviewers continued until they found the desired number of farming households in that cluster. The midterm survey used a probability sampling method at the household selection stage so the non-farming households were included thereby reducing the number of farming households in some clusters. Overall the clusters, about 30% of the households in the sample were non-farming households. This also affected the sample size, at midterm, for WEAI.

relatively small at either midterm or baseline for these comparisons, the results should be interpreted cautiously.

There are also some between corridor differences. Rice is cultivated more in St. Marc than the other corridors (both at baseline and midterm). Sorghum and millet are grown more in Cul-de-Sac than in the Northern corridor at midterm (34.9 vs 1.3 percent). Beans are grown more in Cul-de-Sac than the other two corridors (68.6 vs 43.2 & 45.9 percent). Pigeon peas are grown more in the Northern corridor than in St. Marc (50.1 vs 30.0 percent). Yams, cassava, sweet cassava, and bananas are all grown by at least 20 percent more farmers in the northern corridor than the other two corridors.

Both Northern and Cul-de-Sac show an increase in the mean number of crops planted per household; from 2.84 to 3.59 for Northern and from 2.61 to 3.14 for Cul-de-Sac. Northern corridor plants more crops per household than St. Marc being 3.59 vs 2.78 respectively. There appears to be a difference in the size of the plots between baseline and midterm; overall 0.50 hectares at baseline vs 0.24 hectares at midterm.

Table 32 *[3.10.1] Seasonal Crop Cultivation During the Primary Rainy Season*

Crops planted by households								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Primary Rainy Season	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percent of households								
Planted crops during season[1]	71.7	99.4	56.2	100.0	68.0	98.6	66.0	99.2
Did not plant crops during season	28.2	0.6	43.4	0.0	32.0	1.4	33.9	0.8
DK/Missing	0.1	0.0	0.4	0.0	0.0	0.0	0.2	0.0
Total	100	100	100	100	100	100	100	100
Number of households	875	386	475	217	200	80	1,550	683
Percent of households that planted crops in primary rainy season								
Corn	51.5	62.1	44.6	65.5	66.9	62.2	55.8	63.0
Rice	27.1	36.5	15.0	7.7	1.5	5.1	14.3	17.0
Sorghum/Millet	25.8	22.4	0.0	1.3	41.2	34.9	25.6	21.9
Beans (butter, white, black, red,..)	31.6	43.2	23.2	45.9	36.0	68.6	31.3	53.8
Pigeon peas	33.7	30.0	33.7	50.1	41.2	42.2	36.6	39.8
Peanut	0.2	1.2	7.5	22.1	0.0	18.3	1.9	13.1
Cabbage	3.4	4.3	0.0	0.0	3.7	3.2	2.7	2.8
Lettuce	0.0	0.2	0.0	0.0	0.0	1.1	0.0	0.5
Spinach, purslane	1.0	3.2	0.8	5.2	2.2	17.5	1.4	9.3
Tomato	2.7	15.4	0.8	3.3	3.7	5.3	2.6	8.4
Bell pepper	0.0	8.7	0.0	4.4	0.7	7.5	0.3	7.1
Leek (including shallots)	1.0	1.0	0.0	0.0	19.1	5.2	7.8	2.4
Potato	0.6	1.4	0.0	0.0	8.1	3.7	3.4	1.9

Crops planted by households	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Primary Rainy Season	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Sweet potato	8.6	28.5	21.0	42.0	14.7	27.0	13.9	31.3
Yam, masoko	2.9	10.4	30.0	34.1	0.0	10.4	8.2	16.4
Sweet cassava	8.8	24.0	26.6	48.8	2.9	11.7	10.8	25.5
Cassava	4.0	7.4	23.6	28.9	2.2	7.0	8.0	12.7
Sugarcane	2.1	5.1	9.4	12.5	0.0	10.9	3.0	9.3
Banana & Plantain	33.0	34.5	47.2	54.9	13.2	33.5	28.7	39.3
Number of households	627	386	267	217	136	80	1,030	683
Average number of crops per household*	2.37	2.78	2.83	3.59	2.61	3.14	2.58	3.13
Average number of plots per household*	2.30	1.61	1.77	1.41	1.80	1.46	1.98	1.50
Average area of plot (hectares)	0.50	0.35	0.53	0.20	0.49	0.14	0.50	0.24

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

*For all households that planted crops in list A or B.

During the dry season (generally between October and February), about one-third of households sold or intended to sell the crops of interest. More households sold or intended to sell these crops in the St. Marc (37 percent) and Cul-de-Sac (35 percent) Corridors compared to the Northern Corridor (24 percent). Beans, corn, pigeon peas, bananas and plantains were the most common crops that households sold or intended to sell during the dry season.

[1] at baseline, the instrument included the language "sold(did not sell) or intend(ed) to sell crops during the season" as did tables in 3.10.1 in the Baseline report. On the next page of the baseline instrument , that language had changed to "planted crops". In the midterm questionnaire, there was only "Planted crops".

Table 33 provides information about the percentage of farmers that planted each of 19 different seasonal crops during the dry season. Cultivation of beans and pigeon peas increased from baseline to midterm by more than 20 percentage points in all three corridors; this is consistent with the results both children's and women's diet diversity (tables 3.2.5 and 2.3.6) showing substantial increases in the consumption of legumes in all three corridors. Sweet cassava increased in both St. Marc and Northern corridors by 22.3 and 23.5 percentage points respectively. Sweet potatoes and yams increased only in the Northern Corridor (32.8 and 23.5 percentage points respectively) whereas peanuts, spinach and bananas increased only in Cul-de-Sac between baseline and midterm.

Between corridor differences are with rice being cultivated mostly in St. Marc. Sorghum and millet are grown much less in Northern than in Cul-de-Sac or St. Marc during the dry season. Beans, peanuts and spinach are grown more in Cul-de-Sac than the other two corridors whereas sweet potatoes, yams, cassava and bananas are grown more in the Northern corridor than in the other two.

There are neither changes between baseline and midterm nor differences between corridors per the mean number of crops or plots per household. There may be a difference in the size of

the plots in hectares between baseline and midterm (overall, 0.48 hectares at baseline vs 0.28 hectares at midterm).

Table 33 ***[3.10.2] Seasonal Crop Cultivation During the Dry Season***

Crops planted by households (Dry Season)	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percent of households								
Planted crops during season[1]	36.8	99.5	23.8	100	35.5	100	32.7	99.8
Did not plant crops during season	63.2	0.5	75.4	0.0	64.5	0.0	67.1	0.2
DK/Missing	0.0	0.0	0.8	0	0.0	0	0.2	0
Total	100	100	100	100	100	100	100	100
Number of households	875	177	475	143	200	40	1,550	360
Percent of households that planted crops in dry season								
Corn	23.6	67.5	31.9	65.0	31.0	74.2	28.3	69.3
Ric	19.6	22.5	5.3	6.7	0.0	0.0	8.7	9.2
Sorghum/Millet	12.4	28.0	0.0	2.1	29.6	38.1	16.9	23.8
Beans (butter, white, black, red,..)	23.0	50.8	25.7	48.1	40.9	73.1	30.8	58.4
Pigeon peas	13.4	42.8	21.2	54.2	26.8	54.8	20.5	50.8
Peanut	0.0	1.4	8.0	10.2	0.0	26.6	1.6	13.5
Cabbage	4.7	5.0	0.0	0.0	0.0	4.1	1.8	3.2
Lettuce	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.2
Spinach, purslane	0.0	4.1	0.9	5.9	5.6	26.3	2.5	13.0
Tomato	5.3	16.3	0.0	3.7	4.2	7.6	3.8	9.2
Bell pepper	0.0	5.8	0.0	4.0	0.0	9.8	0.0	6.8
Leek (including shallots)	0.0	2.0	0.0	0.0	15.5	7.1	6.3	3.3
Potato	0.3	2.5	0.0	0.0	5.6	3.0	2.4	1.9
Sweet potato	10.9	24.0	20.4	53.1	12.7	25.5	13.6	33.4
Yam, masoko	0.3	13.6	18.6	42.1	1.4	5.0	4.5	19.1
Sweet cassava	5.9	28.2	23.9	47.4	1.4	12.0	7.7	27.9
Cassava	2.2	11.2	13.3	30.2	0.0	8.4	3.6	16.0
Sugarcane	2.2	6.9	11.5	14.0	0.0	13.6	3.2	11.6
Banana & Plantain	32.0	49.6	48.7	66.2	16.9	43.1	29.2	52.2
Number of households	322	177.0	113	143	71	40	506	360
Average number of crops per household*	1.56	1.69	2.29	2.25	1.92	1.74	1.85	1.88
Average number of plots per household*	1.68	1.38	1.55	1.37	1.41	1.22	1.54	1.32
Average area of plot (hectares)	0.48	0.37	0.50	0.29	0.47	0.18	0.48	0.28

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
*For all households that sold or intended to sell crop.
During the secondary rainy season (generally between July and December), approximately 38 percent of households sold or intended to sell the crops of interest. More households sold or intended to sell these crops in the Cul-de-Sac Corridor (43 percent) compared to the St. Marc (35 percent) and Northern (34 percent) Corridors. Corn, beans, bananas and plantains were the most common crops that households sold or intended to sell during this season. In the Cul-de-Sac Corridor, more households sold or intended to sell sorghum/millet and pigeon peas, and fewer households sold or intended to sell bananas and plantains, compared to the St. Marc and Northern Corridors.

Table 34 provides information about the percentage of farmers that planted each of 19 different seasonal crops during the secondary rainy season. Baseline and midterm estimates are

compared for St. Marc and Northern corridors; the sample size at midterm for Cul-de-Sac is too small for comparisons. Corn, pigeon peas, sweet potatoes and sweet cassava cultivation increased substantially in both the St. Marc and Northern corridors while bean cultivation increased only in St. Marc. The increase in St. Marc was 34.5 percentage points for corn and approximately 20-21 percentage points for the other four crops. In the Northern corridor, corn and sweet potato cultivation increased by 28 percentage points and pigeon peas and sweet cassava by 42 percentage points. Peanuts and cassava increased only in the Northern corridor, by 22.4 and 22.1 percentage points respectively, whereas bananas increased by 22.9 percentage points only in St. Marc.

Between corridor differences are with rice being cultivated in the secondary rainy season more, at midterm, in St. Marc than in Northern. Pigeon peas, peanuts, yams and sweet cassava are grown more in Northern than in St. Marc, with all of these differences in the 20-percentage point range.

There are changes neither from baseline to midterm nor differences between corridors using the mean number of crops or plots per household. Unlike the other two corridors, there are not likely any differences in the size of the plots between baseline and midterm for those farmers planting during the secondary rainy season.

Table 34 [3.10.3] Seasonal Crop Cultivation During the Secondary Rainy Season

Crops planted by households (secondary rainy season)	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percent of households								
Planted crops during season[1]	35.3	67.0	34.3	86.3	42.5	^	37.7	71.9
Did not plant crops during season	64.7	33.0	65.7	13.7	57.5	^	62.3	28.1
DK/Missing	0.0	0.0	0.0	0.0	0.0	^	0.0	0.0
Total	100.0	100.0	100.0	100	100.0	^	100.0	100
Number of households	875	129	475	125	200	28	1,550	282
Percent of households that planted crops in secondary rainy season								
Corn	26.5	61.0	33.7	62.2	40.0	^	34.1	59.4
Rice	23.3	33.9	11.7	9.2	0.0	^	10.5	13.4
Sorghum/Millet	11.7	17.3	0.6	2.3	27.1	^	15.4	21.1
Beans (butter, white, black, red.)	24.9	54.4	30.1	44.4	28.2	^	27.6	55.9
Pigeon peas	13.6	34.8	14.1	55.6	23.5	^	17.9	47.2
Peanut	1.6	0.6	3.7	26.1	0.0	^	1.5	17.0
Cabbage	4.5	5.6	0.6	0.0	1.2	^	2.1	3.7
Lettuce	0.0	0.7	0.0	0.0	0.0	^	0.0	0.2
Spinach, purslane	0.7	2.3	0.6	4.5	4.7	^	2.4	11.8
Tomato	1.9	16.9	0.0	3.5	3.5	^	2.1	10.0
Bell pepper	0.0	6.6	0.0	4.5	0.0	^	0.0	7.2

Crops planted by households (secondary rainy season)	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Leek (including shallots)	0.0	0.7	0.0	0.0	10.6	^	4.5	3.9
Potato	0.0	2.2	0.0	0.0	5.9	^	2.5	2.1
Sweet potato	9.1	30.6	13.5	41.1	9.4	^	10.3	33.8
Yam, masoko	1.3	13.3	16.6	35.1	0.0	^	4.6	17.7
Sweet cassava	8.4	29.8	12.9	55.5	4.7	^	8.0	32.5
Cassava	2.6	12.0	6.8	28.8	3.5	^	4.1	16.8
Sugarcane	3.9	9.3	9.2	9.8	0.0	^	3.6	11.7
Banana & Plantain	28.8	51.7	42.3	54.4	11.8	^	25.0	52.9
Number of households	309	129	163	125	85	28	557	282
Average number of crops per household*	1.63	1.95	1.96	1.91	1.76	1.73	1.77	1.86
Average number of plots per household*	1.66	1.50	1.37	1.26	1.39	1.23	1.47	1.32
Average area of plot (hectares)	0.51	0.34	0.51	0.38	0.35	0.29	0.45	0.34

Table 35 provides information about the percentage of farmers that planted one or more of 19 "other" crop/crop categories (during any season) and compares baseline to midterm estimates in the three corridors. There is less change between the baseline and midterm – and less crops with a difference between corridors – than with the crops shown in tables 32 through 34. The sample size in the Cul-de-Sac corridor are small for this group of crops so any comparison with that corridor – over time or with other corridors - should be interpreted cautiously as it might not reflect a real change. Lima bean cultivation increased only in St. Marc (from 7.5 to 28.8 percent). Breadfruit increased only in Cul-de-Sac (from 5.4 to 33.5 percent). Okra increased in both St. Marc and Northern by 19.6 and 21.8 percentage points respectively. Pumpkin, zucchini and squash increased in all three corridors by a magnitude ranging from 25.8 to 28.9 percentage points. The only difference between corridors is with bread fruit, which is grown more in Northern (33.5 percent vs 13.0 and 16.5 percent in the other two corridors).

Table 35 [3.10.4]: Cultivation of Other Seasonal Crops

Other crops grown and/or sold in rural households	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percent of households that planted "other' crops								
Lima beans	7.5	28.8	1.1	10.4	11.7	19.2	7.3	20.4
Blackeye peas	5.2	23.1	20.5	24.1	8.1	12.8	10.6	19.3
Eggplant	7.8	17.4	1.3	3.4	1.0	1.0	3.4	7.4
Watermelon	4.9	18.7	0.7	0.8	1.0	2.6	2.2	7.9
Pumpkin, zucchini, squash	6.5	34.1	4.7	33.6	4.6	30.4	5.3	32.5
Okra	12.1	31.7	8.2	30.0	14.7	24.0	12.0	28.2
Carrot and turnip	0.2	0.6	0.0	0.4	2.5	7.6	1.0	3.3

Other crops grown and/or sold in rural households								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Red beetroot	0.1	0.6	0.0	0.0	1.0	4.5	0.4	2.0
Onions (including shallots)	1.7	10.9	0.0	0.0	0.5	2.3	0.8	4.8
Malanga, Taro	3.5	11.0	14.0	17.8	1.0	9.5	5.5	12.1
Pineapple	0.1	0.5	0.4	13.2	0.0	0.0	0.2	3.4
Breadfruit	4.7	13.0	5.4	33.5	3.6	16.5	4.5	19.4
Lemon & line	1.6	13.4	1.1	10.5	2.5	4.4	1.8	9.1
Grapefruit	0.2	6.1	1.9	12.1	3.6	5.2	2.0	7.2
Tangerines, mandarines, and Clementines	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cashew	0.0	0.0	0.9	13.0	0.0	0.0	0.2	3.2
Pepper (capsicum spp.)	6.5	0.2	3.0	0.0	4.1	1.0	4.6	0.5
Papaya	5.7	17.5	3.0	19.7	4.1	12.2	4.3	15.9
Other (milton, melon, pistachio, etc.)	4.6	1.7	4.1	4.5	5.6	4.4	4.8	3.5
Number of households	875	409	475	224	200	87	1,550	720

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

Table 36 provides information on six agricultural indicators for 13 (non-tree) crops. Of these six indicators, one is for pre-harvest losses and two are for post-harvest losses. The average cost of inputs and average yield are presented to help interpret the that average gross margins by crop. The baseline report presented only a single table which combined these indicators across all seasons. This presentation is useful for crops, which are grown and/or harvested similarly in all three seasons, but is less useful for crops grown and/or harvested in predominantly one (or two) seasons. This is particularly true for sugarcane that is grown in the wet season and harvested in the dry season. Yams, sweet potatoes, cassava and bananas are not season-specific. Thus, the interpretation of changes identified in this table (3.2.18) should be made with caution.

The average percent of total production lost prior to harvesting (Column A) decreased from baseline to midterm for corn, rice, pigeon peas, peanuts, yams, sweet cassava and bananas. These decreases in pre-harvest losses range from 21 to 37 percentage points. There are no apparent changes in post- harvest losses (Columns E and F) although for many crops the values were missing and/or the number of observations too small for comparison.

The average cost across all types of inputs decreased for all crops except peanuts and sugarcane. The range of magnitude of the reduction is from a low of 20 percent (sugarcane and tomatoes) to highs that exceed 70 percent reduction (rice, pigeon peas and bananas). Some of this reduction in input costs could be related to the smaller average size of the household plots that is described in the previous sections. Other factors which might have influenced this are unknown.

The average yields also decreased for all crops except for peanuts. The range of magnitude of the reduction in yield is from a low of 20 percent (sweet potatoes) to highs that exceed 70 percent (sorghum, yams, cassava and bananas).

The average gross margin decreased for some crops and increased for others. Among those that decreased are sorghum, yams, cassava and bananas. Those that increased are corn, beans, pigeon peas, peanuts, sweet potatoes, sweet cassava and sugarcane. Tomatoes show a negative gross margin at baseline and have a small sample size so it is highly unlikely that the increase seen at midterm is real. There was no change in the gross margin for rice.

Table 36 *[3.10.5] Agricultural Inputs, Yields, Losses, and Gross Margins by Crop* (3 Seasons Combined)

Agricultural inputs, yields, losses, and gross margins by crop (3 seasons combined)

Input costs, yield, gross margin and losses per crop

Crop	Average percent of total production*** lost prior to harvesting	Average Total purchased input cost* per hectare	Average Yield** per hectare	Average gross margin* per hectare	Average percent of total yield lost due to processing	Average percent post-harvest loss *excluding processing losses;* of those with losses	Number of observations (for Inputs, Yield, Gross Margins)
	A	**B**	**C**	**D**	**E**	**F**	
BASELINE (THREE SEASONS COMBINED)							
Corn	62%	$997	2,183	$400	11%	17%	835
Rice	58%	$1,660	3,561	$1,370	24%	19%	371
Sorghum/Millet	51%	$707	3,16	$957	12%	19%	337
Beans (butter, white, black, red)	57%	$1,279	1,238	$181	18%	20%	589
Pigeon peas	63%	$853	1,121	$237	17%	22%	524
Peanut ****	64%	$353	497	$127	13%	^	41
Tomato ****	44%	$1,508	7,293	$30	n/a	25%	53
Sweet potato	51%	$982	2,696	$279	n/a	22%	254
Yam, masoko	73%	$1,247	23,727	$1,030	n/a	^	151
Sweet cassava	64%	$625	2,563	$464	n/a	^	227
Cassava	48%	$390	5,569	$1,651	n/a	^	135
Sugarcane ****	52%	$502	22,620	$129	n/a	0%	82
Banana & Plantain	53%	$1,129	9,193	$3,389	n/a	17%	683
MIDTERM (THREE SEASONS COMBINED)							
Corn	35%	$344	1495	$575	24%	24%	578
Rice	37%	$473	1481	$1,512	17%	7%	304

Agricultural inputs, yields, losses, and gross margins by crop (3 seasons combined)

Input costs, yield, gross margin and losses per crop

Crop	Average percent of total production*** lost prior to harvesting A	Average Total purchased input cost* per hectare B	Average Yield** per hectare C	Average gross margin* per hectare D	Average percent of total yield lost due to processing E	Average percent post-harvest loss *excluding processing losses;* of those with losses F	Number of observations (for Inputs, Yield, Gross Margins)
Sorghum/Millet	35%	$274	734	$474	26%	27%	206
Beans (butter, white, black, red,..)	42%	$613	810	$897	26%	16%	384
Pigeon peas	32%	$224	595	$456	34%	^	577
Peanut ****	27%	$330	537	$1,229	5%	^	67
Tomato ****	29%	$1,199	2464	$1,250	0%	8%	61
Sweet potato	39%	$424	2119	$1,071	10%	19%	261
Yam, masoko	43%	$454	6060	$686	0%	^	245
Sweet cassava	34%	$244	1679	$1,202	17%	^	382
Cassava	30%	$142	1238	$397	67%	^	175
Sugarcane	38%	$601	441	$195	0%	^	114
Banana & Plantain	21%	$233	212	$2,443	41%	24%	732

Table 37 is similar to table 3.2.20A but disaggregates the indicators by season. This table was not included in the baseline report so only midterm values are shown. Not all crops are shown for all three seasons because some crops are not grown by the surveyed households in that season. The survey was not designed to compare these indicators by agricultural season so pairwise comparisons were not done. Nonetheless, this table is even more important than table 3.2.18A because one expects input costs, yields and gross margins to vary by season. Some crops vary considerably by season and others do not. Several factors could influence this variation such as (a) whether or not the crop has more than one harvest period (b) whether or not the crop can be planted and harvested at any time - or at multiple times - during the year (c) the micro climates of different regions within Haiti that influence what is cultivated and when a particular crop is typically planted and harvested in that region.

Because it is at harvest when yields are determined and when gross margins can be calculated, using a harvest calendar for each crop and how that varies by geographic region is probably a better time frame to use than the dry and rainy seasons. For example, this table suggests that sugarcane has the highest yields when harvested in the dry period (which is when it is typically

harvested) but some farmers are also attributing it to the rainy season which could be because they planted in that season.

Table 37 [New] Agricultural inputs, yields, losses, and gross margins by crop and season

Input costs, yield, gross margin and losses per crop (Midterm only)	Average percent of total productio n*** lost prior to harvesting **A**	Average Total purchased input cost* per hectare **B**	Average Yield** per hectare **C**	Average gross margin* per hectare **D**	Average percent of total yield lost due to processing **E**	Average percent post-harvest loss *excluding processing losses;* of those with losses **F**	Number of observations (for Inputs, Yield, Gross Margins)
MIDTERM PRIMARY RAINY SEASON ONLY							
Corn	34%	$340	1470	$530	25%	25%	512
Rice	36%	$567	1705	$1,532	15%	6%	219
Sorghum/Millet	35%	$367	894	$453	19%	23%	137
Beans (butter, white, black, red,..)	43%	$696	730	$852	32%	18%	263
Pigeon peas	32%	$413	716	$352	14%	28%	293
Peanut ****	36%	$531	425	$1,047	14%	9%	50
Tomato ****	34%	$782	8251	$2,517	0%	8%	43
Sweet potato ****	38%	$471	2582	$1,111	10%	18%	185
Yam, masoko	38%	$795	2739	$171	0%	2%	122
Sweet cassava	34%	$378	1949	$1,543	21%	15%	197
Cassava ****	14%	$254	264	$420	0%	35%	71
Sugarcane ****	45%	$448	1290	$407	0%	0%	45
Banana & Plantain	23%	$433	2094	$1,646	41%	33%	313
MIDTERM - DRY SEASON ONLY							
Corn ****	51%	$345	2,320	$910	16%	18%	38
Rice ****	31%	$166	2,465	$1,258	44%	7%	64
Sorghum/Millet ****	39%	$60	522	$573	38%	34%	64
Beans (butter, white, black, red,..) ****	49%	$421	1,780	$1,323	18%	17%	39
Pigeon peas	33%	$25	629	$266	56%	23%	182
Sweet potato ****	32%	$263	754	$378	0%	28%	30
Yam, masoko	40%	$104	7,885	$1,201	0%	21%	107
Sweet cassava	35%	$88	1,609	$1,535	0%	50%	109
Cassava ****	29%	$53	1,251	$518	67%	0%	60
Sugarcane ****	5%	$1,093	10,115	$384	0%	0%	39
Banana & Plantain	16%	$87	3,216	$3,162	0%	31%	273
MIDTERM - SECONDARY RAINY SEASON ONLY							
Corn ****	^	^	^	^	^	^	29
Rice ****	47%	$463	1177	$1,820	20%	11%	46

Input costs, yield, gross margin and losses per crop (Midterm only)

	Average percent of total production*** lost prior to harvesting **A**	Average Total purchased input cost* per hectare **B**	Average Yield** per hectare **C**	Average gross margin* per hectare **D**	Average percent of total yield lost due to processing **E**	Average percent post-harvest loss *excluding processing losses;* of those with losses **F**	Number of observations (for Inputs, Yield, Gross Margins)
Beans (butter, white, black, red,..) ****	37%	$417	554	$725	15%	12%	83
Pigeon peas	30%	$30	556	$708	31%	55%	112
Tomato ****	^	^	^	^	^	^	20
Sweet potato ****	37%	$268	1109	$1,048	0%	17%	49
Yam, masoko ****	39%	$48	18260	$1,516	0%	13%	52
Sweet cassava ****	35%	$97	1764	$728	17%	19%	83
Cassava ****	33%	$47	1735	$285	0%	26%	44
Sugarcane ****	56%	$137	484	$291	0%	0%	34
Banana & Plantain	25%	$74	2961	$1,846	0%	13%	184

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
*Input costs and gross margin are measured in U.S. dollars (conversion rate: 1 Haitian gourde = 0.02353 U.S. dollars)
**Yield is measured in kilograms
***Total production = amount lost prior to harvesting plus amount harvested
**** the sample size is small (< 100) so the measured change between baseline and midterm might not be statistically significant if tested

Table 38 presents Input costs for 13 different crops by totals and costs per six different cost categories. Only comparisons between baseline and midterm are made for these indicators. The baseline report presented only a single table which combined these input cost indicators across all seasons.

The average total purchased input costs per hectare decreased substantially between baseline and midterm for nearly all crops; the exceptions being tomatoes with no change and sugarcane for which the input costs did not change or marginally increased. Cost reductions for the other crops ranged in magnitude from a low of 48 percent for beans to a high of 79 percent for bananas. The categories of input costs which made up the bulk of the total input costs at both baseline and midterm are seeds (column B), labor and equipment for land preparation (column E) and all labor other than for land preparation (column G). In all three of these categories (B, E and G), input costs per hectare decreased between baseline and midterm for most of the crops.

The reduction in costs for seeds varied by crop with a range in magnitude from 40 percent (cassava) to 74 percent (pigeon peas). Reductions in labor costs - excluding land preparation labor- are seen at midterm compared to baseline for all but sugarcane. The range of reductions

in these labor costs was from 40 percent (tomatoes) to 79 percent for sorghum and millet. Similar to the seeds and labor categories, land preparation costs decreased from baseline to midterm for most of the crops with magnitudes of change ranging from 37 percent (beans and sweet cassava) to 80 percent (bananas).

Water irrigation and pesticide costs are, in absolute terms the lowest of the six categories though most did decrease between baseline and midterm at similar magnitudes to the other cost categories. The cost of inputs per hectare for fertilizer is slightly higher than pesticides and irrigation; there were, for the most part decreases similar in magnitude to other input costs with the notable exception of tomatoes and sugarcane both of which increased between baseline and midterm (212 and 364 percent increases respectively).

Table 38 [3.10.6] SEASONAL CROP INPUT COSTS (all seasons combined)

	Individual input costs per crop*							
	Average Total Purchased Input cost* per hectare	Average Seed cost per hectare	Average Fertilizer cost per hectare	Average Pesticide cost per hectare	Average Land preparation cost per hectare	Average Water/ irrigation cost per hectare	Average Labor cost per hectare (excluding land prepara-tion)	Number of observations
	A	B	C	D	E	F	G	
BASELINE (THREE SEASONS COMBINED)								
Rice	$1,660	$196	$471	$43	$450	$6	$309	**371**
Tomato	$1,508	$272	$98	$85	$432	$77	$465	**53**
Beans (butter, white, black, red,..)	$1,279	$516	$78	$25	$262	$36	$212	**589**
Yam, masoko	$1,247	$670	$4	$0	$167	$1	$225	**151**
Banana & Plantain	$1,129	$246	$74	$10	$391	$55	$241	**683**
Corn	$997	$155	$63	$26	$317	$19	$256	**835**
Sweet potato	$982	$138	$54	$30	$301	$39	$281	**254**
Pigeon peas	$853	$184	$18	$10	$271	$4	$245	**524**
Sorghum/Millet	$707	$76	$49	$16	$193	$41	$237	**337**
Sweet cassava	$625	$69	$28	$5	$170	$25	$226	**227**
Sugarcane	$502	$105	$20	$5	$158	$2	$103	**82**
Cassava	$390	$47	$12	$1	$118	$0	$143	**135**
Peanut	$353	$128	$2	$12	$59	$0	$103	**41**
MIDTERM (THREE SEASONS COMBINED)								
Rice	$468	$69	$144	$14	$126	$5	$84	**229**
Tomato	$1,697	$337	$304	$237	$478	$33	$277	**67**
Beans (butter, white, black, red,..)	$663	$344	$14	$5	$166	$7	$105	**349**
Yam, masoko	$427	$233	$1	$2	$121	$0	$53	**231**
Banana & Plantain	$239	$72	$13	$2	$78	$6	$66	**613**
Corn	$382	$55	$15	$8	$161	$5	$116	**454**
Sweet potato	$484	$43	$13	$9	$243	$7	$146	**250**

	Individual input costs per crop*							
	Average Total Purchased Input cost* per hectare	Average Seed cost per hectare	Average Fertilizer cost per hectare	Average Pesticide cost per hectare	Average Land preparation cost per hectare	Average Water/ irrigation cost per hectare	Average Labor cost per hectare (excluding land prepara-tion)	Number of observations
	A	B	C	D	E	F	G	
Pigeon peas	$222	$48	$4	$2	$98	$0	$55	**442**
Sorghum/Millet	$200	$25	$4	$1	$90	$3	$49	**149**
Sweet cassava	$277	$22	$9	$9	$107	$13	$109	**327**
Sugarcane	$654	$97	$94	$26	$327	$2	$86	**103**
Cassava	$148	$28	$1	$1	$63	$0	$41	**149**
Peanut	$310	$164	$10	$18	$46	$0	$55	**73**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
*Input costs are measured in U.S. dollars (conversion rate: 1 Haitian gourde = 0.02353 U.S. dollars)

Table 39 is similar to table 38 but disaggregates the indicators by season. This table was not included in the baseline report so only midterm values are shown. Not all crops are shown for all three seasons because some crops are not grown by the surveyed households in that season. The survey was not designed to compare these indicators by agricultural season so pairwise comparisons were not done. Nonetheless, this table is instructive because one expects the input costs to vary by season.

It is not surprising that most of the input costs for all but one crop are the highest during the primary rainy season; sugarcane is the exception to this with inputs being highest during the dry (harvest) season. It is interesting that inputs for almost all the crops are included in all three seasons. The distribution of costs between the six categories is similar in all seasons, regardless of the crop, for the vast majority of the crops. That distribution is similar to the one described for table 3.2.19A.

Table 39 [New] Seasonal Crop Input Costs for Primary Rainy, Dry and Secondary Rainy Seasons

	Individual input costs per crop* (MIDTERM only)							
	Average Total Purchased Input cost* per hectare	Average Seed cost per hectare	Average Fertilizer cost per hectare	Average Pesticide cost per hectare	Average Land prepara-tion cost per hectare	Average Water/ irrigation cost per hectare	Average Labor cost per hectare	Number of observations
	A	B	C	D	E	F	G	
	MIDTERM - PRIMARY RAINY SEASON ONLY							
Rice	$509	$74	$154	$16	$139	$5	$93	160
Tomato	$1,398	$333	$219	$282	$198	$47	$274	45
Beans (butter, white, black, red,..)	$771	$411	$16	$4	$185	$9	$120	238
Yam, masoko	$816	$444	$1	$4	$238	$0	$100	100

Individual input costs per crop* (MIDTERM only)

	Average Total Purchased Input cost* per hectare **A**	Average Seed cost per hectare **B**	Average Fertilizer cost per hectare **C**	Average Pesticide cost per hectare **D**	Average Land prepara-tion cost per hectare **E**	Average Water/ irrigation cost per hectare **F**	Average Labor cost per hectare **G**	**Number of observations**
Banana & Plantain	$433	$134	$21	$4	$144	$8	$111	250
Corn	$398	$57	$16	$7	$168	$4	$122	393
Sweet potato	$525	$42	$12	$9	$267	$6	$167	174
Pigeon peas	$402	$88	$7	$3	$178	$0	$94	**220**
Sorghum/Millet	$260	$32	$5	$1	$125	$4	$60	96
Sweet cassava	$433	$32	$13	$13	$164	$21	$172	163
Sugarcane	$467	$104	$5	$10	$219	$3	$72	39
Cassava	$265	$58	$0	$0	$120	$0	$63	61
Peanut	$462	$246	$15	$28	$69	$0	$78	57
MIDTERM - DRY SEASON ONLY								
Rice	$205	$40	$59	$3	$57	$0	$27	40
Tomato	-	-	-	-	-	-	-	-
Beans (butter, white, black, red,..)	$233	$86	$3	$0	$75	$0	$44	33
Yam, masoko	$83	$49	$0	$0	$14	$0	$11	87
Banana & Plantain	$80	$11	$8	$0	$21	$5	$33	215
Corn	$193	$26	$12	$27	$40	$2	$75	30
Sweet potato	^	^	^	^	^	^	^	29
Pigeon peas	$29	$1	$0	$1	$8	$0	$16	40
Sorghum/Millet	$58	$8	$0	$1	$7	$0	$24	43
Sweet cassava	$71	$3	$1	$1	$30	$2	$33	88
Sugarcane	$1,283	$164	$267	$64	$671	$2	$123	34
Cassava	$55	$4	$0	$0	$15	$0	$28	49
Peanut	-	-	-	-	-	-	-	-
MIDTERM - SECONDARY RAINY SEASON ONLY								
Rice	^	^	^	^	^	^	^	29
Tomato								
Beans (butter, white, black, red,..)	$491	$233	$13	$8	$143	$2	$80	78
Yam, masoko	$45	$19	$0	$0	$9	$0	$5	44
Banana & Plantain	$81	$26	$5	$0	$19	$3	$24	48
Corn	$324	$52	$2	$3	$198	$23	$44	31
Sweet potato	$368	$54	$25	$11	$184	$17	$70	47
Pigeon peas	$39	$11	$0	$0	$15	$0	$8	82
Sorghum/Millet								
Sweet cassava	$76	$14	$6	$7	$24	$4	$19	76
Sugarcane	$126	$5	$0	$0	$57	$0	$59	30
Cassava	$51	$1	$2	$6	$19	$0	$15	39
Peanut	-	-	-	-	-	-	-	-

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
*Input costs are measured in U.S. dollars (conversion rate: 1 Haitian gourde = 0.02353 U.S. dollars)

Table 40 presents the types of post-harvest processing done for six different crops; rice, corn, sorghum/millet, beans, pigeon peas and peanuts. The percentage of households that processed their crops post-harvest decreased for all six crops according to these data but, because multiple responses were permitted, further interpretation is not possible.

Table 40 [3.10.7] Seasonal Crop Post-Harvest Processing

Types of processing applied	None	Shelling/ Hulling/ Beating	Drying	Milling/ Grinding	Other	Number of Observations
	BASELINE					
Percent reported for each type of processing*						
Corn	26.0	60.0	50.6	17.8	1.8	**826**
Rice	24.9	48.2	47.6	41.5	1.2	**371**
Sorghum/Millet	26.7	54.1	39.7	19.7	3.5	**327**
Beans (butter, white, black, red)	17.3	67.9	47.6	3.2	1.9	**586**
Pigeon peas	43.7	38.0	22.6	3.0	4.4	**509**
Peanut	26.5	25.6	51.3	0.0	2.6	**41**
	MIDTERM					
Percent reported for each type of processing*						
Corn	59.0	54.5	30.8	0.2	16.7	429
Rice	59.6	62.3	56.2	0.0	2.7	175
Sorghum/Millet	32.5	39.0	25.1	0.0	0.4	111
Beans (butter, white, black, red,	56.4	51.9	3.6	0.0	7.7	313
Pigeon peas	9.6	7.6	0.2	0.0	7.1	250
Peanut	44.4	53.8	3.6	0.0	4.1	61

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
* Missing responses excluded
Multiple responses allowed so the sum may exceed 100 percent

Table 41 presents post-harvest losses by source of the loss for 16 crops. Multiple sources of loss could be selected by the respondent. Because of the low sample sizes[36] and missing data only corn, rice, beans and sweet potatoes can be compared between baseline and midterm and even this should be done cautiously. Of these four crops, only beans might have had a

[36] Cell size for this table become easily small even though multiple responses were possible (i.e. a given household may have 2, 3 4 or more sources of loss). Thus, even if the number of observations for a crop is 100, it may not be large enough to determine if change really occurred between the two time periods for a particular source of loss. Nonetheless, only crops with less than 30 observations have been suppressed. This is taken into consideration when interpreting and presenting the results herein.

reduction in loss due to rotting but it might also have had an almost equal increase in loss due to insects.

Table 41 [3.10.8] Seasonal Crop Post-Harvest Losses

	Main reason for post-harvest losses (excluding processing losses)								
	Rotting	Insects	Rodents/ Pests	Flood	Theft	Other	Don't know	Total	Number of Observations**
	BASELINE								
Percentage for each crop*									
Corn	29.8	16.8	21.8	3.1	1.8	11.1	15.6	100.0	**196**
Rice	8.4	9.5	36.8	12.1	2.1	14.2	16.9	100.0	87
Sorghum/Millet	15.4	17.5	27.3	4.4	0.0	5.3	30.3	100.0	91
Beans (butter, white, black, red,..)	40.4	11.5	18.4	1.1	2.6	18.3	7.7	100.0	115
Pigeon peas	19.9	17.4	9.2	0.8	0.0	1.1	51.6	100.0	92
Peanut	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Cabbage	^	^	^	^	^	^	^	100.0	11
Spinach, Purslane	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tomato	^	^	^	^	^	^	^	100.0	18
Sweet potato	29.0	4.5	24.6	0.0	4.5	3.3	34.1	100.0	46
Yam, masoko	^	^	^	^	^	^	^	100.0	22
Sweet cassava	^	^	^	^	^	^	^	100.0	26
Cassava	^	^	^	^	^	^	^	100.0	20
Sugarcane	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Banana & Plantain	1.1	9.3	1.1	1.1	14.6	31.4	41.6	100.0	116
									MIDTERM
Percentage for each crop*									
Corn	25.1	25.4	24.1	1.9	2.5	0.9	20	100	124
Rice	3.7	21.4	55	0.0	5.8	0.0	14.1	100	53
Sorghum/Millet	^	^	^	^	^	^	^	100	17
Beans (butter, white, black, red,..)	21	32.3	17	0.0	2.7	5.3	21.7	100	59
Pigeon peas	^	^	^	^	^	^	^	100	17
Peanuts	^	^	^	^	^	^	^	100	23
Cabbage	^	^	^	^	^	^	^	100	5
Spinach, Purslane	^	^	^	^	^	^	^	100	7
Tomato	^	^	^	^	^	^	^	100	13
Sweet potato	13.8	11.9	28	0.0	1.8	0.0	44.6	100	36

Yam, masoko	^	^	^	^	^	^	^	100	4
Sweet cassava	^	^	^	^	^	^	^	100	16
Cassava	^	^	^	^	^	^	^	100	3
Sugarcane	^	^	^	^	^	^	^	100	3
Banana & Plantain	^	^	^	^	^	^	^	100	20

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
* Missing responses excluded
**This question was only asked of respondents who reported post-harvest losses (excluding processing losses).
Results for crops with fewer than 30 observations have been suppressed as they are not likely representative

Table 42 presents crop storage by methods and compares baseline to midterm results for 15 different crops. Some of the sample sizes for a particular crop are small so comparisons should be made cautiously. Although the sample is small at midterm, the percentage of households using no type of storage for their pigeon pea crop appears to have increased by 50 percent since baseline. On the positive side, it appears that there is a shift from storing rice by heaping it up in the house to storing it in bags in the house: rice increasing storage in bags from 48.8 to 72.2 percent of the households. Those storing corn at baseline preferred bagging or heaping it in the house or hanging it in trees; heaping it in the house and hanging it trees decreased from baseline to midterm while keeping it in bags in the house stayed the same and using (an specified) "other" method increased. Storage of beans, heaped in the house fell from 36.1 to 4.6 percent in the same time period but there is no single method that appears to have taken its place.

Table 42 [3.10.9] Seasonal Crop Storage Methods

Seasonal crop storage methods **Main method of storage**										
	None	Unpro-tected pile	Heaped in house	Bags in house	Silo	Hung in Tree	Other	Don't know	Total	**Number of Observations**
	BASELINE									
Percentage for each crop*										
Corn	22.6	1.5	24.1	27.3	0.4	15.4	3.7	5.1	100	**7 82**
Rice	21.3	1.0	20.3	48.8	1.2	0	1.3	6.1	100	353
Sorghum/Millet	20.6	3.7	31.7	25.0	1.4	0	5.0	12.5	100	317
Beans (butter, white, red, black)	16.9	0.4	36.1	41.7	0.9	0	2.0	2.0	100	549
Pigeon peas	35.4	4.0	17.0	24.2	0.3	0	3.5	15.5	100	479
Peanut	60.0	0	9.5	28.4	0	0	0	2.1	100	34
Cabbage	76.8	0	7.5	6.3	0	0	0	9.4	100	52
Tomato	85.5	0	6.8	1.4	0	0	0	6.3	100	44
Leek (including	64.2	0	21.0	11.6	0	0	2.6	0.5	100	42

shallots)										
Sweet potato	65.2	5.8	9.6	7.3	0	0	0.3	12.0	100	223
Yam, masoko	59.7	0	14.5	3.3	0	0	0.6	22.0	100	125
Sweet cassava	67.6	1.0	9.7	8.7	0	0	0.8	12.2	100	184
Cassava	62.1	0	16.2	3.9	1.0	0	1.0	15.7	100	105
Sugarcane	76.9	1.4	2.9	1.4	3.8	0	1.4	12.0	100	79
Banana & Plantain	68.7	1.7	9.9	4.4	0	0	0.7	14.5	100	551
	MIDTERM									
Percentage for each crop*										
Corn	32.4	5.6	4.5	30.5	0.2	0.7	24.2	1.9	100	355
Rice	10.8	0.9	4.0	77.2	0.0	4.5	0.0	2.6	100	128
Sorghum/Millet	33.6	2.8	6.6	45.0	8.2	0.9	0.0	2.8	100	42
Beans (butter, white, red, black	35.6	5.1	4.6	49.3	0.7	2.9	0.2	1.5	100	218
Pigeon peas	60.4	3.2	10.9	19.0	2.3	0.0	0.0	4.1	100	50
Peanut	22.1	12.6	9.1	55.2	0	0	0	1.1	100	48
Cabbage	^	^	^	^	^	^	^	^	100	12
Tomato	81.4	2.0	2.0	3.4	0	3.3	0	8	100	39
Leeks (including shallots)	^	^	^	^	^	^	^	^	100	3
Sweet potato	62.5	17.7	6.4	10.7	0	0	0	2.7	100	150
Yam, masoko	^	^	^	^	^	^	^	^	100	13
Sweet cassava	67.1	2.9	10.2	11.7	0	0	0	8.2	100	60
Cassava	^	^	^	^	^	^	^	^	100	11
Sugarcane	^	^	^	^	^	^	^	^	100	11
Banana & Plantain	79.7	11.0	1.7	0.9	0	0	0	6.8	100	76

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016
* Missing responses excluded

Table 43 compares baseline to midterm results for the primary buyers of 15 seasonal crops grown within 5 categories of buyers: Friend/Neighbor, Local Market, Private Trader, Agricultural Co-op, and Other. At baseline, 20 percent or more of the households that cultivated Corn, Rice, Sorghum/Millet, Beans, Pigeon peas, Sweet potato, Yams, Sweet cassava, sugarcane and bananas indicated that they had no primary buyers of their crops; at midterm, only two (corn and beans) indicated that they had no primary buyers and those two were both less than two percent. The percentage of households with the local market as a primary buyer for corn, rice and sweet potatoes increased (by over 30 percentage points each). For other crops, there were similar increases nominally in primary buyers at the local market but the sample sizes are small so caution should be taken in drawing any conclusions from those changes. Having private traders for buyers increased by more than 20 percent only for sorghum although, again, the sample is small at midterm so that change might not be real. The proportion of respondents that "didn't know" who were the primary buyers seems to have decreased from baseline to midterm for many of the crops.

Table 43 [3.10.10] Main Buyer of Crop

	Main buyer of crop								Number of Observations
	None	Friend/ Neighbor	Local Market	Private Trader	Ag Co-op	Other	Don't know	Total	
BASELINE									
Percentage for each crop*									
Corn	32.9	1.1	58.5	0.5	n/a	1.5	5.5	100	**773**
Rice	20.5	2.2	64.6	3.0	n/a	3.0	6.7	100	369
Sorghum/Millet	24.3	3.0	56.6	1.1	n/a	2.6	12.5	100	308
Beans (butter, white, black, red,..)	21.3	2.5	71.7	0.9	n/a	1.0	2.7	100	555
Pigeon peas	37.3	0.5	42.6	0.2	n/a	2.6	16.8	100	463
Peanut	14.6	0	80.6	2.9	n/a	0	1.9	100	37
Cabbage	18.5	2.7	68.7	2.0	n/a	0	8.1	100	55
Tomato	19.2	6.7	67.7	0	n/a	1.2	5.2	100	48
Leek (including shallots)	8.9	0	90.7	0	n/a	0	0.5	100	49
Sweet potato	26.6	0.3	59.9	1.2	n/a	1.5	10.5	100	222
Yam, masoko	32.6	0	37.6	1.7	n/a	3.2	25.0	100	122
Sweet cassava	28.8	2.5	51.2	1.5	n/a	2.2	13.8	100	193
Cassava	28.4	1.3	50.5	2.0	n/a	1.3	16.5	100	105
Sugarcane	40.4	2.4	29.3	13.0	n/a	1.4	13.5	100	79
Banana & Plantain	28.2	1.0	48.6	1.8	n/a	3.1	17.4	100	571
MIDTERM									
Percentage for each crop*									
Corn	0.4	0	92.7	6.0	0	0	0.9	100	244
Rice	0	0	96.5	2.6	0	0	0.8	100	93
Sorghum/Millet	0	0	74.6	21.8	0	0	3.6	100	34
Beans (butter, white, black, red,..)	1.7	0	87.8	7.7	1.2	0	1.2	100	160
Pigeon peas	0	0	94.8	1.6	0	0	3.6	100	35
Peanut	0	0	100	0	0	0	0	100	45
Cabbage	^	^	^	^	^	^	^	100	12
Tomato	0	0	97.4	2.6	0	0	0	100	32
Leek (including shallots)	^	^	^	^	^	^	^	100	3
Sweet potato	0	0	93.5	5.9	0	0	0.6	100	102
Yam, masoko	^	^	^	^	^	^	^	^	7
Sweet cassava	0	0	85.4	8.9	0	0	5.7	100	41
Cassava	^	^	^	^	^	^	^	^	10
Sugarcane	^	^	^	^	^	^	^	^	10
Banana & Plantain	0	0	79.2	8.0	0	1.5	11.2	100	61

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016. * Missing responses excluded
^ indicates values from a sample size < 30 and are, therefore, suppressed

Table 44 presents the trees crop cultivation by tree variety grouped by households that had less than 10 trees for all varieties and those with 10 or more trees of at least one variety. The baseline and midterm results are disaggregated by corridor.

There were increases, from baseline to midterm, in the percentage of households cultivating tree crops with less than 10 trees. In St. Marc, the increase was from 30.5 to 61.9 percent while in Northern it was from 28.5 to 65.6 percent and in Cul-de-Sac from 36.3 to 64.4 percent. Sample sizes are too small for variety-specific analysis by corridor between baseline and midterm in Cul-de-Sac. There were no differentiating increases by tree crop variety in St. Marc or Northern corridors with the possible exception of coconut palms in the Northern corridor (but that increase was only by 16.7 percentage points).

From these data, it can be seen that a very high proportion of farmers who have < 10 trees per variety sell production from those trees; at baseline, 93% and at midterm, 98% who had trees sold some or all of the production. If the increase from 30.5 to 61.9 percent between baseline and midterm of households cultivating < 10 trees per variety is real, this could represent a increase in income among the target population.

Sample sizes are too small for variety-specific analysis by corridor between baseline and midterm for households cultivating tree crops having greater than or equal to 10 trees for at least one variety.

Table 44 [3.10.11] Tree Crop Cultivation by Tree Crop Variety and Corridor

Had Tree crops	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percent of households								
Had tree crops during season - all crops with ≤ 10 trees	30.5	61.9	28.5	65.6	36.3	64.4	32.0	63.8
Had tree crops during season - at least one crop with ≥ 10 trees	9.4	7.5	17.3	28.2	11.7	16.3	12.5	16.1
Did not have any tree crops	60.1	30.6	54.1	6.2	52.0	19.3	55.5	20.1
DK/Missing	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100
Number of households	875	409	475	224	200	87	1550	720
Percent of households that sold crops with less than 10 trees [1]								
Avocado	57.9	46.5	49.6	61.2	70.8	45.8	60.9	50
Francique mango	46.6	51.1	5.9	6.5	38.7	20.5	32.8	27.5
Other mango	58.7	65.4	85.2	92.7	46.2	72.8	60.6	75.3
Orange	21.8	30.0	40.7	45.4	31.3	27.3	30.5	32.8

Had Tree crops	St. Marc		Corridor Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Coconut palm	44.4	50.9	38.5	55.2	18.8	45.7	32.7	49.9
Coffee	11.7	5.5	6.7	3.4	10.9	9	10.1	6.4
Cocoa	4.5	0	16.3	24.3	0	0	5.8	6.2
Number of households	266	2-48	135	146	65	54	466	448
Percent of households that sold crops with 10 or more trees								
Avocado	28.1	37.4	35.4	22.6	^	^	35.9	21.9
Francique mango	4.9	13.0	2.4	0	^	^	7.1	5
Other mango	6.1	10.1	57.3	45.3	^	^	36.3	21.2
Orange	3.7	7.4	19.5	7.1	^	^	15.6	4.3
Coconut palm	18.3	8.6	6.1	6.1	^	^	12.3	10.6
Coffee	62.2	51.0	29.3	17.6	^	^	43.9	46.9
Cocoa	0	0	35.4	58.8	^	^	14.7	25.4
Number of households	82	31	82	65	21	15	185	111

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016

For each of the tree crops where 10 or more trees were cultivated, the cost of care for the crop, amount harvested and net income per tree were calculated. The results are provided in Table 3.2.27 [3.10.12]

[1] At baseline, the question posed was "**have you sold *or intended to sell***....", the language was corrected at Midterm to be only "**Sold**"

^ indicates values from a sample size < 30 and are, therefore, suppressed

Table 45 presents Cost, yield and profit for Tree crops at baseline and midterm. For avocado, mango (Francis and other), orange, coconut palm, coffee and cacao trees, a single question was asked to document all costs associated with caring for the trees including, but not limited to, pruning, harvesting, and pest control. The number of trees, amount harvested, and total income for each tree variety was also documented. Net income was calculated as the total income minus the amount paid for crop care.

Tree crop farmers at midterm had less trees, on average, than baseline for "other" mango and coffee. There was an increase of 39.1% for the average cost of care per tree for "other" mango trees contrasting a decrease for coffee trees of 65.5% between baseline and midterm. The average yield per tree decreased for both "other" mango (a 40.3 percent decrease) and coffee (a 41.7 percent decrease) from baseline to midterm while net income increased for mango (108.6 percent increase) but decreased for coffee (85.5 percent decrease).

Note: not only are the sample sizes small for these tree crops but the difference in the average number of trees at baseline and midterm questions the comparability of these data.

Table 45 ***[3.10.12] Tree Crop Cost of Care, Yield, and Net Income***

Cost of care, yield and net income per crop					
	Average Number of trees	Average Cost of Care/tree*	Average Yield/ tree**	Average Net income/tree*	Number of observations***
	BASELINE				
Avocado	35.6	$0.18	48.6	$11.44	61
Francique Mango	^	^	^	^	9
Other Mango	36.6	$0.26	44.4	$6.81	58
Orange	^	^	^	^	23
Coconut Palm	^	^	^	^	22
Coffee	221.2	$0.09	1.2	$4.81	84
Cocoa	^	^	^	^	29
	MIDTERM				
Avocado	^	^	^	^	26
Francique Mango	^	^	^	^	5
Other Mango	16.8	$0.36	26.5	$14.20	31
Orange	^	^	^	^	4
Coconut Palm	^	^	^	^	9
Coffee	71.8	$0.03	0.7	$0.70	37
Cocoa	64.5	$0.12	2.3	$1.20	36

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
*Cost of care and net income are measured in U.S. dollars (1 Haitian gourde = 0.02353 U.S. dollars)
***Results for crops with fewer than 30 observations (marked with '^') are suppressed (shown with a "^")

Table 46 presents the methods tree crop farmers use for processing and storage for coffee and cocoa at baseline and midterm. The sample size at baseline for cocoa is too small so comparisons with the midterm cannot be done.

Increases of 21.3 and 30.3 percentage points might have occurred between baseline and midterm for coffee being processed by drying and roasting respectively. Most of this increase is likely associated with the 16.0 percent reduction in coffee farmers who did no processing at baseline (decreasing from 17.3 to 1.3 percent). There was no change between the two time periods in the method of storing coffee.

At midterm, most (81.8 percent) of the cocoa farmers were drying their product while only a minority roasted (12.4 percent), ground (10 .1 percent) or fermented (20.3 percent) it; 18.2 percent were not processing their cocoa at all. Heaping the cocoa in the house was the dominant storage method comprising 39.7 percent of the households. Sample sizes are small so these results are not likely real.

Table 46 ***[3.10.13] Tree Crop Processing and Storage***

Processing and storage of coffee and cocoa		
	Coffee	**Cocoa**
BASELINE		
Type of Processing (percentage)*		
None	17.3	^
Drying	74.8	^
Roasting	35.2	^
Grinding	17.0	^
Fermenting	0	^
Number of Observations	**84**	**28**
Main method of storage (Percentage)*		
None	4.9	^
Unprotected pile	23.8	^
Heaped in house	28.7	^
Bags in house	35.5	^
Traditional silo	0.8	^
Metallic silo	1.2	^
Number of observations	**80**	**27**
MIDTERM		
Type of Processing (percentage)*		
None	1.3	18.2
Drying	96.1	81.8
Roasting	65.4	12.4
Grinding	13.8	10.1
Fermenting	0	20.3
Number of Observations	**34**	**35**
Main method of storage (Percentage)*		
None	0	2.2
Unprotected pile	25.4	5.0
Heaped in house	33.7	39.7
Bags in house	NA	NA
Traditional silo	0	0
Metallic silo	0	0
Number of observations	**40**	**39**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
*Multiple responses allowed so the sum may exceed 100 percent
^ indicates values from a sample size < 30 that are suppressed

Table 47 presents the baseline and midterm estimates for the type of inputs used and timing of those inputs by corridor for all agricultural products regardless of the crop for which it is intended. Inputs were organized into six different categories. The use of improved seeds decreased in all three corridors between baseline and midterm by 20.5 percent in St. Marc, by 25.0 percent in Northern and by 37.8 percent in Cul-de-Sac. The use of paid labor increased in the Northern corridor (only) changing from 60.3 to 86.8 percent. No other changes in the inputs used reached a 20 percentage point difference. It is, perhaps, notable that in St. Marc, fertilizers, pesticides and paid labor all increased in the 15 percent range.

The proportion of households receiving the irrigated or pump water on time decreased in St. Marc (by 31.5 percent) and Cul-de-Sac (35.9 percent) from baseline to midterm. St Marc alone experienced reductions in the percentage of households receiving – on time - the improved

seeds (decrease of 35.0 percent), fertilizers (decrease of 21.4 percent) and pesticides (decrease of 25.1 percent) in the same time period.

Table 47 [3.10.14] Use and Timing of Agricultural Inputs

Use and timing of inputs in rural households	Corridor St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percent of households using agricultural inputs*								
Irrigated or pump water	32.0	49.8	8.0	2	30.4	26.5	24.5	28.7
Improved seeds	49.8	29.3	40.4	15.4	54.8	17	48.8	21
Fertilizer	38.2	52.7	7.0	3.6	34.8	28.3	27.9	30.9
Pesticides	20.2	35.2	5.3	3.7	26.5	19.0	18.1	21
aid labor	72.3	87.6	60.3	86.8	77.4	83.7	70.6	85.9
Land preparation Equipment	59.9	58.1	57.5	62.1	74.7	69.3	64.5	63.5
None	13.3	0.9	13.1	3.6	12.0	2.2	12.7	2.1
Don't know/missing	8.9	26.6	15.8	35.4	9.5	38.0	11.1	33.7
Number of households	875	545	475	336	200	136	1,550	1,017
Percent able to obtain input on time**								
Irrigated or pump water	85.0	53.5	76.3	^	82.1	46.2	82.9	51
Improved seeds	94.9	59.9	93.1	96.6	90.7	^	92.8	79.5
Fertilizer	89.0	67.6	81.8	^	76.9	73.6	83.0	70.7
Pesticides	92.0	66.9	^	^	83.7	^	86.6	75.3
Paid labor	94.7	87.7	95.7	93.1	87.5	85.6	92.2	88.3
Land preparation equipment	94.7	85.6	94.4	91.0	89.3	90.7	92.4	89.1

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
* Multiple responses allowed so the sum may exceed 100 percent
**Percentage of all households who reported using agricultural input
^ indicates values from a sample size < 30 and are, therefore, suppressed

Table 48 the distribution of six different agricultural inputs among eight different sources for those inputs at baseline and midterm. The government as a source of irrigated or pump water increased from 12.5 percent to 32.9 percent from baseline to midterm. The marketplace decreased from 57.8 percent to 35.6 percent as a source of pesticides during the same time period. With the assumption that "Paid Labor" (column E) was interpreted as simply "Labor" at administration, using oneself for labor increased from 25.2 percent at baseline to 50.4 percent at midterm. Although not quite reaching the 20 percentage point threshold, Associations as a source of paid labor decreased 18.9 percent during this time period. The increased use of oneself for labor with concurrent decrease in paying labor from associations might represent a shift between the two labor sources but there are other possibilities that explain this possible shift.

Table 48 [3.10.15] Source of Agricultural Inputs

Source of inputs in rural households						
	Irrigated or pump water	Improved Seeds	Fertilizer	Pesticides	Paid Labor	Land Preparation Equipment
	A	**B**	**C**	**D**	**E**	**F**
	BASELINE					
Source of inputs (percentage)*						
Previous crop	2.4	10.9	2.9	3.5	5.9	2.5
Marketplace	0.2	70.7	61.8	57.8	2.2	25.3
Private store	9.9	8.7	28.1	32.4	3.4	9.9
Association	23.6	2.7	1.4	2.3	35.1	12.3
Donor project	3.8	1.1	1.3	0.9	0.1	0.4
Government (BAC, DDA, etc.)	12.5	4.1	6.8	5.9	0	0.9
Self	27.8	6.4	1.7	0.9	25.2	37.9
Canal	6.9	0.0	0	0	0	0
Family member	0	0	0	0	1.5	1.8
Worker	0	0	0	0	7.7	2.7
Other1	13.3	0	0	0	23.5	13.7
Number of households	**373**	**723**	**428**	**248**	**1052**	**926**
	MIDTERM					
Source of inputs (percentage)*						
Previous crop	1.4	5.5	4.4	3.1	2.1	2.1
Marketplace	0.6	55.5	48.3	35.6	10.6	16.4
Private store	6.5	22.4	35.5	44.7	0.9	25.3
Association	20.0	2.2	0.5	1.4	16.2	3.2
Donor project	9.4	1.5	1.6	0.7	1.4	1.2
Government (BAC, DDA, etc.)	32.9	6.1	2.5	2.5	0.2	0.7
Self	21.4	7.0	9.8	13.7	50.4	52.1
Other	8.2	2.3	0.3	0.0	21.2	5.8
Number of households	**238**	**173**	**261**	**176**	**616**	**442**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
* Percentage of all households who reported using input
Multiple responses allowed so the sum may exceed 100 percent
[1] The source **'Other'** at Baseline includes: Tank (10.4%) for [Irrigated or pump water in column A]; Friends /neighbors (20.8%) for [Paid Labor in column E]; and Friends/neighbors (12.9%) for [Land Preparation Equipment in column F]

Table 49 presents the characteristics - Slope, erosion control, and usage - of agricultural plots by corridor and time period. There is neither a distinguishable difference between corridors nor from baseline to midterm in terms of the percentage of the plots being sloped or flat. At midterm, there are approximately 60 percent of the plots being mostly flat and 30 percent being mostly sloped. Relative to erosion control for sloped plots, use of grass strips increased in St. Marc (from 9.4 to 42.0 percent) and Northern (from 19.2 to 66.5 percent) and might have increased in Cul-de-Sac which showed a 14.9 percent increase between baseline and midterm. Use of rock walls increased only in St. Marc (from 17.0 to 37.7 percent) whereas dry walls decreased in Cul-de-Sac (from 56.9 to 22.1 percent).

If an assumption is made that the smaller changes between baseline and midterm are real for the remaining erosion control techniques, summing the increases and decreases and dividing by the smaller computes a ratio of increased control measures to decreased control measures. When this is done, St. March has a 43:1 (increased control: decreased control) ratio, Northern has a 11:1 ratio and Cul-de-Sac has a 1:2 ratio. If the assumption is made that any change less than 15 percentage points (whether an increase or decrease) is not a real change and, therefore represents no change, this changes the ratios so that St. Marc and Northern are about the same (53:1 and 47:1 respectively) whereas Cul-de-Sac is 1:3. Thus, it appears that St. Marc and the Northern corridor are making great strides in controlling erosion compared to Cul-de-Sac.

In Cul-de-Sac, the use of dense trees and shrubs for erosion control has decreased (from 34.7 to 9.2 percent) while the use of dispersed tree shrubs – and perhaps bananas - has increased between baseline and midterm (from 45.1 to 85.1 percent and from 29.6 to 46.8 percent respectively). In Northern, the use dispersed trees and shrubs for erosion control has increased (from 55.1 to 85.7 percent). The use of staple crops – and perhaps dense trees/shrubs - has also increased between baseline and midterm (from 46.2 to 88.2 percent and 43.8 to 61.3 percent respectively). In St. Marc, the use dispersed trees and shrubs for erosion control when done has increased (from 43.8 to 63.6 percent). The use of staple crops has also increased between baseline and midterm (from 56.3 to 81.0 percent).

Table 49 [3.10.16] Agricultural Plot Characteristics

Slope of plots, types or erosion control, and usage in rural households								
	St. Marc		Corridor Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Percentage of households with mostly flat or sloped plots*								
Mostly flat	58.9	65.7	60.8	67.4	60.2	66.9	59.9	66.6
Mostly sloped	26.1	34.3	16.7	32.1	39.8	33.1	28.3	33.3
Not applicable or missing	15.0	0	22.5	0.5	0	0	11.8	0.1
Total (%)	100	100	100	100	100	100	100	100
Percentage of sloped plots with erosion controls*								
Terraces	6.3	10.9	21.8	15.0	16.7	23.5	14.1	16.8
Grass strip	9.4	42.0	19.2	66.5	31.9	46.8	22.4	49.8
Rock wall	17.0	37.7	15.4	26.6	33.3	41.4	24.9	36.4
Dry walls	37.1	50.6	25.6	28.2	56.9	22.1	45.1	34.0
Water catchment/ impluvium	3.6	3.8	1.3	0	2.8	4.4	2.8	3.1
Vetiver grass	8.0	16.2	15.4	17.6	31.9	19.2	21.3	17.7
Tree belts	14.3	19.2	23.5	25.8	27.8	30.2	23.5	25.1
Hedgerows	4.9	6.4	10.3	19.4	19.4	10.5	13.1	11.2
Drainage ditches	4.0	8.7	5.1	8.5	16.7	19.2	10.6	12.8
Gully plugs	13.8	11.7	9.0	11	27.8	11.7	20.0	11.5
Contour farming	4.0	5.1	6.4	16.3	18.1	8.7	11.5	9.3
Other	5.8	0	6.4	2.4	4.2	4.4	5.1	2.3
None	4.5	0	2.6	0	2.8	0	3.3	0
Usage of sloped plots*								
Dense trees/shrubs	18.9	30.2	43.8	61.3	34.7	9.2	31.1	29.5
Dispersed trees/shrubs	43.8	63.6	55.1	85.7	45.1	85.1	46.4	77.4

Slope of plots, types or erosion control, and usage in rural households								
	St. Marc		Corridor Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Bananas	33.8	35.7	50.7	49.6	29.6	46.8	34.6	43.4
Staple crops	56.3	81	46.2	88.2	79.2	90.8	66.1	86.6
Pasture	29.9	30.2	44.9	29.6	40.3	38	37.7	33.1
Fallow	27.4	38.9	39.7	32.5	47.2	38.5	39.5	37.2
Other	1.8	2.4	1.3	0	4.2	3.1	2.9	2.1
None	0.5	0	0	0	7.0	0	3.7	0
Number of households	875	545	475	336	200	136	1,550	1017

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
* Multiple responses allowed so the sum may exceed 100 percent

Table 50 presents ownership of agricultural land by type of ownership and size of the land holding(s). Type of ownership is (a) with official title (b) with informal title and (c) with no title. There does not appear to be a change in the proportion of the rural population in the development corridors that are land owners since baseline. If the 20 percentage point criteria used to indicate change is relaxed to 18, then St. Marc (only) has increased land ownership between baseline and midterm (from 55.4 to 73.0).

There is no evidence that the type of land ownership has changed in St. Marc: that is, the same proportion of official vs informal vs no title holdings remains the same at midterm as it did at baseline. Because of the direction of the changes in these three categories of land ownership in St. Marc, it is likely that new land acquisition is being done informally without a title. For Northern and Cul-de-Sac corridors, increases in the proportion of the households having no title increased from 32.7 to 5.5 percent and from 34.3 56.5 percent, respectively yet there was no evidence of change in official and informal title holdings nor of increases in land ownership of any kind. If a larger percentage of the population sampled owned land it might be found that the smaller gains in land ownership (around 10 percent increases) that fall below our 20 percent threshold for change are, in fact real and that, like St. Marc, land ownership is increasing in these two corridors but that is being done informally without a title.

The mean and median size of land holdings is not similar meaning the mean is probably skewed and, therefore, the median should be used. There is no evidence when using the median size of land holdings that there has been any change between baseline and midterm with the possible exception of St. Marc in which the median size decreased from 1.9 to 1.3 hectares (a 49.6 percent reduction).

Table 50 [3.10.17] Agricultural Land Ownership

Ownership of agricultural land, land titles and size of land among rural households								
	Corridor							
	St Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Land Ownership								
Does any member of this HH own agricultural land?	54.4	73.0	58.5	67.8	52.0	64.2	54.6	68.2
Number of households	875	618	475	370	202	143	1,552	1,131
Land Title Ownership1								
Has Official Title	34.9	25.5	46.0	35.9	49.5	34.4	43.5	31.4
Has Informal Title	11.3	9.4	21.2	10.6	16.2	9.1	16.0	9.5
Has No Title	53.8	65.1	32.7	53.5	34.3	56.5	40.5	59.0
DK/NR/ Missing	0	0	0	0	0	0	0	0
Size of Land Holding (Hectares)1								
Mean size of land holding	3.7	1.9	4.5	1.5	4.7	1.5	4.3	1.6
Median size of land holding	1.9	1.3	1.0	1.3	2.0	1.3	1.3	1.3
Number of HH that own land	476	439	278	254	105	91	859	784

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
[1] Includes rural households that own any agricultural land

3.3 Pillar C: Health and Basic Services

3.3.1 HEALTH AND DISABILITY STATUS

Table 51 shows selected health and disability characteristics for household members ages 6 and above. Both baseline and midterm estimates are shown, and disaggregated by the three corridors (St. Marc, Northern, and Cul-de-Sac).
Table 3.3.1 reveals that, overall, nearly one-third (32.6 percent) of household members (ages 6 or older) were reported ill at least once in the prior twelve months. At baseline, only 11.9 percent of the household members were reported as ill. There are no differences between corridors neither at baseline nor at midterm.

The overall prevalence of disability among household members ages 6 or older is similar between baseline (1.8 percent) and midterm (1.7 percent), with no type of disability exceeding 1 percent overall in either period.

The midterm survey also collected information on (a) renovations made to the dwelling and (b) services available in the community to persons with disabilities (PWDs). The availability of improved residences for the disabled was low at both baseline and midterm, with a decrease from baseline to midterm in the Northern corridor (27.8 percent versus 6.2 percent), but the sample size is small, so this should be interpreted cautiously.

Similarly, community services available to PWDs are limited[37]. Only about one quarter (26.9 percent) of PWDs reported using community services at midterm, although this is higher than the baseline estimate of 11.7 percent. Interestingly, although 26.9 percent of respondents overall said they had used a service, 84.5 percent said that they knew of no services available in the community or they were not using any. This discrepancy of over 11 percent may be a function of some misunderstanding of the questions as it is unlikely that PWDs are using services outside their communities.

Table 3.3.1 also shows that just over one-quarter (25.1 percent) of PWDs age 15 or above are currently employed. This is higher than reported at baseline, but not by 20 percent. The corridor with the greatest prevalence of PWD employment is St. Marc (34.6 percent at midterm).

Table 51Health and Disability Status

Percent distribution of household individuals age 6 or older by health and disability status (based on "usual" HH residents)								
	Corridor						**Total**	
	St. Marc		**Northern**		**Cul-de-Sac**			
Characteristic	**Base-line**	**Mid-term**	**Base-line**	**Mid-term**	**Base-line**	**Mid-term**	**Base-line**	**Mid-term**
Health status (12-month prevalence of illness)								
Ill at least once in the last 12 months	14.1	37.7	10.6	34.5	11.9	31.3	11.9	32.6
Not ill in the last 12 months	85.8	62.2	89.4	65.4	88.0	68.6	88.0	67.3
DK/NR/Missing	0.1	0.1	0.0	0.1	0.2	0.0	0.1	0.1
Total	100	100	100	100	100	100	100	100
Prevalence of disabilities								
Blindness	0.2	0.2	0.3	0.2	0.5	0.3	0.4	0.3
Deafness	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1
Muteness	0.1	0.2	0.0	0.3	0.0	0.1	0.0	0.1
Amputation or permanent injury to a limb	0.2	1.1	0.4	1.1	0.7	0.8	0.6	0.9
Mental Illness	0.2	0.7	0.2	0.6	0.3	0.4	0.2	0.4
Other disability	0.2	0.3	0.1	0.2	0.5	0.1	0.4	0.1
Total prevalence of disabilities[1]	1.0	2.3	1.0	2.2	2.3	1.5	1.8	1.7
Number of individuals (>=6 yrs.)	4,662	3,241	5,298	3,918	4,853	3,557	14,813	10,716
Have there been any renovations to this dwelling to facilitate access for this person?								
Yes	^	9.6	27.6	6.2	8.0	3.3	10.7	4.8
No	^	90.4	56.9	93.8	85.7	96.7	81.5	95.2
DK/NR/Missing	^	0	15.5	0	6.3	0	7.8	0
Total		100	100	100	100	100	100	100
Knowledge of Services available in the community for Persons with Disabilities (PWD)								
Disabled persons organization	^	0.0	3.6	0.0	4.5	0.0	4.0	0.0
Health care	^	9.6	5.4	15.6	2.3	1.4	3.9	5.8

[37] Based on respondents' knowledge of available services.

Percent distribution of household individuals age 6 or older by health and disability status (based on "usual" HH residents)								
	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
Characteristic	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Psychological care	^	8.3	5.4	3.2	2.3	4.1	3.6	4.5
Physical rehabilitation	^	3.3	3.6	6.1	2.3	1.4	2.3	2.7
Economic support	^	1.1	1.8	4.0	2.3	0.0	2.1	1.1
Vocational training	^	1.2	1.8	2.8	0.0	0.0	0.4	0.8
Other	^	3.4	1.8	0.0	2.3	0.0	2.1	0.5
None (no service available or not using any)	^	76.3	n/a	75.5	n/a	89.6	n/a	84.5
Don't know or missing	^	1.5	n/a	2.1	n/a	4.8	n/a	3.7
Percent using any services for PWDs	^	39.8	8.6	20.4	12.5	25.7	11.7	26.9
Number of PWD	48	68	58	83	112	55	218	206
Currently employed PWDs (Last 7 Days) (15 years and older)	^	34.6	9.6	16.0	9.8	26.2	10.5	25.1
Number of PWD (15 years and older)	46	62	52	77	102	54	200	193
Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016. (The total of those who have specific disabilities may be more than the overall total because individuals may have more than one type of disability)								

3.3.2 Accessing Health Care

Table 52 presents information about the perceptions among women of reproductive age (WRA) about barriers to their health care access. The majority of women (76.7 percent) reported at least one problem accessing health care whereas the baseline point estimate was 85.8 percent. Problems with getting permission to go to the doctor declined more than 20 percent from baseline to midterm overall and for both the St. Marc and Cul-de-Sac corridors. Problems getting money for treatment also declined by more than 20 percent in St. Marc (86.5 percent at baseline versus 64.5 percent at midterm) and by nearly 20 percent (19.0 percent) in Northern). Problems with distance to a health facility declined by more than 20 percent overall and in the St Marc and Northern corridors.

Despite the major declines in these specific problems, the percentage of women who reported at least one problem did not decline because the most frequently reported problem across the three corridors, getting money for treatment, changed less and was reported by many women (78.8 percent at baseline and 69.3 percent of at midterm).

Table 52 [3.3.2] Problems in Accessing Health Care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Problems accessing health care	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Getting permission to go to the doctor	29.4	10.1	26.1	10.5	27.0	6.7	27.1	7.6
Getting money for treatment	86.5	64.6	89.8	70.8	74.2	69.6	78.8	69.3
Distance to health facility	60.0	32.2	66.5	27.5	40.7	28.8	48.2	28.9
Not wanting to go alone	39.3	20.5	16.3	18.3	26.1	18.5	25.7	18.7
At least one problem accessing health care	88.5	72.8	93.8	77.1	82.9	77.2	85.8	76.7
Number of women	902	892	954	1,041	960	1,033	2,816	2,966

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

The prior table revealed that the main perceived barrier to women's health care access is financial – getting money for treatment. **53** shows the percentage of WRA with specific types of health insurance, or who lack coverage altogether. At both baseline and midterm, the vast majority of women in the study area lack health insurance coverage (96.5 percent at baseline, and 95.7 percent at midterm). The prevalence of uninsured women appears very similar across all three corridors, and over time (at 95 percent or greater).

Among the various health insurance categories shown in Table 53, the most common health insurance type, among those who have health insurance, is coverage through an employer (reported by 3.0 percent of women at midterm).

Table 53 Women's Health Insurance Coverage

Percent distribution of health insurance coverage types for women age 15-49

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Health insurance coverage	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Mutual health organization/ community-based health insurance	0.8	0.5	0.3	0.7	0.1	0.3	0.2	0.4
Health insurance through employer	0.1	0.5	1.8	1.6	2.4	3.6	2.0	3.0
Social Security	n/a	0.3	n/a	0.3	n/a	0.4	n/a	0.3
Other privately purchased commercial health insurance	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1
Other	0.1	0.2	0.1	0.2	0.4	0.5	0.3	0.5

Percent distribution of health insurance coverage types for women age 15-49								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Health insurance coverage	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
None	98.5	98.4	96.6	97.2	96.2	95.0	96.5	95.7
DK/NR/Missing	0.3	0.0	1.5	0.0	0.8	0.0	0.8	0.0
Total	100	100	100	100	100	100	100	100
Number of women	902	892	954	1,041	960	1,033	2,816	2,966
Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 016								

Table 54, which presents new data for the midterm report (not collected at baseline), shows the percentage of WRA who are aware of services for victims of violence. Overall, only about one-third of surveyed women (33.6 percent) reported awareness of at least one service for women who are victims of violence. Nearly half (44.9 percent) of the women in Northern Corridor were aware of services whereas about one-third were aware in St. Marc (33.1 percent) and Cul-de-Sac (31.2 percent).

The most commonly known resource for victims of violence is a doctor or medical personnel, reported by 16.5 percent of women. This is followed by social service organizations (11.4 percent).

Table 54 [New] Knowledge of Services for Violence Against Women

Percentage of women age 15-49 who report knowledge of services for women who are victims of violence								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Services	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Doctor/Medical personnel	n/a	12.2	n/a	19.5	n/a	16.4	n/a	16.5
Police	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Lawyer	a	2.4	n/a	4.1	n/a	1.6	n/a	2.1
Social service organization	n/a	14.8	n/a	18.3	n/a	9.4	n/a	11.4
Religious organization	n/a	0.5	n/a	0.7	n/a	0.2	n/a	0.3
Knowledge of at least one service	n/a	33.1	n/a	44.9	n/a	31.2	n/a	33.6
No knowledge of services	n/a	66.9	n/a	55.1	n/a	68.8	n/a	66.4
Number of women	n/a	892	n/a	1,041	n/a	1,033	n/a	2,966
Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016								

3.3.3 FAMILY PLANNING NEEDS AND ACCESS TO SERVICES

Table 55 shows age-specific and total fertility rates (TFR) in the study area. The TFR is the number of children who would be born per woman (or per 1,000 women) if she/they were to pass through the childbearing years bearing children according to a current schedule of age-specific fertility rates[38]. These estimates are based on the reported birth history data of sampled women age 15-49. Age-specific fertility rates (ASFR) are shown per 1,000 women whereas the TFR show is the average per women.

Table 55 reveals that the midterm TFR (2.4 children/women) is slightly lower in absolute value than the baseline TFR (2.8 children/woman) but because this is not a 20 percent change, it likely does not reflect a real difference. TFR at midterm is higher in St. Marc (3.2 children) than in the other two corridors (2.3 and 2.4 for Northern and Cul-de-Sac respectively).

Table 55 [3.4.1] Current Fertility Rates

Age-specific[1] and total fertility rates for the three years preceding the survey, by residence

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Age group	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
15-19	62.9	49.5	50.7	33.3	27.6	39.7	37.1	39.6
20-24	131.8	149.9	118.9	100.8	77.1	84.3	91.0	92.6
25-29	128.0	14.5	115.7	96.5	111.3	115.4	113.9	114.3
30-34	112.4	152.2	121.0	99.7	120.6	108.9	119.8	111.5
35-39	105.3	103.8	85.8	85.4	103.1	93.9	99.7	93.4
40-44	58.6	52.0	34.2	36.7	55.4	33.4	50.6	36.0
45-49	^	0.0	^	13.6	^	0.0	^	2.5
TFR[2] (15-49)	3.6	3.2	2.6	2.3	2.7	2.4	2.8	2.4

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.

[2] TFR: Total fertility rate expressed per woman

* Result omitted due to small sample size – less than 125 person-years of exposure (unweighted)

Table 56 presents information on women's fertility preferences, namely the extent of women's desire for additional children, disaggregated by marital status (for all women, and for only married women). Among all women, the top panel of Table 3.3.6, there was no change among the women at midterm (4.6 percent) and baseline (8.2 percent) reporting that they wanted to have another child soon (within two years). More women at midterm (55.4 percent) than baseline (20.8 percent) reported they preferred to have another child later (two or more years later). This difference was greater than 20 percent for each of the three corridors. This was accompanied by a decline of more than 20 percent in the number of women who were undecided about whether to have another child (29.1 percent at baseline versus 1.5 percent at

[38] MEASURE Evaluation, https://www.measureevaluation.org/prh/rh_indicators/specific/fertility/total-fertility-rate, accessed 01/2017.

midterm overall the corridors). This decline was consistent over all corridors, although the change was less than a 20 percent in Northern. Thus, the shift appears to be that the undecided has moved to the "desired to have a child later" category between baseline to midterm. Among the married women sub-sample presented in the bottom half of Table 3.3.6, the differences are similar to those cited above for all respondents.

Table 56 [3.4.2] Women's Fertility Preferences by Corridor

Women's fertility preferences by corridor

Percent distribution of women age 15-49 by desire for children

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Desire for more children (ALL WOMEN)								
Have a/another child								
Soon	7.0	3.7	7.1	4.1	8.8	4.9	8.2	4.6
Later	16.0	50.3	28.8	53.1	19.2	56.6	20.8	55.4
Undecided when	3.1	1.3	9.1	2.1	6.2	0.8	6.4	1.1
Undecided	34.5	2.1	12.8	2.6	33.0	1.2	29.1	1.5
Want none/no more	34.4	34.3	39.0	32.9	30.0	30.7	32.4	31.4
Sterilized [3]	1.2	0.7	1.3	0.8	0.8	0.5	0.9	0.6
Declared infecund	3.8	2.1	2.0	1.0	2.0	1.3	2.2	1.4
DK/NR/Missing	0.0	5.5	0.0	3.4	0.0	4.0	0.0	4.1
Total	100	100	100	100	100	100	100	100
Number of all women	902	892	954	1,040	960	1,032	2,816	2,964
Desire for more children (MARRIED WOMEN)								
Have a/another child								
Soon [1]	6.9	3.4	4.2	4.3	7.5	6.0	6.6	5.4
Later [2]	8.4	35.0	15.8	29.4	9.2	35.5	10.8	34.4
Undecided when	2.7	0.8	5.1	2.3	3.8	1.0	4.0	1.2
Undecided	29.6	2.1	11.1	2.2	26.5	0.9	23.0	1.2
Want none/no more	47.0	47.6	58.3	54.2	50.0	48.3	51.7	49.2
Sterilized [3]	1.0	0.8	2.0	1.4	0.7	0.7	1.1	0.8
Declared infecund	4.5	2.6	3.5	1.6	2.3	1.8	2.9	1.8
DK/NR/Missing	0.0	7.9	0.0	4.6	0.0	5.8	0.0	5.9
Total	100	100	100	100	100	100	100	100
Number of married women	441	527	496	539	377	549	1,314	1,615

Haiti Baseline Survey 2012, USAID Haiti Midterm Assessment 2016[1] Wants next birth within 2 years.
[2] Wants to delay next birth for 2 or more years.
[3] Includes both female and male sterilization.
[4] Includes currently married women and women in a union.

Table 57 presents currently married women's fertility preferences by the number of living children. Baseline estimates are presented in the top half of Table 3.3.7, and midterm estimates are presented at the bottom. Unsurprisingly, this table shows that women's desire to limit childbearing increases with increasing number of children. The shifts between "undecided" and "later" that were discussed for Table 3.3.6, are shown in this table to be among women with zero to 2 children. Also shown is that the percentage of women who said they wanted no more children might have declined between baseline to midterm for women with zero or one child although neither change reached the 20 percent threshold.

Table 57 [3.4.3] Fertility Preferences by Number of Living Children

Percent Distribution of Currently Married Women Age 15-49 By Desire For Children By Number Of Living Children

	Number of living children						
	0	1	2	3	4	5 or more	Total
BASELINE							
Desire for more children							
Have a/another child							
Soon [1]	17.8	8.4	3.9	2.4	0.2	2.8	6.6
Later 2	30.7	18.7	3.6	3.1	0.2	0.0	10.8
Undecided when	5.1	9.0	3.4	1.9	0.5	0.0	4.0
Undecided	32.1	22.6	24.0	18.9	15.2	19.9	23.0
Want none/no more	11.8	38.1	62.2	68.7	75.2	72.6	51.7
Sterilized	0.4	0.5	0.1	2.0	3.0	2.5	1.1
Declared infecund	2.1	2.7	2.8	3.1	5.7	2.2	2.9
DK/NR/Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100	100
Number of married women	193	301	318	201	141	160	1314
MIDTERM							
Number married women	18.9	7.0	1.6	1.6	0.0	0.0	5.4
Desire for more children	55.9	62.7	30.0	7.6	3.2	2.7	34.4
Undecided when	2.3	1.8	1.2	0.0	0.2	0.0	1.2
Undecided	3.1	1.5	0.6	0.6	0.7	0.5	1.2
Want none/no more	1.4	19.2	59.7	85.6	91.2	88.3	49.2
Sterilized 3	0.0	0.0	1.2	2.3	1.2	1.3	0.8
Declared infecund	1.8	0.0	2.4	1.0	1.7	6.8	1.8
DK/NR/Missing	16.7	7.7	3.3	1.4	1.7	0.4	5.9
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Number married women	212	434	372	232	156	209	1615

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] Wants next birth within 2 years.

[2] Wants to delay next birth for 2 or more years.

[3] Includes both female and male sterilization.

Table 58 presents the distribution of contraceptive methods used by all women in the sample, ages 15-49, regardless of marital status. (Typically, the contraceptive prevalence rate (CPR) is defined as the percentage of currently married women who are using a method of contraception.)

Table 3.3.8 shows that 43.3 percent of all women of reproductive age (15-49), across all corridors, are using any method of contraception: this is higher than the baseline estimate of 31.6 percent though by less than 20 percent. There is no discernable difference between corridors. The use of a modern method of contraception (e.g., sterilization or other barrier or hormonal contraceptive methods) was reported by 35.7 percent of WRA with no overall change from baseline (30.6 percent). It must be mentioned that large increases in the uptake of modern contraceptive measures are not expected in a four year timeframe. Given the number of pregnant women survey, overall the corridors, is nearly 3,000 at each baseline and midterm, the 5.1% increase might be real and, if so, is a substantial gain.

Table 58 [3.4.4] Current Use of Contraception

Percent distribution of contraceptive methods used by women age 15-49								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Method[1]	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Any method	**28.4**	**37.3**	**32.4**	**42.5**	**31.9**	**44.3**	**31.6**	**43.3**
Any modern method	**27.0**	**30.1**	**30.9**	**36.8**	**31.2**	**36.2**	**30.6**	**35.7**
Modern method								
Female sterilization	1.2	0.7	1.2	0.7	0.7	0.5	0.9	0.6
Male sterilization	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0
IUD	0.0	0.3	0.4	0.4	0.7	0.4	0.6	0.4
Implant	0.2	0.9	0.3	1.2	0.5	0.5	0.4	0.6
Injectable	11.5	16.7	16.8	14.3	10.8	9.6	12.1	11.1
Pill	2.2	1.9	1.3	1.9	2.7	3.0	2.4	2.7
Male condom	10.6	8.9	9.2	17.0	14.4	20.9	12.9	19.1
Diaphragm	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Female condom	0.9	0.1	0.2	0.0	0.5	0.0	0.5	0.0
Spermicide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LAM2	0.2	0.5	1.5	0.6	0.4	1.0	0.6	0.9
Other	0.1	0.1	0.0	0.6	0.5	0.3	0.4	0.3
Any traditional method	**1.3**	**7.2**	**1.5**	**5.7**	**0.8**	**8.0**	**1.0**	**7.6**
Traditional method								
Rhythm	0.0	1.3	1.0	0.2	0.1	1.1	0.2	0.9
Withdrawal	1.3	1.5	0.5	1.2	0.6	1.3	0.7	1.3
Other	0.0	4.4	0.1	4.3	0.1	5.7	0.1	5.4
Not currently using	71.6	62.7	67.6	57.5	68.1	55.7	68.4	56.7
Total	100	100	100	100	100	100	100	100
Number of non-pregnant women	**902**	**841**	**954**	**993**	**960**	**984**	**2,816**	**2,818**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] If more than one method is used, only the most effective method is considered in this tabulation.

[2] LAM = Lactational amenorrhea method.

Table 59, which presents new data for the midterm survey, shows women's reasons for not trying to prevent a future pregnancy. Questions about why respondents were not using a method to prevent pregnancy were asked of non-pregnant, non-contracepting women in a union (married or cohabiting) who reported that they did not want another child soon. For the baseline survey, the only data available were for a single category (fertility-related). For the "fertility-related" category, there was a overall decline from baseline to midterm of 31.5 percent to 17.1 percent, not quite 20 percent. Because of the more detailed questioning in the midterm survey, this may be simply an artifact of the data collection process.

At midterm, 17.1 percent of women report fertility-related reasons for not using contraception, such as no or infrequent sex, infertility, or not menstruating since the last birth. A similar percentage, 18.5 percent, reported contraceptive method-related reasons, such as concerns about side effects, or high cost of contraceptives. Fewer than six percent (5.9 percent) report opposition, by themselves or their partners, to the use of contraception. Moreover, very few women, 0.5 percent, report a lack of knowledge about family planning, suggesting that knowledge factors do not play a large role in women's contraceptive non-use. Table 3.3.9 also presents a measure of surveyed women's "unmet need" for family planning, defined as the percentage of married or cohabiting women aged 15-49 who wish to limit or delay future pregnancies but are not using any form of contraception. Over one-third (34.4 percent) of this group of women have unmet need for family planning, and the prevalence of unmet need is similar in all three corridors.

Table 59 [NEW] Reasons for Not Using Contraception

Percent distribution of women age 15-49 who are married or living together

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Reason not using contraception	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Fertility-related reasons	**28.4**	**15.0**	**32.4**	**19.2**	**31.9**	**16.9**	**31.6**	**17.1**
Not having sex	n/a	4.6	n/a	4.5	n/a	5.1	n/a	4.9
Infrequent sex	n/a	2.9	n/a	6.9	n/a	4.0	n/a	4.4
Menopause/hysterectomy	n/a	1.3	n/a	0.9	n/a	2.5	n/a	2.0
Can't get pregnant	n/a	0.0	n/a	0.0	n/a	0.3	n/a	0.2
Not menstruated since last birth	n/a	3.6	n/a	4.4	n/a	2.7	n/a	3.2
Breastfeeding	n/a	3.1	n/a	3.0	n/a	3.5	n/a	3.4
Up to God/Fatalistic	n/a	0.8	n/a	1.2	n/a	0.5	n/a	0.7
Opposition to use	**n/a**	**5.0**	**n/a**	**6.4**	**n/a**	**6.0**	**n/a**	**5.9**
Respondent opposed	n/a	2.1	n/a	3.1	n/a	3.0	n/a	2.9
Husband/partner opposed	n/a	1.2	n/a	2.5	n/a	2.2	n/a	2.1
Others opposed	n/a	0.4	n/a	0.3	n/a	0.0	n/a	0.1
Religious prohibition	n/a	1.2	n/a	1.0	n/a	1.3	n/a	1.2
Lack of knowledge	**n/a**	**0.8**	**n/a**	**0.6**	**n/a**	**0.4**	**n/a**	**0.5**
Knows no method	n/a	0.6	n/a	0.6	n/a	0.2	n/a	0.3
Knows no source	n/a	0.2	n/a	0.0	n/a	0.4	n/a	0.3
Method-related reasons	**n/a**	**18.2**	**n/a**	**16.6**	**n/a**	**19.1**	**n/a**	**18.5**
Side effects/health concerns	n/a	13.5	n/a	12.5	n/a	14.5	n/a	14.0

Percent distribution of women age 15-49 who are married or living together								
	St. Marc Corridor		Northern		Cul-de-Sac		Total	
Reason not using contraception	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Lack of access/too far	n/a	0.3	n/a	0.1	n/a	0.0	n/a	0.1
Costs too much	n/a	2.0	n/a	0.5	n/a	0.9	n/a	1.0
Preferred method not available	n/a	0.0	n/a	0.2	n/a	0.3	n/a	0.2
No method available	n/a	0.0	n/a	0.0	n/a	0.2	n/a	0.1
Inconvenient to use	n/a	1.0	n/a	0.0	n/a	0.8	n/a	0.7
Interferes with body's normal processes	n/a	2.0	n/a	5.0	n/a	5.4	n/a	4.8
Other reason	**n/a**	**6.6**	**n/a**	**2.7**	**n/a**	**3.9**	**n/a**	**4.1**
Pregnant, currently using contraception, can't get pregnant, DK, NR, Missing	**n/a**	**60.9**	**n/a**	**60.6**	**n/a**	**62.4**	**n/a**	**61.8**
Number of non-pregnant women (15-49) married or living together who do not want another child within next two years	**902**	**464**	**954**	**475**	**960**	**476**	**2,816**	**1,415**
Unmet need for family planning[1]	**n/a**	**39.2**	**n/a**	**35.1**	**n/a**	**33.1**	**n/a**	**34.4**
Number of women (15-49) who are married or living together	**n/a**	**483**	**n/a**	**498**	**n/a**	**507**	**n/a**	**1,488**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] Unmet need refers to the percentage of married or cohabiting women aged 15-49 who wish to limit or delay future pregnancies but are not using any form of contraception. The contraceptive need of women who are pregnant or have postpartum amenorrhea is determined based on the intentionality of their most recent pregnancy or birth, respectively.

3.3.4 ACCESS TO ANTENATAL AND POSTNATAL CARE

Table 60 presents antenatal care (ANC) data for surveyed women in the three corridors. Skilled ANC (i.e., by a skilled provider such as a doctor, nurse, or midwife) is a crucial aspect of ensuring maternal and infant health in pregnancy and delivery. Retrospective information on antenatal care was collected from women who had given birth in the five years prior to the survey. Among women who had had multiple births in this time period, data were collected about their most recent birth only.

Table 3.3.10 shows that, at midterm, only 7.5 percent of women reported that they did not receive any antenatal care with their most recent birth: similar to the baseline value of 11.9 percent. Among those women who did receive antenatal care, the most commonly reported source of ANC at both baseline and midterm was a doctor (72.9 percent of women were seen by a doctor at midterm and 63.7 percent at baseline). The increase in use of a

doctor was more than 20 percentage points in both the St. Marc and the Northern corridors (37.8 percent at baseline versus 62.4 percent at midterm for St. Marc, and 49.2 percent versus 76.7 percent for Northern). The next most common source of ANC was a nurse, at similar percentages for both baseline and midterm (18.7 and 18.3, respectively). Thus, 92.4 percent of women at the midterm received skilled ANC from a doctor, nurse, midwife, or auxiliary nurse. The baseline value for this measure is similar, at 82.4 percent, so probably does not reflect a change.

Table 60 [3.5.1] Antenatal Care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth.

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Antenatal care provider	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Doctor	37.8	62.4	49.2	76.7	74.1	73.8	63.7	72.9
Nurse	41.6	29.3	31.5	19.4	9.5	16.2	18.7	18.3
Midwife	0.0	1.1	0.0	0.5	0.0	1.3	0.0	1.2
Auxiliary nurse/midwife	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1
Other health worker	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Community health worker	0.0	0.9	0.0	0.0	1.4	0.0	0.9	0.1
Traditional birth attendant with first aid kit	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0
Traditional birth attendant without first aid kit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traditional doctor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Friend or family	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other non-health personnel	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DK/NR/Missing	2.1	0.0	6.7	0.0	4.4	0.0	4.7	0.0
No ANC	**18.1**	**5.7**	**12.6**	**3.4**	**10.4**	**8.7**	**11.9**	**7.5**
Total	100	100	100	100	100	100	100	100
Percentage receiving antenatal care from a skilled provider[1]	**79.4**	**93.2**	**80.7**	**96.6**	**83.6**	**91.3**	**82.4**	**92.4**
Number of women	364	374	418	328	344	353	1,126	1,055

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

[1] Skilled provider includes doctor, nurse, midwife and auxiliary nurse/midwife

Table 61 shows survey responses on the number of ANC visits by corridor among women of reproductive age with a live birth in the past five years. Results are summarized as percentage of women receiving antenatal care from any type of skilled provider.

The percentage of women who reported no antenatal care visits in St. Marc fell from baseline (29.6%) to midterm (5.6%), with consistent but not quite a 20 percent decreases in the other two corridors. That the percentage of women who reported four or more antenatal care visits (the gold standard) increased substantially between baseline and midterm is noteworthy. These gains were in all three corridors: from 48.5 to 74.6 percent in St. Marc, from 56.5 to 88.4 percent in Northern corridor, from 54.0 to 75.3 percent in Cul-de-Sac, and from 53.9 to 77.2 percent overall. There are no between corridor differences observed.

Table 61[3.5.2] Number of Antenatal Care Visits

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by the final number of antenatal care (ANC) visits for the most recent live birth

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Number of ANC visits	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
None	29.6	5.6	22.8	3.4	25.0	8.7	25.1	7.5
1	2.6	2.6	1.3	2.1	5.8	2.0	4.0	2.1
2	8.1	4.7	5.6	2.0	4.0	3.5	5.1	3.4
3	11.1	12.5	13.8	4.1	11.2	10.5	11.9	9.8
4+	48.5	74.6	56.5	88.4	54.0	75.3	53.9	77.2
DK/NR/Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100	100	100
Number of women	364	374	418	328	344	353	1,126	1,055

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Survey 2016 Note: DK/NR/Missing responses excluded.

Table 62 shows survey responses use of iron/folic acid tablets and ANC services provided during the visit(s) reported by women of reproductive age with a live birth in the past five years, disaggregated by three corridors.

Comparing baseline to midterm survey results, higher percentages of women reported taking iron/folic acid tablets during the pregnancy for their last birth in St. Marc (from 55.0 to 89.2 percent) and Northern corridor (from 66.2 to 94.2 percent) and Cul-de-Sac (from 65.2 to 83.8 percent). Similar increases are reported for women taking iron and folic acid for more than 90 days during the pregnancy for their last birth. Overall, increased percentages of women

were reported taking iron/folic acid tablets (from 64.2 to 86.0 percent) and taking iron and folic acid for more than 90 days (from 10.3 percent at baseline to 35.9 percent at midterm).

For three of the six antenatal care service components – blood pressure, urine sample and blood sample – baseline percentages are between 80 and 98 percent and remained unchanged at midterm. In Northern Corridor, the percentage of women reporting having been informed of the signs of complications in a pregnancy increased from 43.6 to 83.8 percent, and in Cul-de-Sac this percentage increased from 42.1 to 81.0 percent. In Cul-de-Sac, the percentage of women receiving two or more tetanus shots during their last pregnancy increased from 46.4 to 67.3 percent. As for being tested for HIV/AIDS (and receiving results), Northern and Cul-de-Sac corridors were high at baseline and remained high at midterm (93.2 and 89.8 percent respectively at midterm) while St. Marc was at 75.4 percent at midterm.

Table 62 [3.5.3] Components of Antenatal Care

Among women age 15-49 with a live birth in the five years preceding the survey, percentage receiving specific antenatal services

Components of antenatal care	Corridor St. Marc Base-line	St. Marc Mid-term	Northern Base-line	Northern Mid-term	Cul-de-Sac Base-line	Cul-de-Sac Mid-term	Total Base-line	Total Mid-term
Among women with a live birth in the past five years, the percentage who during the pregnancy for their last birth:								
Took iron/folic acid tablets	55.0	89.2	66.2	94.2	65.2	83.8	64.2	86.0
Percentage of women taking iron and folic acid for more than 90 days	18.7	38.5	13.9	43.6	7.4	33.6	10.3	35.9
Number of women with a live birth in the past five years	364	374	418	328	344	353	1,126	1,055
Among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, percentage receiving specific antenatal services								
Informed of signs of pregnancy complications	59.0	72.0	43.6	83.8	42.1	81.0	44.4	80.3
Blood pressure measured	90.8	96.7	95.1	99.2	97.3	98.3	96.0	98.3
Urine sample taken	88.5	86.9	90.8	96.8	94.2	92.8	92.7	92.7
Blood sample taken	90.0	88.2	91.4	97.7	94.6	95.9	93.3	95.2
Were tested for HIV and received their results	67.2	75.4	82.2	93.2	89.0	89.8	84.8	88.5
Percentage receiving two or more tetanus injections during last pregnancy[1]	56.9	75.5	68.4	77.5	46.4	67.3	52.8	69.8
Number of women with ANC for their most recent birth	297	354	370	315	303	321	970	990

Among women age 15-49 with a live birth in the five years preceding the survey, percentage receiving specific antenatal services								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Components of antenatal care	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.								
[1] The baseline estimate was originally calculated as the percentage of all women with a live birth in the past five years. Because the tetanus injections would occur as part of an antenatal visit, the baseline percentages were adjusted to reflect the percentage of women who received antenatal care during their most recent birth. These adjustments were performed based on the percent of women receiving antenatal care presented in the baseline report.								

Table 63 shows the distribution of responses on the place of delivery reported by women of reproductive age with a live birth in the past five years, for the most recent birth, shown disaggregated by three corridors and in overall totals.

Place of delivery remained unchanged between baseline and midterm and between the corridors.

Table 63 [3.5.4] Place of Delivery

Percent distribution of the most recent birth in the five years preceding the survey by place of delivery								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Home								
Your home	54.8	46.0	41.0	40.4	29.6	38.1	35.4	39.4
Other home	3.2	2.0	1.3	2.2	0.8	2.0	1.2	2.0
Public sector								
Govt. Hospital	27.7	37.2	38.7	41.2	44.3	40.8	40.9	40.4
Govt. Health Center	5.7	6.6	0.7	4.3	4.3	5.4	3.6	5.4
CAL/CSL/Dispensary	2.3	3.0	0.0	0.7	1.0	0.8	0.9	1.1
Other public sector	3.6	0.6	0.7	0.0	4.6	0.2	3.6	0.2
Private Med. Sector								
Pvt. Hospital/ Clinic	0.6	3.7	2.5	10.6	6.6	10.2	4.9	9.5
Other private Med. Sector	0.2	0.5	0.7	0.3	0.4	0.9	0.4	0.8
Other	12.4	0.4	2.6	0.3	12.4	1.6	10.0	1.3
DK/NR/Missing	0.0	0.0	0.0	0.0	1.6	0.0	1.0	0.0
Number of women	364	374	418	328	344	353	1,126	1,055
Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016								

Table 64 shows the distribution of survey responses regarding their qualifications of the person(s) providing care during delivery for the most recent birth in the past five years,

disaggregated by three corridors. There were neither changes between baseline and midterm nor between corridors. The percentage of women with a live birth in the past five years who reported assistance by a skilled provider at the last birth stayed almost the same across the three corridors (62.2% at baseline and 63.9% at midterm).

Table 64 [3.5.5] Assistance During Delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Assistance during delivery	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Health personnel								
Doctor	20.0	29.3	28.9	42.5	51.5	40.4	42.2	39.4
Nurse	22.1	21.0	21.1	12.2	13.7	12.7	16.5	13.6
Midwife	6.9	10.1	1.6	8.4	2.1	11.5	2.6	10.8
All skilled personnel	49.0	60.4	51.6	63.1	67.3	64.6	61.3	63.8
Auxiliary nurse	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.1
Other health personnel	0.0	0.0	0.2	0.0	1.4	0.0	0.9	0.0
Other person								
Community health worker	1.3	1.1	0.5	0.0	1.4	0.0	1.1	0.1
Traditional birth attendant with first aid kit	29.0	18.2	22.2	21.2	10.8	15.8	15.8	16.9
Traditional birth attendant without first aid kit	16.8	14.5	10.8	11.4	9.3	13.9	10.6	13.6
Traditional doctor	0.4	1.5	8.0	0.0	1.7	0.5	3.1	0.5
Friend or family	2.5	2.4	0.3	2.3	1.7	4.4	1.5	3.8
Other	0.2	0.6	0.2	1.4	0.8	0.3	0.6	0.5
Subtotal non-skilled, "other" birth attendees	50.2	38.3	42.0	36.3	25.7	34.9	32.7	35.4
DK/NR/Missing	0.8	0.0	6.2	0.0	5.6	0.0	5.2	0.0
Received no assistance during delivery	0.0	1.0	0.0	0.2	0.0	0.5	0.0	0.5
Total	100	100	100	100	100	100	100	100
Percentage assisted by a skilled provider1	48.9	60.6	51.8	63.4	68.7	64.6	62.2	63.9
Number of women	364	374	418	328	344	353	1,126	1,055

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016

Note: Includes only the most recent birth in the five years preceding the survey. If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

[1] Skilled provider includes doctor, nurse, midwife, auxiliary and other health personnel

Table 65 shows survey responses on the type of provider visited by the mother for the first checkup after delivery, disaggregated by three corridors. Post-delivery checkup includes a check performed on the mother within a few hours of giving birth.

Strong increases in women reporting that a doctor conducted the post-delivery checkup for the most recent birth among women with a live birth in the past five years are shown in each corridor. In St. Marc the percentage increased from 1.5 percent at baseline to 26 percent at

midterm, and similarly for Northern corridor (from 0.5 to 35.4 percent) and Cul-de-Sac (from 2.3 to 34.4 percent). Overall, 1.8 percent of respondents to this question at baseline reported that their first post-delivery checkup was performed by a doctor, compared to 33.5 percent at midterm.

With some increase in women reporting being seen by other qualified health personnel[39], the decrease in women eligible to respond to this question who reported no post-delivery checkup fell dramatically in each corridor and overall. In St. Marc the percentage fell from 97.5 percent at baseline to 22.9 percent at midterm; in Northern corridor from 97.2 to 20.2 percent, and in Cul-de-Sac from 95.6 to 20.5 percent. Overall the percentage fell from 96.2 to 20.7 percent. As seen in the next table (3.5.8), a large percent of the women receiving post-delivery check-ups did so more than 41 days after delivery.

Table 65 [3.5.7] Type of Provider of the Post-Delivery Checkup for The Mother

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution by type of provider of the mother's first post-delivery[1] health check after birth

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Provider	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Health Personnel								
Doctor	1.5	26.0	0.5	35.4	2.3	34.4	1.8	33.5
Nurse	0.4	12.6	1.0	12.3	1.2	17.9	1.0	16.4
Midwife	0.4	16.8	0.3	14.3	0.0	10.0	0.1	11.5
Subtotal; all skilled	2.3	55.4	1.8	62	3.5	62.3	2.9	61.4
Auxiliary nurse	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.1
Other health worker	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Person								
Community health worker	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.2
Traditional birth attendant with first aid kit	0.0	11.3	0.0	14.4	0.2	9.8	0.1	10.7
Traditional birth attendant without first aid kit	0.0	6.7	0.0	2.6	0.0	4.6	0.0	4.5
Traditional doctor	0.0	0.5	0.2	0.0	0.0	0.5	0.0	0.4
Friend or family	0.0	1.3	0.0	0.5	0.0	1.6	0.0	1.4
Other	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2
Subtotal "Other"	0	21.3	0.2	17.5	0.2	16.8	0.1	17.4
DK/NR/Missing	0.2	0.1	0.8	0.0	0.8	0.3	0.7	0.3
No post-delivery checkup	97.5	22.9	97.2	20.2	95.6	20.5	96.2	20.7
Total	100	100	100	100	100	100	100	100
Number of women	364	374	418	328	344	353	1,126	1,055

[39] Including traditional birth attendants with first aid kits.

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution by type of provider of the mother's first post-delivery[1] health check after birth

Provider	St. Marc Corridor Base-line	St. Marc Corridor Mid-term	Northern Base-line	Northern Mid-term	Cul-de-Sac Base-line	Cul-de-Sac Mid-term	Total Base-line	Total Mid-term

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

[1] A post-delivery checkup includes checks performed on the mother within the first few hours after she gave birth. These checks include: A check to determine that the mother is not bleeding excessively, has acceptable blood pressure and temperature, is breastfeeding comfortably, and/or has urinated. The checks may also include counseling on family planning or baby care.

Table 66 shows distribution of survey responses on the timing of the mother's first postnatal checkup, in days after delivery, disaggregated by three corridors and in overall totals. There are no differences greater than 20 percentage points between baseline and midterm survey results and the levels remain at over about 50 percent not receiving any post-natal checkup or receiving it 42 days or more after childbirth.

These data appear to be inconsistent with the data in Table 3.3.17 related to the timing of postnatal visits for the child but this difference is explained by the fact that women who had a postnatal visit more than 41 days after birth are combined with those who had not postnatal check-up at all.

Table 66 [3.5.6] Timing of Mother's First Postnatal Checkup at a Health Facility

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by days after delivery, and the percentages of women with a live birth in the five years preceding the survey who received a postnatal checkup in the first two days and first three days after giving birth

Indicators	St. Marc Corridor Base-line	St. Marc Corridor Mid-term	Northern Base-line	Northern Midterm	Cul-de-Sac Base-line	Cul-de-Sac Mid-term	Total Base-line	Total Mid-term
Timing of first postnatal checkup for the mother								
Less than 1 day	0.0	4.3	0.0	5.0	0.4	6.0	0.2	5.7
1-2 days	2.5	5.9	2.8	7.4	4.1	5.4	3.6	5.7
3-6 days	9.2	11.3	9.5	11.5	9.7	9.3	9.6	9.9
7-41 days	24.2	24.4	19.3	20.4	20.3	23.1	20.5	22.9
Don't know/ missing	1.5	0.3	1.0	0.0	1.2	0.0	1.2	0.0
No postnatal checkup[1]	62.6	53.8	67.5	55.7	64.4	56.2	64.9	55.8
Total	100	100	100	100	100	100	100	100
Percentage of women with a postnatal checkup in the first two days (48 hours) after birth	2.5	10.2	2.8	12.4	4.4	11.4	3.8	11.4
Percentage of women with a postnatal checkup in the first six	11.8	21.5	12.3	23.9	14.1	20.7	13.4	21.3

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by days after delivery, and the percentages of women with a live birth in the five years preceding the survey who received a postnatal checkup in the first two days and first three days after giving birth								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicators	Base-line	Mid-term	Base-line	Midterm	Base-line	Mid-term	Base-line	Mid-term
days (144 hours) after birth								
Number of women	364	374	418	328	344	353	1126	1055

3.3.5 POSTNATAL CARE CHILD

Table 67 shows survey responses on the timing of the child's first postnatal checkup, disaggregated by three corridors and in overall totals. There are no baseline percentages so values at midterm are shown without comparisons. There are no differences between corridors at midterm with respect to this indicator

Table 67 [NEW] Timing of Baby's 1st Postnatal Checkup at a Health Facility

Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution by the timing of the child's first postnatal visit.								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Timing of first postnatal checkup for the child	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
0 – 1 days	n/a	8.0	n/a	14.8	n/a	9.7	n/a	10.2
2 – 3 days	n/a	15.7	n/a	20.0	n/a	15.9	n/a	16.5
4 – 6 days	n/a	5.2	n/a	5.0	n/a	8.4	n/a	7.5
0 – 6 days		28.9		39.8		34.0		34.2
7 – 14 days	n/a	18.4	n/a	18.0	n/a	19.9	n/a	19.4
15 – 30 days	n/a	20.4	n/a	19.2	n/a	26.6	n/a	24.7
31 – 62 days	n/a	3.1	n/a	1.2	n/a	3.3	n/a	3.0
Don't know/ missing	n/a	0.3	n/a	1.6	n/a	0.0	n/a	0.3
No postnatal check-up with first two months	n/a	28.9	n/a	20.2	n/a	16.3	n/a	18.4
Total	n/a	100	n/a	100	n/a	100	n/a	100
Percent of children receiving postnatal care within 72 hours after delivery[1]	n/a	23.7	n/a	34.7	n/a	25.6	n/a	26.7
Number of Children	n/a	374	n/a	328	n/a	353	n/a	1055

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016

[1] Timing of the first postnatal visit is measured in days. This percentage includes children who have received care on the day of birth or within the three days following the delivery.

Table 68 shows survey responses on childhood immunizations, disaggregated by three corridors and in overall totals. Information on childhood immunizations was obtained for the last (most recently born) living child born in 2011 or later. Care should be taken when interpreting any change between corridors, even those greater than or equal to 20 percentage points, because the corridor-specific sample sizes of this cohort of children are small.

The percentage of mothers with children from 12-23 months who reported that their child had received the first DPT vaccination appears to have increased in Northern and Cul-de-Sac such that all three corridors were at 100 1st DPT vaccination at midterm.The third round of DPT vaccination also increased substantially but the results of coverage at midterm with three vaccinations was still only 57.6 percent, overall, (up from 25.8 at baseline).

The same pattern that emerged with DPT also emerges with Polio vaccination but with lower coverage for Polio in the 2nd and 3rd rounds (DPT being at 89.8 and 57.6 percent for the 2nd and 3rd rounds while Polio reached only 72.8 and 36.4 percent for those rounds).
The difference in coverage of the DPT and Polio vaccinations – that are usually administered together - suggests that there are problems with the health care delivery system or the cold chain.

There is no change, overall, in measles vaccine coverage between the two time periods with the midterm being at 74.7 percent. BCG coverage was and remains high being at 93.7 percent at midterm.

Table 68 [3.6.2] Immunizations

Percentage of children age 12-23 months who received specific vaccines at any time before the survey

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Vaccinations	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
BCG								
Yes	91.7	96.4	89.7	95.9	83.6	92.8	85.8	93.7
DK	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
No	n/a	3.6	n/a	4.1	n/a	7.2	n/a	6.3
DPT								
1	83.3	100	79.4	100	63.8	100	69.2	100
2	50.0	91.4	48.5	88.3	36.2	89.7	40.3	89.8
3	29.6	64.3	39.2	49.9	21.6	57.6	25.8	57.6
DK	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Missing	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Polio[1]								
First 2 weeks of birth	65.7	76.9	79.4	79.1	63.8	86.6	66.9	84.3
1	79.6	100	69.1	100	56.9	100	62.1	100
2	46.3	84.6	46.4	77.1	33.6	67.7	37.6	72.8
3	13.9	58.3	23.7	41.8	10.3	27.6	13.2	36.4

Percentage of children age 12-23 months who received specific vaccines at any time before the survey								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Vaccinations	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
DK	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Missing	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Measles	74.1	86.8	72.2	81.4	63.8	71.3	66.7	74.7
DK	n/a	0.0	n/a	6.7	n/a	1.9	n/a	2.2
No	n/a	13.2	n/a	11.9	n/a	26.8	n/a	23.1
All basic vaccinations [2]	**10.2**	**13.9**	**21.6**	**23.5**	**5.2**	**0.0**	**8.8**	**6.5**
Number of children	91	79	74	51	74	69	239	199

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: Only includes youngest child 12-23 months currently living with the mother.
[1] Polio 0 is the polio vaccination given at birth
[2] BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
(see Summary of WHO Position Papers - Recommended Routine Immunizations for Children, September, 2016, for W.H.O recommended vaccination schedule, http://www.who.int/immunization/policy/Immunization_routine_table2.pdf?ua=1

3.3.6 EARLY CHILDHOOD MORTALITY RATES

Table 69 shows survey responses on early childhood mortality rates, disaggregated by three corridors and in overall totals. All estimates presented are in terms of the number of deaths per 1,000 live births

Survey results show increases in infant mortality from baseline to midterm in Northern corridor (from 39.5 to 64.5), Cul-de-Sac (from 32.7 to 65.4) and overall (from 38.1 to 66.7). The increases shown in under-5 mortality in the Cul-de-Sac corridor are from 43.3 to 92.8 reaching an overall level 90.8 per 1,000 live births at midterm.

The highest post neonatal mortality rate, 40.4, in St. Marc is nearly double the lowest rate, 22.3, in Northern. Northern also has the lowest child mortality rate, 11.9, less than half of the rates in St. Marc (25.3) and Cul-de-Sac (29.3), and the lowest under-5 mortality rate (75.6), which is not quite 20 percentage points lower than Cul-de-Sac (92.8) and more than 20 percentage points lower than St. Marc.

These rates are not unexpected in Haiti which has the highest infant and under-5 mortality rates in the Western hemisphere with diarrhea, respiratory infections, malaria, TB and HIV/AIDS being the leading causes.[40] The World Bank's 2015 estimate for the national under-5

[40] UNCEF, http://www.unicef.org/infobycountry/haiti_2014.html, accessed 8/26/2016.

mortality rate at 69[41] per 1,000 while UNICEF estimated the 2010 rate to be 165 per 1,000. The other childhood mortality rates presented by UNICEF and the World Bank are like those found in this survey.

Table 69 [3.6.1] Early Childhood Mortality Rates

Neonatal, post-neonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Neonatal mortality (NN)	26.8	36.0	27.6	42.3	18.2	37.1	21.8	37.8
Post-neonatal mortality (PNN)[1]	31.0	40.4	11.9	22.3	14.6	28.3	16.3	28.8
Infant	57.8	76.4	39.5	64.5	32.7	65.4	38.1	66.7
Child mortality (4q1)	37.7	25.3	21.2	11.9	10.9	29.3	17.5	25.8
Under-5 mortality (5q0)	93.3	99.8	59.8	75.6	43.3	92.8	55.0	90.8

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016
[1] Computed as the difference between the infant and neonatal mortality rates

3.3.7 CHILDREN'S EDUCATION

Table 70 shows survey responses on children's school attendance, overall and disaggregated by the three corridors. There are no baseline data on these questions, and midterm data show only one difference greater than 20 percentage points across corridors or overall: 95.6 percent of Restavek children 6-9 years' old in Northern corridor attended school in the 2015-2016 school year compared to 73.0 percent of the same age group Restavek children in St. Marc.

An extremely high proportion of (non-Restaveck children of all ages have ever attended school (range of 95.7 to 98.9 percent) and attended in the 2015-2016 school year (91.1percent to 92.8 percent). Even the children that are presumed to be Restavek children have high attendance (83.7 percent being the lowest attending school in 2015-2016 and 98.4 percent being the high for ever attending school).

These indicators of school attendance only demonstrate that a child is registered for school and has attended ever (i.e. at least once) during the year; it does not show if the child attends school regularly, throughout the entire school year or if the child will pass to the next grade at the end of the school year.

Most non-Restavek children attend private, non-religious schools (37.9 percent overall the corridors) followed by private religious schools (22.8 percent) and public, non-religious schools in third place at 18.4 percent. There are no between-corridor differences relative to the type of school attended.

[41] WB World Development Report 2012.

Table 70 Children's School Attendance

	School attendance among children aged 6 to 17 years old							
	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-Term	Base-line	Mid-term
Children aged 6 to 17 years' old Ever attended school								
6-17 years' old	n/a	94.8	n/a	97.8	n/a	98.1	n/a	97.6
6-9 years' old	n/a	91.3	n/a	96.6	n/a	96.3	n/a	95.7
10-13 years' old	n/a	95.7	n/a	98.3	n/a	98.7	n/a	98.2
14-17 years' old	n/a	97.7	n/a	98.5	n/a	99.2	n/a	98.9
Attended school in 2015-16 school year								
6-17 years' old	n/a	86.8	n/a	93.2	n/a	92.2	n/a	91.7
6-9 years' old	n/a	88.4	n/a	94.1	n/a	90.7	n/a	91.1
10-13 years' old	n/a	86.3	n/a	93.8	n/a	93.7	n/a	92.8
14-17 years' old	n/a	85.5	n/a	91.9	n/a	91.9	n/a	91.1
Type of school attended in 2015-16 school year								
No school attended	n/a	13.2	n/a	6.7	n/a	7.8	n/a	8.3
Public, non-religious	n/a	19.7	n/a	33.4	n/a	13.9	n/a	18.4
Public, religious	n/a	11.0	n/a	12.6	n/a	12.4	n/a	12.2
Private, religious	n/a	24.0	n/a	20.8	n/a	23.2	n/a	22.8
Private, non-religious	n/a	31.5	n/a	26.3	n/a	42.4	n/a	37.9
Foreign	n/a	0.2	n/a	0.1	n/a	0.3	n/a	0.3
DK/NR/Missing	n/a	0.5	n/a	0.1	n/a	0.0	n/a	0.1
Total	n/a	100.0	n/a	100.0	n/a	100.0	n/a	100.0
Number of children 6-17 yrs old	n/a	1,071	n/a	1,234	n/a	978	n/a	3,283
Restavek children 6 to 17 years' old1 Ever attended school								
6-17 years' old	n/a	94.5	n/a	96.9	n/a	97.9	n/a	97.3
6-9 years' old	n/a	89.2	n/a	95.6	n/a	100.0	n/a	96.9
10-13 years' old	n/a	100.0	n/a	100.0	n/a	93.4	n/a	95.7
14-17 years' old	n/a	90.4	n/a	95.6	n/a	100.0	n/a	98.4
Attended school in 2015-16 school year								
6-17 years' old	n/a	84.5	n/a	90.7	n/a	85.7	n/a	86.6
6-9 years' old	n/a	73.0	n/a	95.6	n/a	81.8	n/a	85.9
10-13 years' old	n/a	89.8	n/a	96.2	n/a	78.4	n/a	83.7
14-17 years' old	n/a	83.5	n/a	83.7	n/a	90.5	n/a	88.7
Number of Restavek children 6-17 years' old	n/a	59	n/a	75	n/a	51	n/a	185

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: Table is based on de jure household members, i.e., usual residents.
[1]Restavek children are not identified directly by the survey. Children aged 5 to 17 whose mother is alive, but does not reside in the household and whose relationship to the primary decision maker is listed as child in guardianship, other relation, worker, or other were inferred to be Restavek children.

Table 71 shows survey responses on child literacy measured using per minute reading test completion rates, by age cohorts, shown in averages disaggregated by three corridors and in overall totals. Literacy was tested in Creole and in French using graphemes, words and connected words. Only comparisons showing a difference greater than 20 words or graphemes per minute are discussed.

As shown in Table 71 literacy measured by these indicators was generally lower at midterm than at baseline. Creole graphemes per minute decreased in Cul-de-Sac overall (from 80.9 to 56.5 graphemes per minute and for two age cohorts (from 70.1 to 30.1 graphemes per minute for children 6-9 years' old, and from 104.0 to 80.5 for children14-17 years' old). Creole graphemes per minute also decreased from 50.0 to 26.0 graphemes per minute for children 6-9 years' old in Northern corridor, and from 53.1 to 28.6 graphemes per minute overall for children 6-9 years' old. Creole connected words per minute for children 6-9 years' old decreased in Cul-de-Sac from 64.8 to 23.8, and from 42.1 to 22.2 overall.

There are also between-corridor differences more than 20 percentage points. Creole connected words per minute averaged 56.2 words among children 10-13 years' old in Cul-de-Sac, but only 34.7 the same age cohort in St. Marc. Creole connected words per minute averaged 79.8 among children 14-17 years' old in Cul-de-Sac compared to an average of 58.7 connected words per minute among the same age cohort in St. Marc.
Similar patterns are evident in the French literacy measures shown in the bottom half of T

Table 71, for all age cohorts in Cul-de-Sac combined, the average number of French graphemes per minute decreased from 92.6 at baseline to 64.5 at midterm, and the average number of French connected words per minute fell from 75.4 at baseline to 54.1 at midterm.

At midterm, children 6-9 years' old read fewer French graphemes per minute than their baseline peers in each corridor and overall, decreasing from 52.0 to 27.3 in St. Marc, from 60.3 to 30.8 in Northern corridor, from 89.1 to 35.8 in Cul-de-Sac, and from 65.0 to 33.7 overall. Among children 10-13 years' old in St. Marc, the average number of French graphemes read per minute fell from a baseline value of 74.5 to 41.8 at midterm; this midterm estimate (41.8) is also more than 20 graphemes per minute fewer than the Cul-de-Sac midterm average of 67.9. Among children 14-17 years' old in Cul-de-Sac, the average number of French graphemes per minute also declined noticeably, from 117.8 at baseline to 85.9 at midterm. French words per minute fell for Cul-de-Sac children 6-9 years' old from an average of 57.7 at baseline to 20.9 words per minute at midterm.

The average number of French connected words read per minute also show consistent declines from baseline to midterm, with a few differences across corridors. Data for Cul-de-Sac children show strong declines for children 6-9 years' old, from 71.6 to 24.2 connected words per minute, and for Cul-de-Sac children of all ages, from 75.4 to 54.1 connected words per minute. Additionally, for children 6-9 years' old, the data show an overall decrease across all three corridors averaging 45.8 connected words per minute at baseline compared to 22.8 at midterm.

Several differences also emerge when comparing, at midterm, the three corridors to one another with respect to the average number of French connected words per minute. The midterm average in Cul-de-Sac across all age cohorts is 54.1, while in St. Marc it is 32.3. Among

children 10-13 years' old, the midterm estimate for St. Marc (29.9) is lower than the other two corridors (61.0 in Cul-de-Sac and 51.0 in Northern corridor).

Table 71[3.8.1] Child Literacy

Mean reading test completion per minute by age								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Test type	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Creole graphemes per minute	**56.0**	**42.3**	**67.5**	**49.6**	**80.9**	**56.5**	**66.1**	**53.4**
6-9 years' old	44.0	24.9	50.0	26.0	70.1	30.1	53.1	28.6
10-13 years' old	51.6	39.2	60.5	53.1	70.0	59.2	58.7	55.6
14-17 years' old	68.4	64.8	94.4	68.5	104.0	80.5	86.7	76.1
Creole words per minute	35.1	28.3	40.9	36.7	48.6	41.8	40.4	39.1
6-9 years' old	24.8	15.4	27.2	17.7	43.9	20.9	30.5	19.5
10-13 years' old	33.2	26.4	41.1	39.3	46.6	45.4	39.2	41.9
14-17 years' old	43.7	44.6	54.0	52.1	56.3	59.2	50.8	56.0
Creole connected words (paragraph) per minute	45.9	35.9	54.6	47.8	65.4	53.2	53.7	50.0
6-9 years' old	33.6	16.6	35.8	20.5	64.8	23.8	42.1	22.2
10-13 years' old	44.0	34.7	54.4	53.9	51.8	56.2	50.8	53.2
14-17 years' old	55.7	58.7	72.2	68.1	77.4	79.8	67.2	74.8
French graphemes per minute	62.7	45.9	71.6	57.1	92.6	64.5	72.2	60.6
6-9 years' old	52.0	27.3	60.3	30.8	89.1	35.8	65.0	33.7
10-13 years' old	74.5	41.8	66.7	59.5	67.4	67.9	63.9	63.0
14-17 years' old	62.7	68.5	89.5	76.8	117.8	85.9	88.7	82.0
French words per minute	38.3	26.7	45.6	34.9	58.2	41.3	45.4	38.2
6-9 years' old	28.0	14.7	30.5	17.5	57.7	20.9	36.1	19.4
10-13 years' old	36.9	24.3	44.4	37.5	51.3	43.7	42.8	40.1
14-17 years' old	46.2	42.2	62.1	49.1	64.6	59.5	56.9	55.2
French connected words (paragraph) per minute	48.8	32.3	60.1	46.0	75.4	54.1	59.0	49.9
6-9 years' old	35.7	16.0	39.3	22.9	71.6	24.2	45.8	22.8
10-13 years' old	46.9	29.9	59.5	51.0	69.1	61.0	56.6	55.5
14-17 years' old	59.1	52.5	80.9	64.0	85.4	77.7	73.9	71.9

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.

In sum, Table 71 shows that midterm estimates are consistently lower than baseline estimates across all of the children's literacy measures. There appears, however, to be an incongruity between Tables 70 and 71. How can there be such high attendance and decreasing literacy?

Considering the launch of the World Bank's Global Partnership for Education (GPE)[42] in 2014, which provides tuition waivers and other support to almost a quarter of a million children as well as President Martelly's 2011 Universal, Free, and Compulsory Education Program which gave schools a subsidy of $90 USD/child for 6-12 year old children[43] one would expect literacy improvement.

Although the study data showing high attendance rates are consistent with national enrollment rates (between 78 percent and 90 percent), other indicators reveal that neither attendance nor enrollment are sufficient indicators for Haiti. The rising cost of living[44] and high relative costs of schooling in Haiti means that lower income families cannot afford to send their children to school year-round and may even skip years. Many children in Haiti will repeat a grade, and about half will drop out before completing primary school, leaving the school system without having mastered even basic language and math skills.[45] Also, the 2012 DHS points to substantial children working at ages 5 to 11 and also in children 12-14 years of age meaning they are not attending school full-time. In fact, 50 percent of Haitian children work (including 60.9% in rural areas and 31.6% in urban areas) including: work outside of the house (paid and non-paid), in family business and land, economic activities, and domestic services.[46] Thus, the decreasing literacy observed through these data might be partially explained by these other education-related indicators.

3.4 PILLAR D: GOVERNANCE AND RULE OF LAW

3.4.1 DELIVERY OF PUBLIC SERVICES

Table 72 shows survey responses on delivery of public services, shown disaggregated by three corridors and in overall totals.
Table 3.4.1 shows that, across all households in the survey (the "Total" columns), the percentage of households who reported using a public transportation system increased from 68.2 percent at baseline to 95.4 percent at midterm. Cul-de-Sac exhibits the largest apparent increase in public transportation use, from 64.0 percent of households at baseline to 96.2 percent at midterm.

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[42] Source: http://www.worldbank.org/en/news/feature/2015/03/12/four-things-you-need-to-know-about-education-in-haiti [Four Things You Need to Know About Education in Haiti March 12, 2015].

[43] Ibid

[44] Add reference here that documents inflation and rising cost of living in Haiti.

[45] [refer to article below: Why school enrollment is not enough: A look inside Haiti's classrooms. Submitted by Juan Baron on Thu, 06/09/2016, co-authors: Melissa Adelman, David Evans].

[46] DHS 2012 table 18.5, p337).

What is not known is if people are replacing what used to be transport by private carriers with public carriers or if these are people who used to walk but are now taking public transport. In a 2014 study the average cost for low-income families for transportation is $16.64 USD per month[47] which a substantial portion of the same families annual income.
In addition, the percentage of households who reported electricity usage increased in the Northern corridor from 28.5 percent at baseline to 54.6 percent at midterm. Households in Cul-de-sac showed slightly less than the 20 percentage point threshold for electricity usage (from 64.3 percent at baseline to 79.8 percent at midterm). Why there has been no change in the St. Marc corridor cannot be explained through the data.

When looking across the corridors (at midterm), there appear to be substantial disparities in electricity usages, from a high of 79.8 percent of households in Cul-de-Sac, to 54.6 percent of households in Northern Corridor, and to 35.5 percent in St. Marc. Factors that explain this disparity between corridors cannot be explored from the survey data. From other sections of this report, it is reported that households do not use electricity for cooking fuel (0.6 and 0.0 percent at baseline and midterm respectively). It is also shown that majority of households with , Table 3.4.1 reveals that the percentage of households overall who reported using public access have no meter at all (neither collective nor individual) and this is across all corridors.

Finally schools decreased between baseline (42.8 percent) and midterm (23.3 percent). This baseline/midterm disparity is most evident among households in St Marc; 54.2 percent of households reported using public schools at baseline, relative to only 21.8 percent at midterm. When looking across the three corridors (at midterm), households in Northern Corridor have the highest reported usage of public education (41.9 percent).

Table 72 [3.2.1] Delivery of Public Services

	Percent distribution of households by type of public service used							
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Type of Community Service								
Public transportation system	67.4	89.3	82.2	96.0	64.0	96.2	68.2	95.4
Public education system (schools)	54.2	21.8	52.5	41.9	37.2	19.2	42.8	23.3
Public primary health care	52.7	56.2	46.5	59.5	44.1	38.2	45.8	43.9
Tap water	40.2	45.2	38.5	57.8	58.1	47.7	51.5	49.1
Electricity	31.5	35.5	28.5	54.6	64.3	79.8	52.3	70.3
Roads	84.5	97.7	88.1	99.6	83.1	99.8	84.3	99.5
Markets	69.5	80.2	73.3	87.1	75.1	78.3	73.9	80.0

[47] This includes 26 days of round-trips to work for one person ($12.07/month), once a week travel to/from the market for one person ($0.93/month) and one trip per year to their hometown for three people ($3.64/month). The High Cost of Low Wages in Haiti: Living Wage Estimate for Export Apparel Workers Port-au-Prince, Haiti; Solidarity Center, AFL-CIO, May 2014.

	Percent distribution of households by type of public service used							
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Basketball, volleyball fields, swimming pools etc.	15.3	17.9	12.1	20.1	15.9	14.1	15.0	15.6
Cultural activities	13.1	20.1	7.8	21.2	10.0	13.5	10.0	15.6
Morgues, cemeteries	13.4	26.5	6.8	22.9	12.9	7.3	11.7	12.2
Police	20.2	5.6	6.8	7.7	20.4	6.9	17.5	6.9
Households using community services								
Households using at least one community service	94.3	99.8	93.7	99.8	94.6	100.0	94.4	99.9
Households not using any public service	5.5	0.2	6.3	0.2	5.3	0.0	5.5	0.1
DK/NR/Missing	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: There are multiple services possible so the sum of the reported services may exceed 100 percent.

Table 73 shows household survey responses on satisfaction with public services, disaggregated by three corridors and in overall totals. The percentages shown indicate the proportion of households that rated public services as "good" or "very good." Only differences greater than 20 nominal percentage points are discussed.

The percentage of households that used police services and rated this public service as good or very good decreased strongly overall (64.3 percent at baseline and 37.0 at midterm), as well as within two corridors.[48] In St. Marc, the percentage rating the police as good or very good fell from 86.4 percent at baseline to 40.9 at midterm, and in Cul-de-Sac there was also a decline, from 63.3 percent to 34.2 percent.

Very few households actually use the police service (around seven percent at both baseline and midterm shown in Table 3.4.1).

The other large differences between baseline and midterm in estimates of households' satisfaction with public services generally occur within St. Marc Corridor. In St. Marc, households' satisfaction has declined with respect to public transportation (from 75.4 percent at baseline to 44.7 percent at midterm), schools (from 80.0 percent to 58.1 percent), tap water (from 77.4 to 51.1), electricity (from 57.7 to 10.1 percent), markets (from 57.3 to 35.7), sports facilities (from 66.8 to 39.0 percent), and morgues or cemeteries (from 72.7 to 48.2). Formative research should be conducted to explore why satisfaction with public services in St. Marc has

[48] N = 52 HH in St. Marc and 60 HH in Cul-de-Sac so these might not be significant differences if statistically tested. The same is true of the Northern corridor with N=71.

decreased substantially in 8 out of 10 services when it decreased in only 1 out of 10 services in the other two corridors.

At midterm, the public service which exhibits the greatest level of satisfaction is cultural activities (65.2 percent of households overall), and the service which exhibits the lowest satisfaction among surveyed households is roads (21.7 percent).

Table 73 [3.2.2] Satisfaction with Public Services

Percent of households that rated a service as 'Good' or 'Very good', by type of public service accessed								
	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
Type of Public Service	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Public transportation system	75.4	44.7	36.6	37.0	43.6	35.7	46.2	36.9
Number of households using service	n/a	825	n/a	911	n/a	886	n/a	2,622
Public schools *(of those using the public schools)*	80.0	58.1	44.1	45.4	60.4	49.0	59.7	48.9
Number of households using service	n/a	202	n/a	401	n/a	180	n/a	783
Public primary health care	76.6	58.8	40.3	52.4	51.0	49.2	52.8	51.4
Number of households using service	n/a	525	n/a	578	n/a	366	n/a	1,469
Tap water	77.4	51.1	60.6	54.7	52.4	41.9	56.4	45.5
Number of households using service	n/a	418	n/a	552	n/a	450	n/a	1,420
Electricity	57.7	10.1	22.8	25.2	42.9	23.8	41.8	23.2
Number of households using service	n/a	320	n/a	493	n/a	731	n/a	1,544
Roads	45.1	25.7	13.4	17.4	29.9	22.1	28.4	21.7
Number of households using service	n/a	896	n/a	945	n/a	922	n/a	2,763
Markets	57.3	35.7	14.1	20.8	25.5	22.5	27.3	23.7
Number of households using service	n/a	737	n/a	830	n/a	726	n/a	2,293
Basketball, volleyball fields, swimming pools, etc.	66.8	39.0	40.0	34.9	38.0	34.6	42.4	35.2
Number of households using service	n/a	169	n/a	190	n/a	134	n/a	493
Cultural activities	68.8	72.9	71.0	63.5	44.1	63.9	52.9	65.2
Number of households using service	n/a	182	n/a	213	n/a	132	n/a	527
Morgues, cemeteries	72.7	48.2	54.9	41.1	38.2	40.8	45.7	42.8
Number of households using service	n/a	244	n/a	220	n/a	71	n/a	535
Police	86.4	40.9	30.5	45.7	63.3	34.2	64.3	37.0
Number of households using service	n/a	52	n/a	71	n/a	60	n/a	183

Percent of households that rated a service as 'Good' or 'Very good', by type of public service accessed								
	Corridor						Total	
	St. Marc		Northern		Cul-de-Sac			
Type of Public Service	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: Sample base for each public service includes the households that used that public service within the last 12 months.

3.4.2 REPRESENTATIVE AND EFFECTIVE GOVERNANCE

Table 74 shows household respondents' opinions or perceptions of governance generally, disaggregated by the three corridors and in overall totals.

Survey results show an overall decrease between baseline and midterm in respondents' agreement with the statement that *Government's ability to meet citizen needs has improved since last year;* the difference is from 24.7 percent at baseline to 4.4 percent at midterm but it is from the Cul-de-Sac corridor where most of this change occurred. There is no difference between corridors at the midterm measure.

The population's confidence in the government about meeting its' needs is very low in all three corridors at midterm (between 3.8 and 6.0 percent). Similarly, the population in all three corridors neither feels that the country is moving in the right direction (between 2.7 and 4.1 percent) nor does it believe that human rights are protected or somewhat protected (between 2.3 and 5.5 percent).

Respondents across the three corridors separately and in total to have increased sharply from baseline to midterm in their perceptions of C*orruption among public officials being common* or *very common.* This measure rose from 43.0 percent to 70.7 percent in St. Marc, from 16.8 to 69.3 percent in the Northern Corridor, and from 35.6 to 76.2 percent in Cul-de-Sac. The increase across all three corridors is from 32.7 percent at baseline to 74.4 percent at midterm. Similarly, steep increases occurred between baseline and midterm in all three corridors with respect to interviewees' opinion about the *Number of cases of corruption in the government increasing these days.* This measure increased from 34.5 to 56.0 percent in St. Marc from 19.3 to 69.3 percent in the Northern Corridor, and from 31.7 to 76.2 percent in Cul-de-Sac.

At Midterm, (a) *confidence in the municipal government's ability to manage funds and* (b) *the perception that municipal projects benefit them* are very low (12.7 and 7.5 percent overall, respectively) with little or no variation between the corridors. These questions were not asked at baseline so there is no comparison over time. Perceptions about the elections (b) *being fair or somewhat fair* and (b) *effectively organized* are also very low: overall, these are, 8.1 and 14.9 percent respectively at midterm. Only in Cul-de-Sac has the perception of elections being fair decreased substantially between baseline and midterm (from 26.0 to 6.5 percent) although the other two corridors are also very low at midterm (10.5 and 13.0 percent).

Table 74 [3.2.3] Perceptions of Governance

Percent distribution of household respondents by indicators								
	St. Marc Corridor		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
General Indicators								
Country is moving in the right direction	12.2	3.9	16.6	4.1	14.8	2.7	14.8	3.1
Human rights are protected or somewhat protected	n/a	5.5	n/a	3.9	n/a	2.3	n/a	2.9
Government's ability to meet citizen needs has improved	18.8	5.4	20.4	6.0	27.3	3.8	24.7	4.4
Elections								
Elections in Haiti are very or somewhat fair	26.3	10.5	17.0	13.0	26.0	6.5	24.1	8.1
The organization of elections are very effective or effective	n/a	14.7	n/a	24.6	n/a	12.7	n/a	14.9
Management and Services								
Some or a lot of confidence that the local government manages funds well	n/a	17.2	n/a	16.9	n/a	11.0	n/a	12.7
Projects carried out by municipality benefit people like the respondent	n/a	8.8	n/a	10.3	n/a	6.6	n/a	7.5
Officials have given community advice on natural disaster preparedness	n/a	32.8	n/a	33.7	n/a	15.7	n/a	20.7
Corruption								
Corruption among public officials common or very common	43.0	70.7	16.8	69.3	35.6	76.2	32.7	74.4
Experienced a case of corruption involving a government employee or police in the past 12 months	1.7	2.7	1.8	2.6	3.3	4.1	2.8	3.7
Number of cases of corruption in the government increasing a lot or somewhat	34.5	56.0	19.3	69.3	31.7	76.2	29.5	74.4
Fight against corruption is very or somewhat successful	23.2	17.8	12.3	17.4	18.2	13.1	17.7	14.4
Municipal corruption1 among those listing this as one of the top three problems								
Corruption most serious problem	n/a	0.8	n/a	0.6	n/a	0.5	n/a	0.6
Corruption is a top three serious problem	n/a	5.1	n/a	4.7	n/a	3.2	n/a	3.6
Municipality has done a little (but not a lot) to solve corruption problem	n/a	3.6	n/a	7.7	n/a	3.1	n/a	4.2
Municipality spends "most" of its expenditures on corruption	n/a	11.3	n/a	13.1	n/a	10.5	n/a	11.0
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Percent distribution of household respondents by indicators								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016.

[1] Respondents reported the top three problems faced by the municipality. This section reports whether corruption is the most serious problem and among the top three serious problems. Among households listing corruption as a top three problem, the percentage of of those who think the municipality has done something, either a lot or a little, is reported.

Table 75 shows household respondents' opinions or perceptions about specific problems facing their communities; estimates are disaggregated by corridor. Note that some measures presented in this table were not collected at baseline (similarly, some measures in the top panel were not collected at midterm); for those items, estimates are shown without comparison. Respondents provided up to three spontaneous responses about the most serious problems being faced in their communities, and the table shows the distribution of their responses. The only specific problem that appears to show a 20 percent or more increase over time is *Lack of water* in Cul-de-Sac, which increased from 35.1 percent at baseline to 56.0 percent at midterm. There was also a difference between St. Marc's midterm estimate of this measure (63.9 percent) and the Northern corridor (39.9 percent) as well as a difference at midterm between St. Marc (15.4 percent) and Cul-de-Sac (35.4 percent) about their perception that *Lack of security* is a problem.

Multiple different problems facing communities that did not fit into the pre-determined response options are grouped in *Other*. At baseline, these ranged from a low of 13.1 to a high of 26.9 percent by corridor with an overall of 16.4. At midterm, St. Marc increased from 26.9 percent at baseline to 48.2 percent at midterm; Northern corridor increased from 19.7 to 47.7 percent; Cul-de-Sac increased from 13.1 to 43.8 percent. This is not, most likely, a real increase and is explained by the fact that the two baseline response options - that were not repeated in the midterm - were identified by a substantial proportion of the respondents in all three corridors. These are problems of electricity and unemployment which were 46.4 and 36.2 percent respectively for St. Marc; 52.5 and 32.9 percent respectively for Northern and 28.9 and 46.2 percent respectively for Cul-de-Sac.

Of all the possible problems shown in Table 3.4.4, *Lack of water* is most prevalent. Conversely, *Displaced people* was the problem mentioned the least, at 0.9 percent at midterm. The proportion of the respondents that feel the municipal government has done *a lot* to solve these problems is negligible regardless of the corridor in which they live (less than two percent or less).

Table 75 [3.2.7] Main problems facing community

Percent distribution of household respondents by type of problem								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Problem	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Lack of water	50.2	63.9	39.5	39.9	35.1	56.0	38.1	54.2
Roads in poor condition	26.3	42.0	45.3	44.1	30.2	41.6	32.8	42.1
Lack of security	9.7	15.4	17.4	22.4	26.8	35.4	22.5	30.9
Lack of street cleanliness	4.2	5.2	5.9	10.2	14.0	11.0	11.0	10.2
Electricity	46.4	n/a	52.5	n/a	28.9	n/a	36.3	n/a
Unemployment	36.2	n/a	32.9	n/a	46.2	n/a	42.1	n/a
Lack of services	11.3	24.6	8.0	24.6	10.3	24.3	9.9	24.4
Economy	21.8	29.0	16.0	20.4	21.2	17.3	20.2	19.2
Lack of funds	25.3	25.7	15.7	30.9	16.8	21.5	17.7	23.6
Bad government	4.2	2.4	2.2	4.6	4.0	3.1	3.6	3.3
Environment	7.0	14.3	15.5	26.2	9.2	23.7	10.2	23.0
Corruption	2.4	5.1	2.7	4.7	8.8	3.2	6.7	3.6
Displaced people	0.6	0.9	0.5	0.6	1.2	1.0	1.0	0.9
Reconstruction	1.3	0.8	1.0	1.6	2.6	1.2	2.1	1.2
Housing	4.7	5.0	5.9	4.0	8.8	4.3	7.6	4.4
Other	26.9	48.2	19.7	47.7	13.1	43.8	16.4	45.0
Percent who believe municipality has done "a lot" to solve the								
Lack of water	n/a	2.2	n/a	0.7	n/a	0.2	n/a	0.5
Roads in poor condition	n/a	1.1	n/a	0.5	n/a	0.0	n/a	0.2
Lack of security	n/a	0.7	n/a	0.0	n/a	0.2	n/a	0.2
Lack of street cleanliness	n/a	0.0	n/a	2.0	n/a	0.0	n/a	0.3
Lack of services	n/a	1.0	n/a	0.0	n/a	0.0	n/a	0.1
Economy	n/a	0.7	n/a	0.0	n/a	0.0	n/a	0.1
Lack of funds	n/a	0.4	n/a	0.0	n/a	0.5	n/a	0.4
Bad government	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Environment	n/a	0.6	n/a	0.4	n/a	0.0	n/a	0.1
Corruption	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Displaced people	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Reconstruction	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Housing	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: Percents indicate the proportion of household respondents that spontaneously mentioned a problem, with up to three problems accepted.
[1] Includes only those who nominated the problem as one of the top three in their community.

Table 76 shows opinions or perceptions regarding the use of municipal funds; baseline and midterm estimates are disaggregated by corridor and shown overall. Household respondents provided up to three spontaneous responses on the types of expenditures for which municipal funds are being used and the table shows the distribution of their responses.

Respondents felt that the municipality diverts much more money now (at midterm) through corruption than they did at baseline, and this is the case in all three corridors, with a change of 5.9 percent to 52.0 percent in St. Marc, 10.7 percent to 50.6 percent in the Northern Corridor,

and 15.9 percent to 44.4 percent in Cul-de-Sac. Overall, corruption was mentioned by 13.4 percent of respondents at baseline compared to 46.3 percent at midterm.

Other expenditure types which seem to have changed in all three corridors include *Nothing,*[49] for which the overall estimates are 25.6 percent at baseline and 58.0 percent at midterm. Of all the possible expenditures listed in Table 3.4.5, this measure (*Nothing*) garnered the highest prevalence at midterm (58.0 percent); the expenditure with the lowest midterm (as well as baseline) prevalence was *Sports infrastructures* (1.0 percent). There are no differences between corridors.

Table 76 [3.2.6] Perceived Use of Municipal Funds

Percent distribution of household respondents by type of expenditure

	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Type of expenditure	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Street cleanliness	4.3	8.0	3.9	13.6	12.8	9.2	9.8	9.8
Roads	11.1	18.9	6.8	12.3	12.6	19.6	11.2	18.3
Sports infrastructures	2.7	0.9	2.5	0.4	4.7	1.1	3.9	1.0
Other public works	4.5	18.9	2.5	20.5	8.4	14.9	6.6	16.3
Health	5.7	10.1	7.5	7.7	10.0	3.5	8.9	5.0
Education	8.7	12.8	8.8	12.5	14.3	6.0	12.4	7.9
Corrupt use of money	5.9	52.0	10.7	50.6	15.9	44.4	13.4	46.3
Salaries	3.9	6.5	3.0	5.4	7.0	5.7	5.7	5.7
Nothing	24.5	51.0	17.6	59.7	28.3	58.8	25.6	58.0
Other	4.5	7.7	6.3	6.3	10.9	6.2	9.0	6.4
DK/NR/Missing	68.7	9.4	75.8	6.0	62.2	8.9	65.9	8.4
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
Note: Percents indicate the proportion of household respondents that spontaneously mentioned a type of expenditure, with up to three types accepted.

[49] "It is not known if a "Nothing" response meant the same thing to all people. It could mean that the money not spent (just sits there unused), it is wasted or it is diverted through corruptions, etc. Another possibility is that people replied "Nothing" meaning "I don't know" (DK) which might explain why the DK/NR/Missing at baseline is so high and decreased so much at midterm. Thus, caution should be used interpreting these two response options.

3.4.3 PHYSICAL SECURITY AND PROTECTION OF HUMAN RIGHTS

Table 77 shows opinions or perceptions regarding crime reports, violence, and victim support services, disaggregated by corridor and shown in overall totals. Note that data presented from the midterm survey on reporting crimes were not collected at baseline, so the table shows those values without baseline comparisons.

Survey results show increases from baseline to midterm in knowledge of the availability of legal support services across the board: from 13.8 to 38.8 percent (St. Marc), from 10.9 to 42.4 percent (Northern), from 12.2 to 33.8 percent (Cul-de-Sac), and from 12.2 to 35.8 percent (total). Survey results also show increases in reported knowledge of police support services available for victims of violence or abuse in St. Marc (from 36.8 to 64.3 percent) and Cul-de-Sac (from 44.5 to 71.3 percent). Overall, knowledge of police services increased from 45.2 percent at baseline to 70.4 percent at midterm.

Respondents' experiences of violence, shown in the middle panel of Table 3.4.6, appear to have declined in Cul-de-Sac alone, with 36.3 percent reporting at baseline that they had witnessed an act of police brutality against citizens in the previous 12 months, compared to 12.5 percent at midterm.

It should be noted that knowledge of counseling services for victims of violence is only at 8.1 percent overall with little variation by corridor and this has not changed since baseline. Likewise, that only 29.4 percent of the respondents identify the health services as being available for victims of violence is disconcerting and calls for additional, exploratory research to explain this.

Table 77 [3.2.3] Crime and Violence

Percent distribution of household respondents by indicators								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Knowledge of support services available for victims of violence or abuse								
Health Services	14.5	24.4	16.8	29.2	13.6	30.3	14.4	29.4
Counseling Services	7.4	10.4	10.2	8.6	6.1	7.6	7.1	8.1
Legal Support Services	13.8	38.8	10.9	42.4	12.2	33.8	12.2	35.8
Police	36.8	64.3	52.8	70.7	44.5	71.3	45.2	70.4
Other	15.7	7.7	10.4	6.2	8.8	4.4	10.1	5.1
None	9.4	1.3	2.9	1.5	9.0	2.0	7.8	1.8
DK/NR/Missing	9.7	1.6	5.0	0.6	6.8	1.2	6.8	1.2
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787
Experiences of violence								
Was a victim of crime in the last 6 months	3.4	10.0	5.3	11.7	2.0	13.3	2.9	12.6

Percent distribution of household respondents by indicators								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Witnessed an act of police brutality against citizens in the last 12 months	9.2	12.1	7.8	7.6	36.3	12.5	26.6	11.6
Knows a victim of physical violence in the last 12 months	5.5	12.6	5.5	13.6	3.6	12.0	4.3	12.3
Number of households	**1,200**	**914**	**1,199**	**949**	**1,179**	**924**	**3,578**	**2,787**
Reporting of crimes[1]								
Crime reported	n/a	57.4	n/a	60.0	n/a	42.3	n/a	47.4
Resolved satisfactorily	n/a	55.5	n/a	47.6	n/a	53.5	n/a	52.4
Not resolved satisfactorily	n/a	44.5	n/a	52.4	n/a	46.5	n/a	47.6
Crime not reported	n/a	42.6	n/a	40.0	n/a	57.7	n/a	52.6
Number of respondents who know a victim of violence	n/a	116	n/a	134	n/a	101	n/a	351
Reason not repoted[1,2]								
It is useless	n/a	25.4	n/a	20.0	n/a	^	n/a	20.6
It is dangerous; they feared retaliation	n/a	18.6	n/a	36.5	n/a	^	n/a	43.0
Didn't have evidence	n/a	14.7	n/a	18.3	n/a	^	n/a	12.5
It wasn't serious	**n/a**	24.4	**n/a**	23.4	**n/a**	^	**n/a**	11.4
Didn't know where to report	**n/a**	**13.0**	**n/a**	**10.9**	**n/a**	**^**	**n/a**	**13.0**
Other	**n/a**	1.7	**n/a**	0.0	**n/a**	^	**n/a**	5.0
Number of respondents who knew of a victim that did not report a crime	**n/a**	**66**	**n/a**	**84**	**n/a**	**46**	**n/a**	**196**

Source: Haiti Baseline Survey, 2012, USAID Haiti Midterm Assessment. 2016.
[1] Of the respondents who had a friend of family that was a victim of violence or abuse.
[2] Respondents provided multiple responses. Listed percentages do not total to 100

Table 78 shows household respondents' opinions or perceptions regarding legal options, disaggregated by corridor and in overall totals. For a few items, data were not collected either at baseline or at midterm, so these values are presented in the table without comparisons.

There was an increase between baseline and midterm survey results in the percentage of respondents in Cul-de-Sac reporting one of their preferred sources of legal assistance to resolve conflicts with neighbors is the *Police* (from 33.3 percent at baseline to 54.2 percent at midterm).

In all three corridors - and the overall results - show increases between baseline and midterm with respect to respondents' indicating one of their preferences is the *Local Court* as their source of legal assistance: from 23.5 to 49.8 percent (St. Marc), from 34.5 to 60.9 percent (Northern), from 22.2 to 53.3 percent (Cul-de-Sac), and from 25.0 to 54.2 percent overall.

Among those respondents whose households solved an important dispute in the last two years without going to formal courts, survey data show increases between baseline and midterm about having used *Friend/Family* in those resolutions (from 41.2 to 71.5 percent in St. Marc, from 48.1 to 72.6 percent in Northern corridor, from 44.6 to 77.2 percent in Cul-de-Sac, and from 44.9 to 75.5 percent overall).

Table 78 [3.2.4] Legal system: experiences and assistance used

Percent distribution of household respondents by indicators								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base line	Mid term	Base line	Mid term	Base line	Mid term	Base line	Mid term
Preferred sources of legal assistance if conflict with neighbor								
None	5.2	3.3	5.2	6.6	7.4	10.1	6.6	8.7
Church Council	4.8	11.5	5.9	11.2	4.0	10.5	4.5	10.7
Lawyer	2.7	8.3	7.5	10.4	7.0	10.4	6.5	10.1
Local Elders	15.3	31.7	7.8	18.7	2.5	11.7	5.4	15.2
Local Court	23.5	49.8	34.5	60.9	22.2	53.3	25.0	54.2
Police	33.2	40.2	30.1	48.1	33.3	54.2	32.6	51.5
CASEC	11.8	n/a	7.9	n/a	4.2	n/a	6.1	n/a
Other	5.2	7.4	5.3	3.2	8.9	4.5	7.7	4.6
DK/NR/Missing	0.2	0.8	0.1	0.4	16.0	1.0	10.5	0.9
Number of households	1,200	914	1,199	949	1,179	924	3,578	2,787
Formal justice system								
Had an interaction with the court system in the last two years	4.1	13.6	5.6	14.1	4.2	7.1	4.4	8.9
Legal process was fair[1]	81.6	63.0	65.7	61.3	69.4	55.9	70.0	58.5
Number of households that had an interaction in the last two years	49	119	67	132	49	68	165	319
As percent of respondents	4.1%	13.0%	5.6%	13.9%	4.2%	7.4%	4.6%	11.4%
Informal Justice System								
Solved an important dispute without going to formal courts in the last two years	4.2	11.8	4.5	9.0	4.7	8.6	4.6	9.0

Percent distribution of household respondents by indicators								
	Corridor							
	St. Marc		Northern		Cul-de-Sac		Total	
Indicator	Base line	Mid term	Base line	Mid term	Base line	Mid term	Base line	Mid term
Method of Informal Justice Used [2]								
Lawyer without going to court	9.8	2.2	5.6	5.6	10.7	5.5	9.6	5.0
Friend/Family	41.2	71.5	48.1	72.6	44.6	77.2	44.9	75.5
Formal Mediator/Arbitrator	2.0	1.5	18.5	1.6	5.4	1.2	7.6	1.3
Traditional justice	13.7	2.8	11.1	7.6	8.9	2.4	10.0	3.4
Government official	0.0	1.8	0.0	0.0	7.1	2.2	4.8	1.8
Respected member of society	5.9	8.7	0.0	4.3	5.4	0.0	4.3	2.0
Security firm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.1
Religious leader	7.8	3.1	5.6	3.2	5.4	3.0	5.7	3.1
CASEC	n/a	0.0	n/a	0.0	n/a	0.0	n/a	0.0
Other	17.6	6.1	9.3	5.2	8.9	8.5	10.1	7.6
DK/NR/Missg	2.0	1.5	1.9	0.0	3.6	0.0	3.0	0.2
Number of households that solved an important dispute without going to formal courts in the last two years	51	107	54	89	56	81	161	277
As percent of respondents	4.3%	11.7%	4.5%	9.4%	4.7%	8.8%	4.5%	9.9%

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016.
[1] Includes households that had an interaction with the court system in the last two years.
[2] Includes households that solved an important dispute without going to formal courts in the last two years.
CASEC = Conseil d'Administration de la Section Communal

Table 79 presents household respondents' reports of participation in civil society, disaggregated by the three corridors as well as shown overall. For a few items, data were not collected at baseline, therefore these values are presented in the table without comparisons.

The data show several changes in reported civic participation between the baseline and midterm surveys. With respect to the measure of reported participation in *any type* of meeting at least once in the prior 12 months, midterm estimates are consistently higher than baseline estimates for each corridor and overall: from 15.2 to 69.8 percent in St. Marc, from 16.6 to 64.3 percent in Northern corridor, from 29.9 to 56.3 percent in Cul-de-Sac, and from 25.1 to 59.3 percent overall.

These changes appear to be driven partly by increases at midterm in respondents' reported participation in *Religious organization meetings (not including church)* and *Parent association meetings at school.* With respect to religious organizations, St. Marc was 7.3 percent at baseline and 31.1 percent at midterm; the Northern corridor was 7.3 percent at Baseline and 29.1 percent at midterm. Likewise, participation in parent association meetings at schools followed a similar pattern as religious organizations with St. Marc increasing from 5.9 to 43.4 percent and the Northern corridor increasing from 3.5 to 38.7 percent. It should be noted that while Cul-de-Sac did not have increases as in the other corridors, its' starting point (baseline) was higher for both of these meeting types and by midterm the three corridors are much closer to each other.

In addition, Table 3.4.10 shows that the percentages of respondents who reported they voted in the last elections decreased in St. Marc from 63.7 percent at baseline to 41.2 percent at midterm.

Table 79 [3.2.5] Civic Participation

Percent distribution of household respondents by civil participation indicator											
	Corridor										
	St. Marc		Northern				Cul-de-Sac		Total		
Indicators	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line
Participation in meetings of civic organizations[1]											
Religious organization (not including church)	7.3	31.1		7.3	29.1		17.1	26.4		13.7	27.4
Parents association at school	5.9	43.4		3.5	38.7		14.8	30.3		11.2	33.3
Community improvement committee or association	3.8	18.2		7.8	14.1		6.4	10.5		6.4	12.0
Association of professionals, merchants, manufacturers or farmers	3.0	14.1		3.4	9.2		3.0	4.1		3.1	6.1
Political party or political organization	2.3	15.4		3.2	18.8		2.5	11.1		2.6	12.9
Associations or groups of women or home makers	1.8	11.6		4.2	13.6		3.7	6.7		3.6	8.4
Town or city council meeting	n/a	9.7		n/a	8.7		n/a	3.6		n/a	5.2

Percent distribution of household respondents by civil participation indicator											
	Corridor										
	St. Marc		Northern				Cul-de-Sac		Total		
Indicators	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line
Participating in any type of meeting	15.2	69.8	16.6	64.3			29.9	56.3	25.1	59.3	
Participation in elections											
Has national ID card	n/a	77.2	n/a	82.8			n/a	83.9	n/a	82.9	
Registered to vote	70.7	61.2	74.4	73.8			63.9	61.7	67.0	63.7	
Voted in last elections	63.7	41.2	67.5	59.3			54.3	37.6	58.3	41.7	
Number of households	1,200	914	1,199	949			1,179	924	3,578	2,787	

Source: Haiti Baseline Survey 2012, Haiti Midterm Survey 2016.
Note: [1] Percentage of household respondents who participated in meetings at least once a year in the past 12 months.

Table 80 shows data on specific civil participation familiarity, intentions or behavior measures relative to elected officials. As with other tables, these measures are disaggregated by corridors. Most of the items presented in Table 3.4.9 were not collected in the Haiti baseline survey, so those values are presented in the table without comparisons. For the data which do exist for both baseline and midterm (the *Met with elected representatives* measure), there do not appear to be any differences over time.

There do, however, seem to be differences between corridors at midterm about respondents knowing their CASEC (with the Cul-de-Sac estimate, 20.7 percent, lower than the other two corridors). Similarly, respondents reported familiarity with their Deputy is highest in the Northern corridor (52.0 percent). Finally, Table 3.4.9 shows that a greater percentage of respondents from St. Marc felt they could meet with their CASEC than respondents from Cul-de-Sac (41.7 percent and 17.3 percent, respectively).

Table 80 [NEW] Knows of and/or Has Met with Elected Officials

Percent distribution of household respondents by civil participation indicator										
	Corridor									
	St. Marc		Northern				Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Knows elected representative										
CASEC	**n/a**	47.2	**n/a**	42.2			**n/a**	20.7	**n/a**	27.4
Mayor	**n/a**	**32.9**	**n/a**	**42.8**			**n/a**	**30.4**	**n/a**	**32.8**
Deputy	**n/a**	**17.7**	**n/a**	**52.0**			**n/a**	**35.9**	**n/a**	**36.5**
Senator	**n/a**	**31.7**	**n/a**	**33.2**			**n/a**	**43.0**	**n/a**	**40.0**

Percent distribution of household respondents by civil participation indicator										
	St. Marc Corridor		Northern				Cul-de-Sac		Total	
Indicator	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term	Base-line	Mid-term
Could meet with elected representative										
CASEC	n/a	41.7		n/a	35.6		n/a	17.3	n/a	23.2
Mayor	n/a	25.3		n/a	30.7		n/a	10.7	n/a	15.8
Deputy	n/a	10.1		n/a	27.2		n/a	9.2	n/a	12.3
Senator	n/a	9.7		n/a	14.0		n/a	6.8	n/a	8.4
Met elected representative[1]										
CASEC	19.0	18.7		15.8	14.2		8.6	7.5	11.5	10.0
Mayor	5.4	7.6		6.6	11.2		6.2	4.1	6.2	5.7
Deputy	4.6	3.0		5.2	11.9		3.3	3.6	3.9	4.9
Senator	1.3	2.5		2.1	5.2		1.0	1.1	1.3	2.0
Total meeting any elected representative	22.2	25.0		20.7	29.5		14.2	13.5	16.7	17.5
Number of households	1,200	914		1,199	949		1,179	924	3,578	2,787
Ask for employment	n/a	3.0		n/a	4.0		n/a	3.3	n/a	3.4
Ask for assistance	n/a	14.5		n/a	13.2		n/a	12.3	n/a	12.9
Ask for a reference	n/a	1.3		n/a	1.4		n/a	0.6	n/a	0.9
Resolve a problem	n/a	12.9		n/a	20.2		n/a	14.3	n/a	15.7
Lodge a complaint	n/a	4.2		n/a	2.4		n/a	1.7	n/a	2.3
On a referral	n/a	2.9		n/a	1.9		n/a	2.2	n/a	2.2
Personal matter	n/a	58.2		n/a	59.9		n/a	59.3	n/a	59.3
Other	n/a	16.0		n/a	12.5		n/a	12.6	n/a	13.2
Number meeting at least one elected official	n/a	228		n/a	284		n/a	120	n/a	632

4. SUMMARY

4.1 SUMMARY: PILLAR A – INFRASTRUCTURE AND ENGERY

Under Pillar A are the constructs related to the population's housing, assets, water supply and sanitation.

Between baseline and midterm, there appears to have been was a slight shift toward more female-only (13.6 to 18.6 percent) and male-only households (3.7 to 9.9 percent) from male and female households in all corridors. No changes occurred in (a) the number of usual household members (b) the mean size of the household (c) mean number of persons per sleeping room. The percentage of households with Restavek children is zero or near-zero in all corridors at midterm. In the same time period, the distribution of the number of rooms used for sleeping shifted downward. The data suggest a slight increase between baseline and midterm (7.6 to 21.3 percent) in the use of flush to septic tanks. There was a difference between St. Marc (20.5 percent) and Cul-de-Sac (43.5 percent) in access to any improved - and not shared – toilet/latrine facilities. Disposal of waste water in the courtyard is higher in St. Marc (47.0 percent) than Northern (36.3 percent) and Cul-de-Sac (23.2 percent) corridors. Reported disposal of solid waste into a ravine is higher in Cul-de-Sac than the other two corridors, while reported periodic incineration is higher in St. Marc than in Cul-de-Sac.

Only in St. Marc, the proportion of households with cement or brick flooring changed (by less than 20 percent). There was a marked difference observed in metal roofing at midterm between St. Marc (81.2 percent) and Cul-de-Sac (58.2 percent). Consistent with their locations relative to the earthquake's epicenter, HHs in Cul-de-Sac spent more on repairs than other corridors; The median amount of money spent on repairs per HH in Cul-de-Sac was 10,000 HTG compared with the Northern corridor at 1,700 HTG and St. Marc at 2,500 HTG.

Ownership status was similar across all corridors, with more St. Marc households (63.6 percent) reporting no official title for the property compared with the Northern corridor (43.4 percent) and Cul-de-Sac (39.3 percent). The greatest difference between the baseline and midterm measures in non-agricultural assets occurred for televisions (63.9 percent for Cul-de-Sac versus 29.5 percent for St. Marc and 42.6 percent for Northern). Reported ownership for refrigerators/freezers was 28.3 percent in Cul-de-Sac and 6.3 percent in St. Marc. Reported ownership for fans was 34.7 percent in Cul-de-Sac and only 11.9 percent in St. Marc. With respect to productive and agricultural assets, in St. Marc there was higher ownership of agricultural land and higher ownership of small livestock (by 17-19 percent) compared with the other corridors.

The proportion of households with access to improved drinking water at baseline was high in all three corridors, with the largest increase in access to improved water sources between

baseline and midterm (69.2 to 89.2 percent) in the Northern corridor. There was a difference with respect to using bottled water between Cul-de-Sac (45.1 percent) and St. Marc (23.2 percent). A shift from using public tap water in favor of bottled and/or a water selling society was observed. There was a increase between baseline and midterm in households not treating their water in the Northern (38.0 to 67.6 percent) and Cul-de-Sac (35.7 to 71.1 percent) corridors. A decrease in the use of appropriate water treatment methods was seen in the Northern corridor (53.5 to 31.8 percent) and Cul-de-Sac (48.2 to 28.7 percent). When JMP criteria were applied to the baseline and midterm data, only 55 percent of the population in the 3DCs have improved drinking water with corridor-specific values ranging from 48 percent (St. Marc) to 61 percent (Northern) at midterm.

For non-drinking water, a lower percentage of households used improved water in St. Marc than did Northern and Cul-de-Sac corridors at midterm. Cul-de-Sac reported greater use of tanker trucks, while St. Marc reported greater use of surface water (a non-improved water source) for their non-drinking water.

Few large or consistent differences emerge overall relative to having improved, non- shared sanitation facilities. Data do, however, show a difference between St. Marc (20.5 percent) and Cul-de-Sac (43.5 percent) in access to any improved, not shared, sanitation facility. Disposal of waste water in the courtyard is much higher in St. Marc (47.0%) than Cul-de-Sac (23.2%). Disposal of solid waste into a ravine is reported to be substantially higher in Cul-de-Sac than the other two corridors

Between baseline and midterm, there was a decrease in the percentage of households reporting no access to electricity in the home, particularly in the Northern corridor (74.3 to 44.3 percent). At midterm, Cul-de-Sac reported having the most electrified households, with St. Marc reporting the least. Cul-de-Sac reported higher usage of charcoal than St. Marc (76.8 versus 57.9 percent), and lower usage of wood than St. Marc (9.5 versus 35.7 percent).

4.2 SUMMARY: PILLAR B – ECONOMIC AND FOOD SECURITY

4.2.1 SUMMARY FOOD SECURITY, NUTRITION AND DIET

The percent of households with moderate to severe hunger likely decreased from 50 to 64 percent in Northern corridor between baseline and midterm; no change occurred in Cul-de-Sac and, if there was change in St. Marc it was a modest improvement only (about 10 percentage point decrease). At midterm, here is no difference between the corridors

Overall the corridors, wasting in children is low (4.2 percent) in the development corridors at midterm with virtually no children severely wasted. Stunting, however, remains at a relatively high level (17. 6%) with about a third of these being severely stunted. The Northern corridor appears to have had a modest reduction in wasting. There are no discernable differences between the corridors in the nutritional status of children at midterm.

There are no discernable differences between corridors for women's BMI measures nor are there any changes between baseline and midterm. The percent of stunted women neither varies by corridor nor change between baseline and midterm and remains at very low levels.

There is no change between baseline and midterm for the proportion of women who are exclusively breastfeeding their 0-5 month old infants and the level remains low with no differences between the corridors (overall the corridors, only 22.8 percent at baseline and 34.0 percent at midterm). In absolute terms, that only 34 percent of women are exclusively breastfeeding to five months indicates that there is a lot of room for improvement

In the diet diversity food group two, children's consumption of legumes and nuts, increases of over 20 percentage points were seen all three corridors for an overall increase from 20.5to 49.8 percent from baseline to midterm! There was an even greater increase in food group six, Vitamin A-rich foods, between baseline and midterm with an overall increase from 31.3 percent to 64.0 percent These gains are impressive and should reflect improvements in micronutrient intake but they were not enough to improve the proportion of children receiving a minimum acceptable diet (MAD) which was and remains low at the 15 percent level. Likely contributing substantially to this stagnation are the continued low consumption levels of (i) flesh foods, (ii) eggs and (iii) other fruits and vegetables.

Women's Consumption of legumes and nuts increased from baseline to midterm (overall 47.5 to 74.8 percent) and are now high. Grains, roots and tubers were and remain extremely high in all three corridors. As was the case with children's diet diversity, also increasing in the same time period were Vitamin A rich foods but only in the Northern corridor. A decrease in consumption of flesh foods, however, was seen in St. Marc and Cul-de-Sac. Dairy products, eggs, organ meats and Vitamin A Dark leafy vegetables all remain at low levels of consumption (between 14.3 and 32.6%). Using the women's dietary diversity index, the three corridors are now at 4.2, 4.2 and 4.0 percent for St. Marc, Northern and Cul-de-Sac respectively. There is no difference between corridors in the minimum diet diversity and these are all below 50 percent at midterm.

4.2.2 SUMMARY ECONOMIC SECURITY

The employment status of people 15 years and older is notably better at midterm than baseline. The percentage of adults who were economically active sometime within the past month and who expect to be employed in the coming month nearly doubled or more reaching levels between 55.2 and 63.1 percent across the corridors and 49.8 vs 63.3 percent for males and females respectively. The median weekly earnings (in HTG) increased between baseline and midterm in the Northern corridor (from 600 to 1,250 HTG/week) and Cul-de-Sac (from 1,000 to 1,687 HTG/week) while St. Marc showed only marginal increases from 1,000 to 1,250 HTG/week. The median income for men appears to have increased between baseline and midterm (1,000 HTG vs 2,000 HTG) whereas that for women only marginally increased if at all (1,000 HTG vs 1,250 HTG). Self-employed remains the principal characteristic of employment during both time periods. Only at the midterm measure is a difference of more than 20 percent between male and females noted, with the former being 48.7 percent and the latter 76.0 percent.

The predominant sectors of employment in both the baseline and the midterm surveys were agriculture and retail trade, but there is a suggestion of a slight shift out of agriculture and into retail over time in the St. Marc and Northern corridors. Within the agricultural sector, the only notable change during this time period is with the median weekly earnings in the Northern corridor increasing from 400 to 1,000 HTG/week.

Based on the median, there were overall increases in some types of expenditure between baseline and midterm, such as with occasional expenses, utilities, and education. Expenditures on food increased only in the Northern corridor, whereas usual expenses decreased only in Cul-de-Sac. Housing increased in Cul-de-Sac and very marginally in St. Marc.

Based on the mean, expenditures on utilities have increased but, based on the median, assets and housing have also increased over all the corridors, yet health care, education, and exceptional expenses have only increased in St. Marc and the Northern corridors. Sharp decreases in remittances and moderate increases in housing expenditures are also observed via the mean. But caution should be used when interpreting mean values because the data suggest a skewed distribution.

Urban expenditures are higher than rural expenditures and most categories of expenditures appear to have increased proportionately except for housing which increased more in the urban setting. The most pronounced difference between baseline and midterm was the decrease in the number of households reported to be living in poverty in St. Marc and the Northern corridor; from 21.9 to 12.4 percent and from 26.8 to 14.6 percent respectively whereas Cul-de-Sac did not change (although it remained lower than the other two corridors with a midterm estimate of 6.7 percent).

The percentage of households with access to a bank account and the percentage that had taken a loan in the last twelve months were about the same between baseline and midterm. Households taking loans remained rather small at 13.1 and 15.6 percent for baseline and midterm, respectively. Within these loan-taking households, the average value of the loan taken is higher, at midterm, by at least 20 percent that it was at baseline for all corridors. The largest increase was in the Northern corridor (from 13,818 to 20,423 HTG). Of all three corridors, Cul-de-Sac had the largest average loan value at both baseline and midterm (20,691 and 25,089HTG, respectively). At baseline, Cul-de-Sac's average loan value was more than 20 percent higher than Northern which, in turn, was more than 20 percent higher than St. Marc.

Obtaining loans from cooperatives and community savings/credit groups increased modestly from 12.4 to 22.1 percent overall. Loans to expanding family business increased most notably in St. Marc but also modestly in the Northern and Cul-de-Sac corridors in contrast to a substantial decrease in loans for farm production in Cul-de-Sac and a more modest decrease in St. Marc while Northern remained at very low levels for the same purpose.

Women's empowerment in agriculture in Haiti is relatively high compared to many other developing countries when assessed with the WEAI. Six of the nine measured using WEAI are at 75 percent or higher (that have achieved adequacy). Areas where women's empowerment in Haiti should still be reinforced are (a) the purchase, sale or transfer of assets, (b) access to and decisions on credit and (c) group membership whose scores are 61.2, 55.4, and 54.6 percent, respectively (reaching adequacy).

In the St. Marc corridor, only the cultivation of sweet potatoes increased from 8.6 to 28.5 percent from baseline to midterm. In the Northern corridor, cultivation of four crops increased notably; corn (from 44.6 to 66.5 percent), beans (from 23.2 to 45.9 percent), sweet potatoes (from 21.0 to 42.0 percent), and sweet cassava (from 26.6 to 48.8 percent). In Cul-de-Sac, beans and bananas increased from 36.0 to 68.6 percent and from 13.2 to 33.5 percent, respectively. Between corridor differences at baseline are: Rice is cultivated more in St. Marc. Sorghum and millet are grown more in Cul-de-Sac than in the Northern corridor (34.9 vs 1.3 percent). Beans are grown more in Cul-de-Sac than the other two corridors (68.6 vs 43.2 & 45.9 percent). Pigeon peas are grown more in the Northern corridor than in St. Marc (50.1 vs 30.0 percent). Yams, cassava, sweet cassava, and bananas are all grown by at least 20 percent more farmers in the northern corridor than the other two corridors. Both Northern and Cul-de-Sac show an increase in the mean number of crops planted per household; from 2.84 to 3.59 for Northern and from 2.61 to 3.14 for Cul-de-Sac. Northern corridor plants more crops per household than St. Marc being 3.59 vs 2.78 respectively. There appears to be a difference in the size of the plots between baseline and midterm; overall 0.50 hectares at baseline vs 0.24 hectares at midterm.

Cultivation of beans and pigeon peas during the dry season increased from baseline to midterm in all three corridors. Sweet cassava increased in St. Marc and Northern corridors. Sweet potatoes and yams increased only in the Northern Corridor whereas peanuts, spinach and bananas increased only in Cul-de-Sac. Beans, peanuts and spinach are grown most in Cul-de-Sac whereas sweet potatoes, yams, cassava and bananas are grown more in the Northern corridor. Between corridor differences are with rice being cultivated in the dry season more, at midterm, in St. Marc than in Northern. In Northern, pigeon peas, peanuts, yams and sweet cassava are grown more than in St. Marc.

In the secondary rainy season, corn, pigeon peas, sweet potatoes and sweet cassava cultivation increased in the St. Marc and Northern corridors. Peanuts and cassava increased only in the Northern corridor whereas beans and bananas increased only in St. Marc. Rice is cultivated more in St. Marc than in Northern at midterm. Pigeon peas, peanuts, yams and sweet cassava are grown more in Northern than in St. Marc.

Of the 19 "other" crops planted throughout the year, pumpkin, zucchini and squash appear to have increased in all three corridors. The only difference between corridors is with bread fruit, which is grown more in the Northern corridor than the other two corridors.

Comparing household production, yields and gross margins for all seasons combined, the average percent of total production lost prior to harvesting decreased from baseline to midterm for corn, rice, pigeon peas, peanuts, yams, sweet cassava and bananas. These decreases in pre-harvest losses range from 21 to 37 percentage points. There are no apparent changes in post- harvest losses. The average cost across all types of inputs decreased for all crops except peanuts and sugarcane. The range of magnitude of the reduction is from a low of 20 percent (sugarcane and tomatoes) to highs that exceed 70 percent (rice, pigeon peas and bananas).

Some of this reduction in input costs could be related to the smaller average size of the household plots that is described in the previous sections. Other factors which might have influenced this are unknown. The average yields also decreased for all crops except for peanuts. The range of magnitude of the reduction in yield is from a low of 20 percent (sweet potatoes) to highs that exceed 70 percent (sorghum, yams, cassava and bananas). The average gross margin decreased for sorghum, yams, cassava and bananas; those that increased are corn, beans, pigeon peas, peanuts, sweet potatoes, sweet cassava and sugarcane. There was no change in the gross margin for rice.

The average total purchased input costs per hectare decreased between baseline and midterm for nearly all crops; the exceptions being tomatoes and sugarcane. Cost reductions for the other crops ranged in magnitude from 48 percent for beans to 79 percent for bananas. The categories of input costs which made up the bulk of the total input costs at both baseline and

midterm are seeds, labor and equipment for land preparation and all labor other than for land preparation. In all three of these categories, input costs per hectare decreased for most of the crops. For seeds, inputs for all but two crops decreased (tomatoes and cassava being the exceptions). The reductions in costs for seeds varied by crop with a range in magnitude from 40 percent (cassava) to 74 percent (pigeon peas). Reductions in labor costs - excluding land preparation labor- are seen at midterm compared to baseline for all but sugarcane. The range of reductions in these labor costs was from 40 percent (Tomatoes) to 79 percent for sorghum and millet. Similar to the seeds and labor categories, land preparation costs decreased from baseline to midterm for most of the crops the exceptions being tomatoes and sweet potatoes (no change) and sugarcane (increased). Water irrigation and pesticide costs are, in absolute terms the lowest of the six categories though most did decrease between baseline and midterm at similar magnitudes to the other cost categories. The cost of inputs per hectare for fertilizer is slightly higher than pesticides and irrigation; there were, for the most part decreases similar in magnitude to other input costs with the notable exception of tomatoes and sugarcane both of which increased between baseline and midterm (212 and 364 percent increases respectively).

The percentage of households that processed their crops post-harvest decreased for all six crops assessed.

Respondents were able to select multiple sources of post-harvest loss. Because of the low sample sizes for post-harvest losses, only corn, rice, beans, and sweet potatoes can be compared between baseline and midterm and even this should be done cautiously. Of these four crops, only beans might have had a reduction in loss due to rotting but it might also have had an almost equal increase in loss due to insects.

Although the sample is small at midterm, the percentage of households using no type of storage for their pigeon peas appears to have increased by 50 percent since baseline. On the positive side, it appears that there is a shift from storing rice by heaping it up in the house to storing it in bags in the house: 48.8 at baseline to 72.2 percent at midterm. Heaping corn in the house and/or hanging it trees decreased from baseline to midterm while using (an unspecified) "other" method increased. Storage of beans, heaped in the house fell from 36.1 to 4.6 percent in the same time period but there is no single method that appears to have taken its place.

At baseline, 20 percent or more of the households that cultivated Corn, Rice, Sorghum/Millet, Beans, Pigeon peas, Sweet potato, Yams, Sweet cassava, sugarcane and bananas indicated that they had no primary buyers of their crops; at midterm, only two (corn and beans) indicated that they had no primary buyers and those two were both less than two percent. The percentage of households with the local market as a primary buyer for corn, rice and sweet potatoes increased from baseline to midterm (by over 30 percentage points each). For other crops, there were similar increases nominally in primary buyers at the local market but the sample sizes are small so caution should be taken in drawing any conclusions from those

changes. The proportion of respondents that "didn't know" who were the primary buyers seems to have decreased from baseline to midterm for many of the crops.

There were increases, from baseline to midterm, in the percentage of households cultivating tree crops with less than 10 trees. In St. Marc, the increase was from 30.5 to 61.9 percent while in Northern it was from 28.5 to 65.6 percent and in Cul-de-Sac from 36.3 to 64.4 percent. Sample sizes are too small for variety-specific analysis by corridor between baseline and midterm in Cul-de-Sac. There were no differentiating increases by tree crop variety in St. Marc or Northern corridors with the possible exception of coconut palms in the Northern corridor (but that increase was only by 16.7 percentage points).

Tree crop farmers at midterm had substantially less trees, on average, than baseline for "other" mango and coffee. There was an increase of 39.1% for the average cost of care per tree for "other" mango trees contrasting a decrease for coffee trees of 65.5% between baseline and midterm. The average yield per tree decreased for both "other" mango (a 40.3 percent decrease) and coffee (a 41.7 percent decrease) from baseline to midterm while net income increased for mango (108.6 percent increase) but decreased for coffee (85.5 percent decrease). The number of observations is extremely small so these results are most likely not real.

At midterm, most (81.8 percent) of the cocoa farmers were drying their product while only a minority roasted (12.4 percent), ground (10 .1 percent) or fermented (20.3 percent) it; 18.2 percent were not processing their cocoa at all. Heaping the cocoa in the house was the dominant storage method comprising 39.7 percent of the households.

The use of improved seeds decreased in all three corridors between baseline and midterm by 20.5 percent in St. Marc, by 25.0 percent in Northern and by 37.8 percent in Cul-de-Sac. The use of paid labor increased in the Northern corridor (only) changing from 60.3 to 86.8 percent. The proportion of households receiving the irrigated or pump water on time decreased in St. Marc (by 31.5 percent) and Cul-de-Sac (35.9 percent) from baseline to midterm. St Marc alone experienced reductions in the percentage of households receiving – on time - the improved seeds (decrease of 35.0 percent), fertilizers (decrease of 21.4 percent) and pesticides (decrease of 25.1 percent) in the same time period.

The GOH, as a source of irrigated or pump water, increased from 12.5 percent to 32.9 percent from baseline to midterm. The marketplace decreased from 57.8 percent to 35.6 percent as a source of pesticides during the same time period. With the assumption that "Paid Labor" was interpreted as simply "Labor" at administration, using oneself for labor increased from 25.2 percent at baseline to 50.4 percent at midterm. The increased use of oneself for labor with concurrent decrease in paying labor from associations might represent a shift between the two labor sources but there are other possibilities that explain this.

There is neither a distinguishable difference between corridors nor from baseline to midterm in terms of the percentage of the plots being sloped or flat. At midterm, there are approximately 60 percent of the plots being mostly flat and 30 percent being mostly sloped. Relative to erosion control for sloped plots, use of grass strips increased in St. Marc (from 9.4 to 42.0 percent) and Northern (from 19.2 to 66.5 percent) and might have increased in Cul-de-Sac which showed a 14.9 percent increase between baseline and midterm. Use of rock walls increased only in St. Marc (from 17.0 to 37.7 percent) whereas dry walls decreased in Cul-de-Sac (from 56.9 to 22.1 percent). It appears that St. Marc and the Northern corridor are making great strides in controlling erosion while Cul-de-Sac is not.

The data suggest that only St. Marc has increased land ownership between baseline and midterm (from 55.4 to 73.0). There is no evidence that the type of land ownership has changed in St. Marc: that is, the same proportion of official vs informal vs no title holdings remains the same at midterm as it did at baseline. For Northern and Cul-de-Sac corridors, increases in the proportion of the households having no title increased yet there was no evidence of change in official and informal title holdings nor of increases in land ownership of any kind.

4.3 SUMMARY PILLAR C - HEALTH AND OTHER BASIC SERVICES

Nearly one-third (32.6 percent) of household members (ages 6 or older) were reported ill at least once in the prior twelve months. At baseline, 11.9 percent of household members were reported ill. There are no differences between corridors neither at baseline nor at midterm. The overall prevalence of disability among household members ages 6 or older is similar between baseline (1.8 percent) and midterm (1.7 percent). The availability of improved residences for the disabled was low at both baseline and midterm, with a drop from 27.8 to 6.2 percent in the Northern corridor. Only 26.9 percent of persons with disabilities (PWDs) reported using community services at midterm (11.7 percent at baseline). Over one-quarter (25.1 percent) of PWDs age 15 or above are currently employed.

The majority of women (76.7 percent) reported at least one problem accessing health care. Problems getting permission to go to the doctor declined by more than 20 percent from baseline to midterm overall and for the St. Marc and Cul-de-Sac corridors. Problems getting treatment money declined by more than 20 percent in St. Marc (86.5 to 64.5 percent) but getting money for treatment was the most frequently reported problem across all corridors (78.8 to 69.3 percent). At both baseline and midterm, the vast majority of women in the study area lack health insurance coverage (96.5 percent at baseline, and 95.7 percent at midterm). The prevalence of uninsured women appears very similar across all three corridors, and over time (at 95 percent or greater).

At midterm, nearly half (44.9 percent) of the women in Northern Corridor were aware of services whereas about one-third were aware in St. Marc (33.1 percent) and Cul-de-Sac (31.2 percent). The most commonly reported (16.5 percent) known resource for victims of violence is a doctor or medical personnel.

The midterm total fertility rate (TFR) of 2.4 children is slightly lower in absolute value than the baseline TFR (2.8 children) but this is not a 20 percent change so might not be a real difference. At midterm, computed fertility is higher in St. Marc (3.2 children) than the other two corridors (2.3 and 2.4 for Northern and Cul-de-Sac respectively) and was similarly higher in magnitude at baseline.

Among all women, there was no change between midterm (4.6 percent) and baseline (8.2 percent) in the desire to have another child within two years. More women at midterm (55.4 percent) than baseline (20.8 percent) reported they preferred to have another child two or more years later (for women with zero to two children). This increase was accompanied by a decrease of more than 20 percent in the number of women who were undecided, at baseline, about whether to have another child (29.1 percent at baseline versus 1.5 percent at midterm overall).

The use of a modern method of contraception (e.g., sterilization or other barrier or hormonal contraceptive methods) was reported by only 35.7 percent of WRA with no change from baseline (30.6 percent).

At midterm, 17.1 percent of women report fertility-related reasons for not using contraception, such as no or infrequent sex, infertility, or not menstruating since the last birth. Contraceptive method-related reasons, such as concerns about side effects, or high cost of contraceptives, were reported by 18.5 percent. Fewer than six percent (5.9 percent) report opposition to contraception. Only 0.5 percent report a lack of knowledge about family planning. Over one-third (34.4 percent) of married or cohabiting women aged 15-49 who wish to limit or delay future pregnancies are not using any form of contraception (i.e. have an unmet need for family planning) and this is similar across all three corridors.

At midterm, only 7.5 percent (11.9 percent at baseline) of women reported not receiving antenatal care (ANC) with their most recent birth. Most women reported receiving ANC from a doctor (72.9 percent at midterm, and 63.7 percent at baseline). Between baseline and midterm, there was increased use of a doctor by more than 20 percent in St. Marc (37.8 to 62.4 percent) and Northern corridors (49.2 to 76.7 percent). 92.4 percent of women at the midterm received skilled ANC from a doctor, nurse, midwife, or auxiliary nurse. The baseline value for this measure is similar, at 82.4 percent,

Between baseline and midterm, the percentage of women reporting no antenatal care visits in St. Marc decreased (29.6 to 5.6 percent), with less than 20 percent decreases in other corridors; the percentage of women reporting four or more antenatal care visits increased in St Marc, (48.5 to 74.6 percent), in the Northern corridor (56.5 to 88.4 percent), in Cul-de-Sac (54.0 to 75.3 percent), and overall (53.9 to 77.2).

Between baseline and midterm, higher percentages of women reported taking iron/folic acid tablets during the pregnancy for their last birth in St. Marc (55.0 to 89.2 percent), in the Northern corridor (66.2 to 94.2 percent), and in Cul-de-Sac (65.2 to 83.8 percent). Overall, increased percentages of women reported taking iron/folic acid tablets (64.2 to 86.0 percent) and taking iron and folic acid for more than 90 days (10.3 to 35.9 percent). For blood pressure, urine sample and blood sample services, baseline percentages between 80 and 98 percent remained unchanged at midterm; the percentage of women reporting receiving this service increased in the Northern Corridor (43.6 to 83.8 percent), and in Cul-de-Sac (42.1 to 81.0 percent). Overall, the percentage increased from 44.4 to 80.3 percent.

In Cul-de-Sac, the percentage of women receiving two or more tetanus shots during their last pregnancy increased from 46.4 to 67.3 percent. HIV/AIDS testing was high in Northern and Cul-de-Sac at midterm (93.2 and 89.8 percent respectively at midterm) while St. Marc was at 75.4 percent; similar levels were found at baseline. Place of delivery remained unchanged between baseline and midterm and between the corridors. The percentage of women with a live birth in the past five years who reported assistance by a skilled provider at the last birth stayed almost the same across the three corridors (62.2% at baseline and 63.9% at midterm). Between baseline and midterm, strong increases in women reporting that a doctor conducted the post-delivery checkup are shown in St. Marc (1.5 to 26.0 percent), in Northern (0.5 to 35.4 percent) and in Cul-de-Sac (2.3 to 34.4 percent) for an overall increase from 1.8 to 33.5 percent. Considering the combined increases of women reported being seen by other health personnel, the percentage of eligible women who reported no post-delivery checkup decreased in all three corridors for an overall decrease from 96.2 to 20.7 percent.

With respect to the timing of the mother's first postnatal checkup, there was no change between baseline and midterm and the percent of women who did not receive any post-natal checkup - or received it 42 days or more after childbirth – remains at about 50 percent. There are no differences between corridors, at midterm, with respect to the timing of the child's first postnatal checkup.

The percentage of mothers with children in this age range who reported that their child had received the first DPT vaccination increased to 100 percent across all corridors but fell sharply by the third round to 57.6 percent (up from 25.8 at baseline). The same pattern that emerged with DPT also emerges with Polio but with lower coverage for Polio in the 2nd and 3rd rounds (DPT being at 89.8 and 57.6 percent for the 2nd and 3rd rounds while Polio reached only 72.8

and 36.4 percent for those rounds). The difference in coverage of the DPT and Polio vaccinations – that are usually administered together - suggests that there are problems with the health care delivery system or the cold chain.

There is no change in measles vaccine coverage between the two- time periods with the midterm measles coverage at 74.7 percent and midterm BCG coverage remaining high and being at 93.7 percent.

From baseline to midterm, there are increases in infant mortality in Northern corridor (39.5 to 64.5), Cul-de-Sac (32.7 to 65.4), and overall (38.1 to 66.7). Increases in under-5 mortality in Cul-de-Sac are from 43.3 to 92.8. St. Marc has the highest post neonatal mortality rate of 40.4 compared with 22.3 in Northern corridor. Northern has the lowest child mortality rate (11.9) compared with St. Marc (25.3) and Cul-de-Sac (29.3). The Northern corridor also has the lowest under-5 mortality rate (75.6), compared with Cul-de-Sac (92.8) and St. Marc (99.8).

4.4 SUMMARY PILLAR D - DEMOCRACY AND RULE OF LAW

Between baseline and midterm, an increase in public transportation system use was reported across all households (68.2 to 95.4 percent), with Cul-de-Sac exhibiting the largest increase (64.0 to 96.2 percent). Between baseline and midterm, the percentage of households reporting electricity usage increased in the Northern corridor (28.5 to 54.6), with households in Cul-de-sac showing slightly less than the 20 percentage point threshold for electricity usage (64.3 to 79.8). There were substantial disparities in electricity usages, from a high of 79.8 percent of households in Cul-de-Sac, to 54.6 percent of households in Northern Corridor, and to 35.5 percent in St. Marc. Between baseline and midterm, the percentage of households using public schools decreased overall (42.8 to 23.3 percent) and in St Marc (54.2 to 21.8 percent). At midterm, households in Northern Corridor have the highest reported usage of public education (41.9 percent) compared with other corridors.

Only about seven percent of households in the three development corridors actually use the police service. Between baseline and midterm, the percentage of households that used police services and rated this public service as good or very good decreased strongly overall (64.3 to 37.0 percent), as well as within two corridors, with the rating decreasing in St. Marc from 86.4 to 40.9 percent and 63.3 to 34.2 percent in Cul-de-Sac. Between baseline to midterm in St. Marc, households' satisfaction has declined with respect to public transportation (75.4 to 44.7 percent), schools (80.0 to 58.1 percent), tap water (77.4 to 51.1), electricity (57.7 to 10.1 percent), markets (57.3 to 35.7), sports facilities (66.8 to 39.0 percent), and morgues or cemeteries (72.7 to 48.2). At midterm, cultural activities exhibit the greatest level of

satisfaction (65.2 percent of households overall), and roads exhibit the lowest satisfaction among surveyed households (21.7 percent).

In all corridors at the midterm, the population's confidence in the government is very low (between 3.8 and 6.0 percent), as is the belief that the country is moving in the right direction (between 2.7 and 4.1 percent). The population's belief is similarly low with regard to believing human rights are protected (between 2.3 and 5.5 percent). Between baseline and midterm, perceptions of corruption among public officials being common or very common overall rose from 32.7 to 74.4 percent, from 43.0 to 70.7 percent in St. Marc, from 16.8 to 69.3 percent in the Northern Corridor, and from 35.6 to 76.2 percent in Cul-de-Sac. At midterm, responses are highest in Cul-de-Sac (76.2 percent) about feeling that government corruption in Haiti is increasing. Only in Cul-de-Sac has the perception of elections being fair decreased substantially between baseline and midterm (from 26.0 to 6.5 percent) although the other two corridors are also very low at midterm (10.5 and 13.0 percent).

A lack of water was ranked the most serious problem of the pre-determined response options at midterm (54.2 percent). Between baseline and midterm, a 20 percent or more increase (35.1 to 56.0 percent) in the concern over lack of water was reported in Cul-de-Sac. The proportion of respondents that felt that the municipal government has done a lot to solve these problems is negligible (two percent or less) across all corridors.
In all three corridors, respondents reported feeling that the municipality diverts much more money now through corruption (between baseline and midterm): overall (13.4 to 46.3 percent), in St. Marc (5.9 to 52.0 percent), in the Northern Corridor (10.7 to 50.6 percent), and in Cul-de-Sac (15.9 to 44.4 percent). The expenditure of *Nothing* garnered the highest prevalence at midterm (58.0 percent); the expenditure with the lowest midterm (as well as baseline) prevalence was Sports infrastructures (1.0 percent).

Survey results showed strong increases from baseline to midterm in knowledge of the availability of legal support services: from 13.8 to 38.8 percent (St. Marc), from 10.9 to 42.4 percent (Northern), from 12.2 to 33.8 percent (Cul-de-Sac), and from 12.2 to 35.8 percent (total) and in reported knowledge of police support services available for victims of violence or abuse in St. Marc (from 36.8 to 64.3 percent) and Cul-de-Sac (from 44.5 to 71.3 percent). Only in Cul-de-Sac did respondents' *experiences of violence* decline (from 36.3 percent at baseline to 12.5 percent at midterm). Knowledge of counseling services for victims of violence is only at 8.1 percent overall.

Between baseline and midterm, there was an increase in the percentage of respondents in Cul-de-Sac, reporting Police as preferred legal assistance to resolve conflicts (from 33.3 to 54.2 percent). All three corridors showed increases between baseline and midterm with respect to

respondents' indicating Local Court as their preferred source of legal assistance (from 23.5 to 49.8 percent in St. Marc, 34.5 to 60.9 percent in Northern, and 22.2 to 53.3 percent in Cul-de-Sac. Among respondents whose households solved a dispute in the last two years without formal courts, there were increases between baseline and midterm in Friend/Family involvement in resolutions: from 41.2 to 71.5 percent in St. Marc, from 48.1 to 72.6 percent in Northern corridor, from 44.6 to 77.2 percent in Cul-de-Sac, and from 44.9 to 75.5 percent overall.

With respect to the measure of reported participation in any type of meeting at least once in the prior 12 months, midterm estimates are consistently higher than baseline estimates for each corridor and overall: from 15.2 to 69.8 percent in St. Marc, from 16.6 to 64.3 percent in Northern corridor, from 29.9 to 56.3 percent in Cul-de-Sac, and from 25.1 to 59.3 percent overall. Between baseline and midterm, increased participation in religious organizations were reported in St. Marc (from 7.3 to 31.1 percent) and in the Northern corridor (7.3 to 29.1 percent) and increased participation in parent association meetings at schools were reported in St. Marc (5.9 to 43.4 percent) and the Northern corridor (3.5 to 38.7 percent). The percentages of respondents who reported they voted in the last elections decreased in St. Marc from 63.7 percent at baseline to 41.2 percent at midterm.

At midterm, there seem to be differences between corridors with respect to respondents knowing their CASEC (with the Cul-de-Sac estimate, 20.7 percent, lower than the other corridors). Familiarity with their Deputy is highest in the Northern corridor (52.0 percent). A greater percentage of respondents from St. Marc felt they could meet with their CASEC compared with respondents from Cul-de-Sac (41.7 percent and 17.3 percent, respectively).

ANNEXES

ANNEX I: REFERENCES

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ANNEX 11. SUPPLEMENTARY DATA AND FIGURE

A11.1A the 3DCs vs ZOI values at Midterm, 2016 for FTF indicators

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Feed the Future Indicator	FTF Interim/ZOI (2016)			Midterm/3DCs (2016)		
	Estimate	95% CI[1]	n	Estimate	95% CI	n
Daily per capita expenditures (as a proxy for income) in USG-assisted areas (2010 USD)						
All households	3.04	2.51 - 3.57	1117	5.26	3.05 – 7.48	2,764
Male and female adults	2.91	2.36 - 3.46	762	5.37	2.70 – 8.04	1,934
Female adult(s) only	3.22	2.53 - 3.92	226	4.32	3.68 – 4.97	554
Male adult(s) only	4.84	4.18 - 5.51	129	6.35	5.58 – 7.13	276
Prevalence of Poverty: Percent of people living on less than $1.25 per day (2005 PPP)						
All households	21.9	15.5 - 30.1	1117	8.7	6.5 – 11.7	2,764
Male and female adults	23.5	16.8 - 31.9	762	9.1	6.8 – 12.0	1,934
Female adult(s) only	18.4	10.6 - 30.1	226	8.8	5.2 – 14.6	554
Male adult(s) only	4.2	1.5 - 11.4	129	1.1	0.4 – 3.0	276
Depth of Poverty: Mean percent shortfall relative to the $1.25 per day poverty line (2005 PPP)						
All households	6.0	3.5 - 8.5	1117	2.1	1.3 – 3.0	2,764
Male and female adults	6.0	3.7 - 8.3	762	2.0	1.2 – 2.9	1,934
Female adult(s) only	7.0	1.8 - 12.1	226	2.9	1.0 – 4.8	554
Male adult(s) only	2.0	-0.2 - 4.1	129	0.5	0.0 – 1.0	276
Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators[2,3]						
Input in productive decisions	95.0	91.7 – 97.0	489	Not applicable		
Ownership of assets	85.2	78.8 – 89.9	489	"		
Purchase, sale or transfer of assets	61.2	52.7 – 69.0	489	"		
Access to and decisions on credit	55.4	44.5 – 65.9	489	"		
Control over use of income	98.9	97.6 – 99.5	489	"		
Group member	54.6	46.6 – 62.3	489	"		
Speaking in public	79.3	69.3 – 86.6	489	"		
Workload	74.8	69.8 – 79.2	489	"		
Leisure	83.8	71.9 – 91.2	489	"		
Autonomy in production	n/a	n/a	n/a			
Prevalence of households with moderate or severe hunger						
All households	58.9	50.9 - 66.5	1,131	47.3	42.8 – 51.9	2,786
Male and female adults	56.6	47.3 - 65.5	763	45.6	40.4 – 50.9	1,934
Female adult(s) only	62.8	53.1 - 71.6	228	54.1	47.7 – 60.3	557
Male adult(s) only	65.7	55.6 - 74.6	140	47.1	38.8 – 55.4	295
Women's Dietary Diversity: Mean number of food groups consumed by WRA						
All women age 15-49	4.2	3.97 - 4.32	1055	4.06	3.94 – 4.19	2,963
Prevalence of exclusive breastfeeding among children under 6 months of age						
All children	45.4	26.9 - 65.4	51	34.0	22.2 – 48.3	109
Male children	^	^	23	39.8	23.5 – 58.7	52
Female children	^	^	28	30.2	15.3 – 50.8	57

Feed the Future Indicator	FTF Interim/ZOI (2016)			Midterm/3DCs (2016)		
	Estimate	95% CI[1]	n	Estimate	95% CI	n
Prevalence of children 6-23 months receiving a minimum acceptable diet						
All children	12.5	7.4 - 20.2	141	14.7	10.5 – 20.3	317
Male children	7.9	3.1 - 18.6	63	12.1	7.1 – 19.9	157
Female children	15.5	8.1 - 27.8	78	17.4	11.6 – 25.1	160
Prevalence of underweight women						
All non-pregnant women age 15-49	12.2	9.7 - 15.1	988	9.8	8.4 – 11.6	2,803
Prevalence of stunted children under 5 years of age						
All children	23.0	17.3 - 29.9	623	17.6	14.5 – 21.2	1,369
Male children	30.1	20.0 - 42.6	302	21.2	15.6 – 28.0	662
Female children	16.6	11.1 - 24.2	321	14.5	10.8 – 19.3	707
Prevalence of wasted children under 5 years of age						
All children	5.6	2.2 - 13.6	623	4.2	2.7 – 6.6	1,369
Male children	7.8	3.0 - 18.6	302	5.3	3.1 – 8.9	662
Female children	3.5	1.3 – 9.0	321	3.3	1.9 – 5.6	707
Prevalence of underweight children under 5 years of age						
All children	10.7	6.5 - 17.2	623	9.7	7.3 – 12.8	1,369
Male children	16.3	9.5 - 26.6	302	10.9	7.5 – 15.5	662
Female children	5.7	3.2 - 9.8	321	8.7	5.5 – 13.6	707

[1] Confidence intervals (CIs) demonstrate the reliability of estimated values. While these surveys were not designed to capture change over time, non-overlapping CIs do indicate significant differences between the two estimates. However, if CIs do overlap, the reader cannot conclude whether there is or is not a significant difference between baseline and interim estimates. CIs were provided for the baseline indicators of: prevalence of poverty, prevalence of households with moderate or severe hunger, prevalence of exclusive breastfeeding, prevalence of children receiving a minimum acceptable diet, prevalence of underweight women, and prevalence of stunted, wasted, and underweight children. At baseline, CIs were not provided for disaggregate values. For each of these indicators, with the exception of children's wasting (which exhibits a significant baseline-interim difference), it cannot be concluded whether there are significant differences in estimates over time.

[2] The full WEAI score cannot be calculated because interim data were collected from women only and the autonomy indicator was dropped. The second interim survey will collect the full set of data from women and men and will report on the full WEAI.

[3] Feed the Future baseline reports presented censored headcounts of inadequate achievement for these empowerment indicators, while this interim report presents uncensored headcounts of adequate achievement for the interim reporting period. Censored headcounts present the percent of women who are disempowered and achieve adequacy (or inadequacy) in each indicator, while uncensored headcounts present the percent of women who achieve adequacy (or inadequacy) in each indicator regardless of empowerment status.

Source(s): USAID Haiti FTF ZOI Interim Assessment 2016 and the USAID Haiti 3DCs Midterm Assessment 2016

A11.1B FTF INDICATOR ESTIMATES FOR THE 3DCS (URBAN AND RURAL COMBINED)

Unweighted sample sizes, point estimates, standard deviations, confidence intervals, design effects (DEFF), and nonresponse rates for the USAID Haiti 3DCs Midterm Assessment, 2016

	Estimate					
Feed the Future indicator	**Indicators[a]**	**SD**	**95% CI**	**DEFF**	**Non-response rate[1]**	**n**
Daily per capita expenditures (as a proxy for income) in USG-assisted areas (2010 USD)[a]						
All households	5.26	28.56	3.05 – 7.48	4.3	3.3	2,764
Male and female adults	5.37	28.99	2.70 – 8.04	4.2	3.3	1,934
Female adult(s) only	4.32	5.48	3.68 – 4.97	1.9	3.3	554
Male adult(s) only	6.35	5.84	5.58 – 7.13	1.3	3.2	276
Prevalence of Poverty: Percent of people living on less than $1.25 per day (2005 PPP)a						
All households	8.7	-	6.5 – 11.7	6	3.3	2,764
Male and female adults	9.1	-	6.8 – 12.0	4.7	3.3	1,934
Female adult(s) only	8.8	-	5.2 – 14.6	2.5	3.3	554
Male adult(s) only	1.1	-	0.4 – 3.0	0.3	3.2	276
Depth of Poverty: Mean percent shortfall relative to the $1.25 per day (2005 PPP) poverty line[a]						
All households	2.1	8.6	1.3 – 3.0	6.9	3.3	2,764
Male and female adults	2.0	7.6	1.2 – 2.9	5.5	3.3	1,934
Female adult(s) only	2.9	13.4	1.0 – 4.8	2.8	3.3	554
Male adult(s) only	0.5	8.2	0.0 – 1.0	0.3	3.2	276
Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators 2						
Input in productive decisions	95.0	-	91.7 – 97.0	1.6	13.5	489
Autonomy in production	n/a	n/a	n/a	n/a	n/a	n/a
Ownership of assets	85.2	-	78.8 – 89.9	2.9	13.5	489
Purchase, sale or transfer of assets	61.2	-	52.7 – 69.0	3.4	13.5	489
Access to and decisions on credit	55.4	-	44.5 – 65.9	5.7	13.5	489
Control over use of income	98.9	-	97.6 – 99.5	0.8	13.5	489
Group member	54.6	-	46.6 – 62.3	3.0	13.5	489
Speaking in public	79.3	-	69.3 – 86.6	5.4	13.5	489
Workload	74.8	-	69.8 – 79.2	1.4	13.5	489
Leisure	83.8	-	71.9 – 91.2	7.9	13.5	489
Prevalence of households with moderate or severe hunger						
All households	47.3	-	42.8 – 51.9	6.0	2.5	2,786
Male and female adults	45.6	-	40.4 – 50.9	5.7	2.5	1,934
Female adult(s) only	54.1	-	47.7 – 60.3	2.2	2.5	557
Male adult(s) only	47.1	-	38.8 – 55.4	2.0	2.6	295

Table A1.1B continued	Estimate					
Feed the Future indicator	Indicator[a]	SD	95% CI	DEFF	Non-response rate[1]	n
Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age						
All women age 15-49	4.06	1.51	3.94 – 4.19	5.4	3.7	2,963
Prevalence of exclusive breastfeeding among children under 6 months of age						
All children	34.0	-	22.2 – 48.3	1.9	6.8	109
Male children	39.8	-	23.5 – 58.7	1.4	7.1	52
Female children	30.2	-	15.3 – 50.8	2.3	6.6	57
Prevalence of children 6-23 months receiving a minimum acceptable diet						
All children	14.7	-	10.5 – 20.3	1.3	9.8	317
Male children	12.1	-	7.1 – 19.9	1.3	9.7	157
Female children	17.4	-	11.6 – 25.1	1.1	10.0	160
Prevalence of underweight women						
All non-pregnant women age 15-49	9.8	-	8.4 – 11.6	2.1	4.2	2,803
Prevalence of stunted children under 5 years of age						
All children	17.6	-	14.5 – 21.2	2.7	2.9	1,369
Male children	21.2	-	15.6 – 28	3.7	2.9	662
Female children	14.5	-	10.8 – 19.3	2.7	2.9	707
Prevalence of wasted children under 5 years of age						
All children	4.2	-	2.7 – 6.6	3.1	2.9	1,369
Male children	5.3	-	3.1 – 8.9	2.5	2.9	662
Female children	3.3	-	1.9 – 5.6	1.9	2.9	707
Prevalence of underweight children under 5 years of age						
All children	9.7	-	7.3 – 12.8	2.9	2.9	1,369
Male children	10.9	-	7.5 – 15.5	2.5	2.9	662
Female children	8.7	-	5.5 – 13.6	3.7	2.9	707

n/a – Not available.

[1] Non-response rates for each indicator are derived by the difference between the number of eligible cases and the number of observations available for analysis divided by the number of eligible cases.

[2] The full WEAI score cannot be calculated because interim data were collected from women only and the autonomy indicator was dropped. The second interim survey will collect the full set of data from women and men and will report on the full WEAI.

[a] Significance tests were run for associations between each indicator (bold text title in the rows) and the disaggregate variable below the indicator title. For example, a test was done between per capita expenditures and gendered household type. When an association between the indicator and disaggregate variable is found to be significant ($p<0.05$), the superscript is noted next to the indicator.

Source: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016.

A1.2: Urban vs Rural Household demographic characteristics (in the 3DCs at midterm)

Characteristics of the Population	Total (All HHs)	By gendered household type[a]			
		Male and female adult	Female adult(s) only	Male adult(s) only	Child only
URBAN population sampled from the 3DCs					
Mean household size[a]	4.4	5.0	3.2	1.9	-
Mean number of adult female household members[1,2,]	1.6	1.7	1.8	0.0	-
Mean number of children (<2 years) [a, 1]	0.2	0.2	0.1	0.0	-
Mean number of children (0-4 years) [a, 1]	0.5	0.6	0.3	0.0	-
Mean number of children (5-17 years) [a, 1]	1.1	1.2	1.1	0.3	-
Mean percentage of adults who are female[1,2]	56.1	52.3	100.0	0.0	-
Highest education level attained					
No education	**1.9**	**0.9**	5.7	2.1	-
Less than primary	**8.7**	**7.2**	12.7	12.0	-
Primary	45.1	42.8	56.5	40.6	-
Secondary or more	44.4	49.0	25.1	45.3	-
n[3]	1656	1172	329	155	**n/a**
Rural (ZOI) population sampled					
Mean household size[a]	4.5	5.3	3.5	1.7	-
Mean number of adult female household members[a,1,2,]	1.4	1.5	1.6	0.0	-
Mean number of children (<2 years)[a, 1]	0.2	0.2	0.2	0.0	-
Mean number of children (0-4 years)[a, 1]	0.6	0.7	0.6	0.0	-
Mean number of children (5-17 years)[a, 1]	1.4	1.6	1.4	0.3	-
Mean percentage of adults who are female [1,2]	54.0	49.8	100.0	0.0	-
Highest education level attained[a]					
No education	10.4	7.1	14.6	22.8	-
Less than primary	28.4	25.3	37.9	30.0	-
Primary	41.8	44.6	37.7	31.8	-
Secondary or more	19.4	22.9	9.8	5.5	-
n[3]	1131	763	228	140	n/a

[1] The count is based on household members with known age.

[2] Adult are individuals age 18 or older. Females age 15-17 are of reproductive age, but are not considered adults by this definition.

[3] Sample n is the unweighted count of all households that responded to the survey.

[a] Significance tests were performed for associations between household characteristics and gendered household type. For example, a test was done between mean household size and gendered household type. When an association is found to be significant ($p<0.05$), a superscript is noted next to the household characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Annex A1.3 Urban vs Rural - primary male and female adult decisionmaker Characteristics (in the 3DCs at midterm)

Characteristic	Total (All primary adult decisionmakers)		By primary adult decision maker sex[a]			
			Male		Female	
	Percent	n	Percent	n	Percent	n
URBAN population sampled from the 3DCs						
Age[a]						
18-24	7.3	2375	4.1	1006	9.9	1369
25-29	13.4	2375	11.7	1006	14.6	1369
30-39	31.0	2375	31.4	1006	30.7	1369
40-49	22.0	2375	25.0	1006	19.7	1369
50-59	14.9	2375	17.9	1006	12.7	1369
60+	11.3	2375	9.8	1006	12.4	1369
					Educational attainment[a]	
No education	14.4	2370	8.4	1004	18.9	1366
Less than primary	21.6	2370	19.7	1004	23.1	1366
Primary	41.8	2370	44.6	1004	39.8	1366
Secondary or more	22.1	2370	27.3	1004	18.2	1366
Rural (ZOI) population sampled						
Age						
18-24	8.6	1,720	7.0	757	9.8	963
25-29	10.7	1,720	9.3	757	11.8	963
30-39	22.9	1,720	20.7	757	24.7	963
40-49	19.2	1,720	20.7	757	18.1	963
50-59	17.6	1,720	20.2	757	15.7	963
60+	20.9	1,720	22.1	757	20.0	963
Educational attainment[a]						
No education	36.0	1712	33.0	755	38.4	957
Less than primary	28.8	1712	27.2	755	30.0	957
Primary	25.4	1712	28.7	755	22.9	957
Secondary or more	9.7	1712	11.1	755	8.7	957

[a] Significance tests were performed for associations between the sex and background characteristics of the decisionmaker. For example, a test was done between sex and age of the decisionmaker. When an association is found to be significant ($p<0.05$), a superscript is noted next to the characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

A11.4 URBAN vs Rural Household dwelling characteristics (in the 3DCs at midterm)

Characteristic of Dwellings	Total (All households)	
	Estimate	n
URBAN population sampled from the 3DCs		
Percent with improved water source[1]	38.6	1656
Percent with improved sanitation[2]	43.9	1656
Mean persons per sleeping room[3]	3.0	1656
Percent using solid fuel for cooking[4]	87.3	1656
Percent with access to electricity	82.8	1656
Household roof materials (%)[5]		
Natural	0.0	1652
Rudimentary	1.0	1652
Finished	99.0	1652
Household exterior wall materials (%)[6]		
Natural	0.5	1598
Rudimentary	2.5	1598
Finished	97.0	1598
Household floor materials (%)[7]		
Natural	8.1	1654
Rudimentary	0.1	1654
Finished	91.8	1654
Rural (ZOI) population sampled		
Percent with improved water source[1]	53.8	1131
Percent with improved sanitation[2]	23.0	1131
Mean persons per sleeping room[3]	2.8	1131
Percent using solid fuel for cooking[4]	92.5	1131
Percent with access to electricity	34.8	1131
Household roof materials (%)[5]		
Natural	3.2	1130
Rudimentary	0.3	1130
Finished	96.5	1130
Household exterior wall materials (%)[6]		
Natural	9.3	1082
Rudimentary	16.5	1082
Finished	74.2	1082
Household floor materials (%)[7]		
Natural	42.0	1121

Rudimentary	0.0	1121
Finished	58.0	1121

[1] Improved water sources include piped water into the dwelling, piped water into the yard, a public tap/standpipe, a tube well/borehole, a protected dug well, a protected spring, and rainwater (WHO and UNICEF 2006). The proportion of the population with sustainable access to an improved water source is the 2015 MDG indicator #30 (UNDG 2003); however, as in most major international survey programs, the measure reported here reflects only access to an improved water source, and not the sustainability of that access.

[2] Improved sanitation facilities are those that separate human excreta from human contact and include the categories flush to piped sewer system, flush to septic tank, flush/pour flush to pit, composting toilet, ventilated improved pit latrine, and a pit latrine with a slab. Because shared and public facilities are often less hygienic than private facilities, shared or public sanitation facilities are not counted as improved (WHO and UNICEF 2006). The proportion of the population with access to improved sanitation is the 2015 MDG indicator #31 (UNDG 2003).

[3] The average number of persons per sleeping room is a common indicator of crowding (UNDG 2003).

[4] Solid fuel is defined as charcoal, wood, animal dung, and agriculture crop residue. The proportion of the population using solid fuels is MDG indicator #29 (UNDG 2003). The other and no food cooked in household categories are removed from percentages.

[5] Natural roofs include no roof and thatch/palm leaf. Rudimentary roof includes bamboo, wood/plank, and cloth/tent. Finished roofs include metal, wood, cement, and brick. Cases falling into the "Other" category have been removed (from the denominator (n) and percentages.

[6] Natural walls include no walls, cane/palm/trunks, and dirt. Rudimentary walls include bamboo with mud, stone with mud, reused wood, cloth/tent, and cardboard. Finished walls include cement, stone with lime/cement, cement blocks, and wood planks or shingles. Cases falling into the "Other" category have been removed (from the denominator (n) and percentages.

[7] Natural floors include earth/sand and dung. Rudimentary floors include wood/palm. Finished floors include parquet or polished wood, concrete/cement/brick, and ceramic tile/mosaic. Cases falling into the "Other" category have been removed (from the denominator (n) and percentages

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

A11.5 URBAN vs RURAL School attendance and educational attainment (in the 3DCs at midterm)

Characteristic	Urban (from 3DCs) Percent			Rural (ZOI) Percent		
	Attending school[1,a]	Attained a primary level of education[2,b]	n	Attending school[1,a]	Attained a primary level of education[2,b]	
Age group	[a,b]			[a,b]		
5-9	90.8	n/a[1]	752	86.6	n/a[1]	625
10-14	94.2	28.8	727	90.2	10.3	622
15-19	85.1	79.5	866	80.0	56.0	530
20-24	57.1	87.3	915	38.0	69.4	441
25-29	n/a	84.8	741	n/a[2]	62.4	355
30-34	n/a	79.9	606	n/a[2]	55.1	290
35-54	n/a	65.4	1365	n/a[2]	39.8	863
55+	n/a	32.0	671	n/a[2]	5.9	612
Sex	[a,b]			[b]		
Female						
Age group						
5-9	91.0	n/a[1]	362	89.1	n/a[1]	307
10-14	93.8	30.9	377	91.4	9.2	305
15-19	81.3	76.1	456	78.2	57.4	263
20-24	53.6	85.8	488	27.2	69.3	225
25-29	n/a[2]	81.4	415	n/a[2]	60.5	193
30-34	n/a[2]	78.1	332	n/a[2]	53.1	164
35-54	n/a[2]	55.9	728	n/a[2]	34.7	461

Characteristic	Urban (from 3DCs) Percent			Rural (ZOI) Percent		
	Attending school[1,a]	Attained a primary level of education[2,b]	n	Attending school[1,a]	Attained a primary level of education[2,b]	
55+	n/a[2]	22.6	425	n/a[2]	3.5	326
Male						
Age group						
5-9	90.7	n/a[1]	390	84.2	84.2	318
10-14	94.7	26.6	350	n/a[1]	n/a[1]	317
15-19	89.7	83.5	410	n/a[3]	n/a[3]	267
20-24	61.5	89.2	427	n/a[3]	n/a[3]	216
25-29	n/a[2]	89.1	326	318	318	162
30-34	n/a[2]	82.1	274	10-14	10-14	126
35-54	n/a[2]	76.0	637	89.0	89.0	402
55+	n/a[2]	48.1	246	11.4	11.4	286

n/a[1] Not applicable – Children aged 5-9 years are not yet old enough to have attained a primary level of education.

n/a[2] Not applicable – Current school attendance applies to school-age children and youth only, ages 5-24.

[1] The USAID Haiti FTF ZOI interim assessment and USAID Haiti Midterm Survey were administered during the school year.

[2] The goals of achieving universal primary education and achieving gender equity with respect to education are assessed by multiple MDG indicators, typically using administrative school data. This table presents respondent-reported school attendance, primary educational attainment, as well as the ratio of females to males on these measures (UNDG 2003).

[3] The MDG indicators for universal primary education and gender equity within education are assessed through the literacy rate (MDG indicator #8) and the ratio of literate women to men (MDG indicator #10) among young adults, age 15-24 years (UNDG 2003).

[a-c] Significance tests were performed for associations between the indicator in the column heading, and age and sex. For example, a test was done for school attendance by sex, and a test was done for school attendance by age. When an association is found to be significant ($p<0.05$), the superscript of the column heading will appear next to the sex row heading and/or next to the age group row heading.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Annex A11.6 URBAN vs Rural Daily per capita expenditures by household characteristic (in 2010 USD)[1] (in the 3DCs at midterm)

Characteristic	Estimate (weighted)						
	Mean[a]	Percentile					n[2]
		10th	25th	50th	75th	90th	
URBAN population sampled from the 3DCs							
Total (All households)	**6.08**	**1.76**	**2.63**	**3.88**	**5.44**	**7.87**	**164**
Gendered household type[a]							
Male and female adults	6.16	1.75	2.68	3.70	5.3	7.462	117
Female adult(s) only	4.75	1.64	2.51	3.70	5.8	8.00	328
Male adult(s) only	6.88	3.02	3.86	6.37	9.03	11.5	147
Household size							
Small (1-5 members)	5.04	2.14	2.98	4.15	6.0	8.552	118
Medium (6-10 members)	7.44	1.54	2.33	3.45	4.5	6.39	442
Large (11+ members)	^	^	^	^	^	^	23
Household educational attainment[a]							
No education	2.84	0.94	1.43	2.08	4.1	5.48	32
Less than primary	3.10	1.37	1.51	2.50	3.7	5.02	162
Primary	3.76	1.67	2.41	3.34	4.6	6.67	756
Secondary or more	8.49	2.42	3.42	4.52	6.3	9.68	697
Rural (ZOI) population sampled							
Total (All households)	**3.04**	**0.90**	**1.50**	**2.59**	**3.6**	**6.027**	**111**
Gendered household type[a]							
Male and female adults	2.91	0.94	1.40	2.44	3.4	5.74	762
Female adult(s) only	3.24	0.71	1.71	2.71	4.2	6.12	226

Male adult(s) only	4.85	2.05	2.89	4.13	6.69	8.67	129
Household size[a]							
Small (1-5 members)	3.79	1.48	2.25	3.15	4.65	6.97	783
Medium (6-10 members)	2.30	0.89	1.25	1.96	2.75	3.88	309
Large (11+ members)	^	^	^	^	^	^	25
Household educational attainment[a]							
No education	2.72	0.70	1.36	2.17	3.45	5.7	127
Less than primary	2.20	0.84	1.08	1.71	2.76	4.1	344
Primary	2.83	1.13	1.51	2.47	3.61	5.0	469
Secondary or more	4.52	1.77	2.61	3.38	5.96	9.3	176

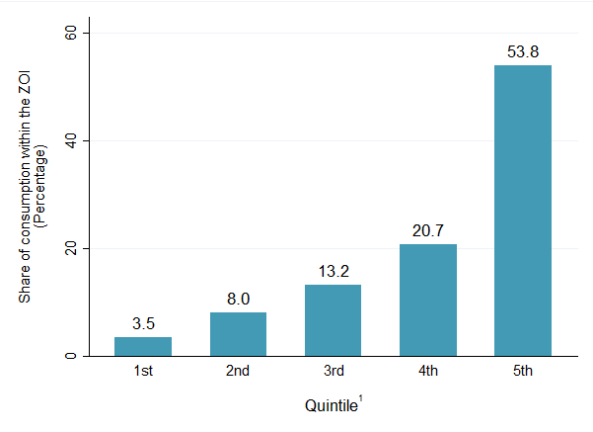
[1] Per capita expenditures measured in Haitian gourdes (HTG) were converted to 2010 USD using the Consumer Price Index (CPI) and the PPP Index estimated by the World Bank. We used the formula (2005 CPI HTG / 2016CPI HTG) * (1 / PPP 2005) * (2010 USD CPI / 2005 USD CPI) where PPP 2005 = 19.37, 2016 CPI HTG = 231.44, 2005 CPI LCU = 100, 2010 USD CPI =111.65, and 2005 USD CPI = 100. The conversion factor was 0.24905.

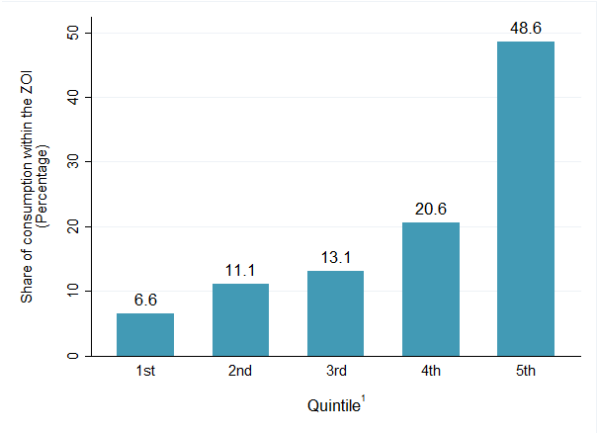
[2] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[a] Significance tests were performed for associations between per capita expenditures and household characteristics. For example, a test was done between per capita expenditures and gendered household type. When an association is found to be significant ($p<0.05$), the superscript is noted next to the household characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

FIGURE A1.6 URBAN VS. RURAL SHARE OF CONSUMPTION PER QUINTILE (IN THE 3DCS AT MIDTERM)





[1] Share of the poorest quintile in national consumption is an MDG indicator that provides information on income inequality (UNDG 2003). The poorest quintile is determined as the poorest fifth of the population. The poorest quintile's share of total consumption is calculated by dividing the consumption of the poorest quintile by total consumption within the ZOI.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

A11.7 URBAN vs RURAL (extreme) Poverty at the $1.25 (2005 PPP)[1] per person per day threshold (in the 3DCs at midterm)

URBAN Characteristic	Prevalence of poverty[2,5, a]		Depth of poverty[3,5,b]		Average consumption shortfall of the poor[4,5]		
	Percent population[a]	n[6]	Percent of poverty line[b]	n[6]	In USD 2005 PPP[c]	Percent of poverty line[c]	n[6]
URBAN population sampled from the 3DCs							
Total (All households)	4.4	11647	0.8	11647	0.23	18.73	62
Gendered household type[b]							
Male and female adults	4.5	1172	0.8	1172	0.22	17.47	49
Female adult(s) only	5.0	328	1.3	328	^	^	13
Male adult(s) only	0.0	147	0.0	147	^	^	0
Household sizea,b							
Small (1-5 members)	2.3	1182	0.4	1182	^	^	25
Medium (6-10 members)	7.5	242	1.4	442	0.23	18.62	37
Large (11+ members)	^	23	^	23	0	0	0
Household educational attainment[a,b,c]							
No education	20.7	232	6.3	32	^	^	3
Less than primary	13.3	162	1.0	162	^	^	11
Primary	6.0	756	1.4	756	0.28	22.79	39
Secondary or more	1.2	697	0.2	697	^	^	9
RURAL (ZOI) population sampled							
Total (All households)	21.9	1117	6.0	1117	0.3	27.3	158
Gendered household type[a, b]							
Male and female adults	23.5	762	6.0	762	0.3	25.6	132
Female adult(s) only	18.4	226	7.0	226	^	^	22

Male adult(s) only	4.2		129	2.0		129	^		^			4
Household size[a,b]												
Small (1-5 members)	8.6		783	2.1		783	0.3		24.5			53
Medium (6-10 members)	32.1		309	8.6		309	0.3		26.7			93
Large (11+ members)	^		25	^		25	^		^			12
Household educational attainment[a,b,c]												
No education	29.5		127	9.2		127	^		^			21
Less than primary	36.5		344	11.5		344	0.4		31.5			74
Primary	19.9		469	4.7		469	0.3		23.6			58
Secondary or more	6.7		176	1.3		176						5

^ Results not statistically reliable, n<30.

[1] The Feed the Future poverty indicators are based on the poverty threshold of $1.25 (2005 PPP) per person per day.

[2] The prevalence of poverty is the percentage of individuals living below the $1.25 (2005 PPP) per person per day threshold. Poverty prevalence is sometimes referred to as the poverty incidence or poverty headcount ratio.

[3] The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

[4] The average consumption shortfall of the poor is the average amount below the poverty threshold of a person in poverty. This value is estimated only among individuals living in households that fall below the poverty threshold.

[5] A significance test was performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between prevalence of poverty and gendered household type. When an association between the column indicator and row variable is found to be significant ($p<0.05$), the superscript for the indicator in the column heading is noted next to the row variable.

[6] n = number of households (HH). Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[a-c] Superscripts in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between prevalence of poverty and gendered household type. When an association between the column indicator and row variable is found to be significant ($p<0.05$), the superscript for the indicator in the column heading is noted next to the row variable

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

A11.8 URBAN vs RURAL Household hunger (IN THE 3DCS AT MIDTERM)

Characteristic	Percent			n[1]
	Little to no hunger [a]	Moderate hunger	Severe hunger	
URBAN population sampled from the 3DCs				
Total (All households)	56.4	39.1	4.5	**1655**
Gendered household type				
Male and female adults	57.7	37.5	4.8	**1171**
Female adult(s) only	49.0	46.6	4.4	**329**
Male adult(s) only	60.4	37.5	2.2	**155**
Household size				
Small (1-5 members)	56.8	39.1	4.1	1189
Medium (6-10 members)	55.0	39.5	5.4	443
Large (11+ members)	^	^	^	23
Household educational attainment[a]				
No education	45.5	43.6	10.9	32
Less than primary	37.4	52.3	10.3	164
Primary	55.3	40.2	4.5	758
Secondary or more	61.7	35.3	3.0	701
RURAL (ZOI) population sampled				
Total (All households)	**41.1**	**50.9**	**8.0**	**1131**
Gendered household type				
Male and female adults	43.4	47.9	8.7	763
Female adult(s) only	37.2	54.7	8.1	228
Male adult(s) only	34.3	62.1	3.7	140
Household size				
Small (1-5 members)	42.1	50.0	7.9	797
Medium (6-10 members)	37.2	55.1	7.6	309
Large (11+ members)	^	^	^	25
Household educational attainment[a]				
No education	36.8	54.6	8.6	132
Less than primary	29.9	59.4	10.7	349
Primary	41.9	50.0	8.1	472
Secondary or more	57.8	38.7	3.5	177

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample size may not total to the aggregated sample size.

[a] Significance tests were performed for associations between little to no hunger and household characteristics, which is equivalent to testing the association between moderate to severe hunger and household characteristics. For

example, a test was done between little to no hunger and gendered household type. When differences were found to be significant ($p<0.05$), the superscript is noted next to the household characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

A11.9 URBAN vs Rural Women's dietary diversity score (IN THE 3DCS AT MIDTERM)

Characteristic	Mean [a]	Median	n[1]
URBAN population sampled from the 3DCs			
Total (All women 15-49)	**4.0**	**4**	**1908**
Age			
15-19	4.0	4	361
20-24	4.0	4	403
25-29	4.0	4	345
30-34	4.1	4	295
35-39	4.1	4	220
40-44	4.2	4	154
45-49	4.2	4	130
Educational attainment			
No education	4.0	4	116
Less than primary	4.0	4	367
Primary	4.1	4	1010
Secondary or more	4.0	4	414
Gendered household type			
Male and female adults	4.1	4	1483
Female adult(s) only	4.0	4	418
Male adult(s) only	^	^	7
Household size			
Small (1-5 members)	4.0	4	1169
Medium (6-10 members)	4.1	4	695
Large (11+ members)	4.2	5	44
Household hunger			
Little to no hunger	4.1	4	1015
Moderate or severe hunger	4.0	4	892

Table A1.9 Continued	Percent[a]		n[1]
RURAL (ZOI) population sampled			
Total (All women 15-49)	4.1	4	1055
Age[a]			
15-19	4.1	4	222
20-24	4.3	4	190
25-29	4.1	4	168
30-34	4.6	5	148
35-39	3.9	4	131
40-44	4.1	4	104
45-49	3.9	4	92
Educational attainment[a]			
No education	3.5	3	180
Less than primary	4.0	4	362
Primary	4.3	4	417
Secondary or more	4.6	4	91
Gendered household type			
Male and female adults	4.1	4	813
Female adult(s) only	4.2	4	235
Male adult(s) only	^	^	7
Household size			
Small (1-5 members)	4.2	4	573
Medium (6-10 members)	4.1	4	435
Large (11+ members)	4.2	4	47
Household hunger			
Little to no hunger	4.2	4	439
Moderate or severe hunger	4.1	4	616

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[a] Significance tests were performed for associations between mean women's dietary diversity score and individual/household characteristics. For example, a test was done between mean women's dietary diversity score and age. When an association is found to be significant ($p<0.05$), the superscript is noted next to the characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.10 Urban vs Rural Women's minimum dietary diversity (in the 3DCs at midterm)

Characteristic	Percent [a]	n[1]
URBAN population sampled from the 3DCs		
Total (All Women 15-49)	38.8	1908
Age		
15-19	32.4	361
20-24	40.0	403
25-29	40.1	345
30-34	38.8	295
35-39	38.7	220
40-44	40.2	154
45-49	47.8	130
Educational attainment		
No education	31.7	116
Less than primary	39.0	367
Primary	38.6	1010
Secondary or more	41.2	414
Gendered household type		
Male and female adults	39.9	1483
Female adult(s) only	34.3	418
Male adult(s) only	^	7
Household size		
Small (1-5 members)	39.3	1169
Medium (6-10 members)	37.3	695
Large (11+ members)	52.4	44
Household hunger		
Little to no hunger	39.9	1015
Moderate or severe hunger	37.5	892

Table A1.10 Continued	Percent[a]	n[1]
RURAL (ZOI) population sampled		
Total (All Women 15-49)	37.8	1055
Age		
15-19	33.8	222
20-24	41.8	190
25-29	36.7	168
30-34	51.4	148
35-39	33.0	131
40-44	39.3	104
45-49	26.7	92
Educational attainment		
No education	23.0	180
Less than primary	33.9	362
Primary	42.6	417
Secondary or more	46.7	91
Gendered household type		
Male and female adults	37.2	813
Female adult(s) only	40.0	235
Male adult(s) only	^	7
Household size		
Small (1-5 members)	39.4	573
Medium (6-10 members)	36.7	435
Large (11+ members)	34.1	47
Household hunger		
Little to no hunger	40.0	439
Moderate or severe hunger	36.2	616

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[a] Significance tests were performed for associations between women's minimum dietary diversity and individual/household characteristics. For example, a test was done between women's minimum dietary diversity and age. When an association is found to be significant ($p<0.05$), the superscript is noted next to the characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.11 Urban vs Rural Consumption of foods by women's minimum dietary diversity status (in the 3DCs at midterm)

Category	Percent of women according to achievement of a minimum dietary diversity[a]	
	Achieving	Not achieving
URBAN population sampled from the 3DCs		
Women consuming a specific food group		
Grains, roots and tubers	98.1	97.3
Legumes and beans[a]	85.7	65.5
Nuts and seeds[a]	13.8	1.6
Dairy products[a]	47.3	14.5
Meat and organ meats[a]	78.5	38.3
Eggs[a]	27.6	5.2
Vitamin A-rich dark green leafy vegetables[a]	52.7	19.0
Other Vitamin A-rich vegetables and fruits[a]	87.8	51.0
Other fruits[a]	22.1	3.2
Other vegetables[a]	55.3	13.4
n		
RURAL (ZOI) population sampled		
Grains, roots and tubers[a]	99.6	94.2
Legumes and beans[a]	91.2	68.7
Nuts and seeds[a]	16.8	1.7
Dairy products[a]	47.3	17.7
Meat and organ meats[a]	73.4	32.1
Eggs[a]	36.3	3.2
Vitamin A-rich dark green leafy vegetables[a]	62.4	17.6
Other Vitamin A-rich vegetables and fruits[a]	90.5	56.0
Other fruits[a]	19.0	3.5
Other vegetables[a]	59.3	18.9
n	415	640

[a] Significance tests were performed for associations between women's achievement of minimum dietary diversity and consumption of a specific food group. For example, a test was done between women's achievement of minimum dietary diversity and consumption of grains, roots and tubers. When an association is found to be significant ($p<0.05$), a superscript is noted next to the food group.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.12 Urban vs Rural Prevalence of exclusive breastfeeding to children < 6 months (in the 3DCs at midterm)

Characteristic	Percent [a]	n[1]
URBAN population sampled from the 3DCs		
Total (All children under 6 months)	**29.5**	**58**
Child sex		
Male	^	29
Female	^	29
Mother's educational attainment[2]		
No education	^	4
Less than primary	^	19
Primary	^	25
Secondary or more	^	10
RURAL (ZOI) population sampled		
Total (All children under 6 months)	**45.4**	**51**
Child sex		
Male	^	23
Female	^	28
Mother's educational attainment[2]		
No education	^	8
Less than primary	^	21
Primary	^	18
Secondary or more	^	4

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[2] The Haiti Mid-term Survey identified the youngest child of sampled women to measure exclusive breastfeeding. The person in this measure is the child's biological mother.

[a] Significance tests were performed for associations between exclusive breastfeeding and child/caregiver characteristics. For example, a test was done between exclusive breastfeeding and the child's sex. When an association is found to be significant ($p<0.05$), the superscript is noted next to the characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.13 Urban vs Rural Percentage of children age 6-23 months who receive a minimum acceptable diet (in the 3DCs at midterm)

Characteristic	Percent [a]	n[1]
URBAN population sampled from the 3DCs		
Total (All children 6-23 months)	**12.5**	**141**
Child sex		
Male	7.9	63
Female	15.5	78
Child age		
6-11 months	14.7	43
12-17 months	9.0	49
18-23 months	13.1	43
Care-giver educational attainment[2]		
No education	^	25
Less than primary	7.1	60
Primary	30.0	46
Secondary or more	^	9
Gendered household type		
Male and female adults	12.0	110
Female adult(s) only	15.4	30
Male adult(s) only	^	1
Household size		
Small (1-5 members)	14.4	61
Medium (6-10 members)	11.9	77
Large (11+ members)	^	3
Household hunger		
Little to no hunger	12.4	53
Moderate or severe hunger	12.5	88

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

Table A1.13 Continued	Percent[a]	n[1]
RURAL (ZOI) population sampled		
Total (All children 6-23 months)	**12.5**	**141**
Child sex		
Male	7.9	63
Female	15.5	78
Child age		
6-11 months	14.7	43
12-17 months	9.0	49
18-23 months	13.1	43
Total (All children 6-23 months)	**12.5**	**141**
Child sex		
Male	7.9	63
Female	15.5	78
Child age		
6-11 months	14.7	43
12-17 months	9.0	49
18-23 months	13.1	43
Care-giver educational attainment[2, a]		
No education	^	25
Less than primary	7.1	60
Primary	30.0	46
Secondary or more	^	9
Gendered household type		
Male and female adults	12.0	110
Female adult(s) only	15.4	30
Male adult(s) only	^	1
Household size		
Small (1-5 members)	14.4	61
Medium (6-10 members)	11.9	77
Large (11+ members)	^	3
Household hunger		
Little to no hunger	12.4	53
Moderate or severe hunger	12.5	88

[2] The Haiti mid-term identified the youngest child of sampled women to measure dietary diversity and exclusive breastfeeding. The person in this measure is the child's biological mother.

[a] Significance tests were performed for associations between children receiving a minimum acceptable diet and child/caregiver/household characteristics. For example, a test was done between children receiving a minimum

acceptable diet and child's sex. When an association is found to be significant ($p<0.05$), the superscript is noted next to the characteristic.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.14 Urban vs Rural Components of MAD for children age 6-23 months (in the 3DCs at midterm)

MAD components and food groups	Percent			
	All children [a]	By child age (in months)		
		6 to 11	12 to 17	18 to 23
URBAN population sampled from the 3DCs				
Breastfed children				
Achieving minimum meal frequency	39.3	43.7	^	^
Achieving minimum dietary diversity	40.6	25.7	^	^
Consuming				
Grains, roots, and tubers	84.2	73.6	^	^
Legumes and nuts[a]	38.4	25.6	^	^
Dairy products[a]	55.4	58.8	^	^
Flesh foods	32.7	18.9	^	^
Eggs[a]	8.8	6.1	^	^
Vitamin A-rich fruits and vegetables[a]	52.0	35.2	^	^
Other fruits and vegetables	23.7	13.2	^	^
n	108	65	26	17
Non-breastfed children				
Achieving minimum meal frequency	52.3	^	^	42.8
Achieving minimum milk feeding frequency	57.5	^	^	53.6
Achieving minimum dietary diversity	38.1	^	^	47.5
Consuming				
Grains, roots, and tubers[a]	96.0	^	^	94.0
Legumes and nuts	68.7	^	^	85.4
Dairy products	80.2	^	^	80.0
Flesh foods	31.2	^	^	32.4
Eggs[a]	12.3	^	^	13.3
Vitamin A-rich fruits and vegetables	76.8	^	^	71.9
Other fruits and vegetables	33.2	^	^	41.1
N	68	17	15	36

Table A1.14 Continued

	Percent			
	All children [a]	By child age (in months)		
		6 to 11	12 to 17	18 to 23
RURAL (ZOI) population sampled				
Breastfed children				
Achieving minimum meal frequency	30.5	49.8	13.5	^
Achieving minimum dietary diversity	35.2	27.6	39.5	^
Consuming				
Grains, roots, and tubers[a]	84.3	78.6	87.0	^
Legumes and nuts	41.3	32.7	57.4	^
Dairy products	31.4	43.0	30.6	^
Flesh foods	35.1	25.1	40.1	^
Eggs[a]	6.1	2.9	7.5	^
Vitamin A-rich fruits and vegetables	73.3	71.3	64.0	^
Other fruits and vegetables	25.2	25.6	22.0	^
N	101	48	34	19
Non-breastfed children				
Achieving minimum meal frequency	30.5	^	^	24.1
Achieving minimum milk feeding frequency	27.0	^	^	^
Achieving minimum dietary diversity	31.3	^	^	41.1
Consuming				
Grains, roots, and tubers[a]	98.2	^	^	97.5
Legumes and nuts	63.4	^	^	75.2
Dairy products	30.5	^	^	24.0
Flesh foods	26.7	^	^	38.0
Eggs[a]	21.2	^	^	26.8
Vitamin A-rich fruits and vegetables	67.7	^	^	71.2
Other fruits and vegetables	28.0	^	^	22.1
N	40	1	9	66

^ Results not statistically reliable, n<30.

[a] Significance tests were performed for associations between MAD components/food groups for breastfed and non-breastfed children. For example, a test was done for achieving minimum meal frequency and breastfeeding status. When an association is found to be significant ($p<0.05$), a superscript is noted next to the breastfed and non-breastfed row headings corresponding to the MAD component/food group.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.15 Urban vs Rural Prevalence of underweight, normal weight, overweight, and obese (non-pregnant) women (in the 3DCs at midterm)

Characteristic	Mean BMI[a]	Body Mass Index (BMI) category (percent)[b]				n[1]
		Under-weight[c]	Normal weight	Over-weight	Obese	
URBAN						
Total (All women age 15-49)	**24.1**	**9.3**	**55.4**	**21.3**	**14.0**	**1815**
Age[a,b,c]						
15-19	21.4	19.4	69.6	5.7	5.4	351
20-24	22.4	10.5	68.2	16.4	4.9	383
25-29	24.0	6.6	60.0	22.7	10.6	319
30-34	26.2	5.3	42.2	30.4	22.1	278
35-39	26.5	3.1	45.9	24.6	26.4	205
40-44	26.6	5.5	38.7	28.1	27.7	149
45-49	27.4	5.7	22.3	46.2	25.9	130
Educational attainment [a,b],						
No education	24.3	4.0	56.1	29.3	10.6	109
Less than primary	23.4	9.3	59.0	23.4	8.3	345
Primary	23.8	10.8	56.4	19.2	13.5	958
Secondary or more	25.4	7.4	50.1	21.8	20.7	402
Gendered household type						
Male and female adults	24.3	9.3	54.0	22.2	14.4	1412
Female adult(s) only	23.5	9.0	60.8	17.8	12.4	397
Male adult(s) only						6
Household size[c]						
Small (1-5 members)	24.3	7.5	56.0	22.0	14.5	1100
Medium (6-10 members)	23.9	11.8	54.8	20.3	13.2	675
Large (11+ members)	24.5	10.1	48.9	23.2	17.8	40
Household hungera						
Little to no hunger	24.4	8.4	54.1	22.9	14.6	969
Moderate or severe hunger	23.8	10.4	56.9	19.4	13.3	845

Table A1.15 Continued

Characteristic	Mean BMI[a]	Body Mass Index (BMI) category (percent)[b]				n[1]
		Under-weight[c]	Normal weight	Over-weight	Obese	
RURAL						

Total (All women age 15-49)	23.2	12.2	57.3	22.4	8.1	988
Age[a,b,c]						
15-19	20.6	26.5	65.8	7.2	0.6	211
20-24	22.0	7.5	72.7	17.0	2.7	172
25-29	23.3	13.3	55.0	25.2	6.5	152
30-34	25.0	3.3	50.1	29.5	17.0	134
35-39	24.9	8.7	47.2	30.1	14.0	127
40-44	25.4	4.4	45.4	32.0	18.2	101
45-49	24.7	9.1	47.6	34.6	8.7	91
Educational attainment,						
No education	23.3	10.2	57.3	26.1	6.5	169
Less than primary	22.9	11.6	60.3	22.3	5.9	343
Primary	23.0	12.7	58.5	21.6	7.2	390
Secondary or more	24.9	14.1	46.0	21.2	18.7	81
Gendered household type						
Male and female adults	23.3	10.7	57.6	24.0	7.7	761
Female adult(s) only	23.2	16.7	56.6	17.0	9.7	221
Male adult(s) only	^	^	^	^	^	6
Household size						
Small (1-5 members)	23.4	12.3	55.4	22.7	9.5	529
Medium (6-10 members)	23.0	11.8	61.1	20.7	6.3	414
Large (11+ members)	23.5	12.7	50.3	28.2	8.7	45
Household hunger						
Little to no hunger	23.5	10.8	55.9	25.5	7.7	415
Moderate or severe hunger	23.0	13.1	58.4	20.1	8.3	573

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[a-c] A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between BMI and the woman's age. When an association between the column indicator and row variable is found to be significant ($p<0.05$), the superscript for the indicator in the column heading is noted next to the row variable.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A1.16 Urban vs Rural Stunting (height-for-age) among children under 5 years old (in the 3DCs at midterm)

Characteristic	% Stunted (<-2 SD)[a]	% Severely stunted (<-3 SD)	Mean Z-score [b]	n[l]
URBAN population sampled from the 3DCs				
Total (All children under 5 years)	**15.6**	**4.6**	**-0.6**	**744**
Sex of child				
Male	**14.6**	**4.1**	**-0.7**	**353**
Female	**16.3**	**4.9**	**-0.6**	**391**
Child age,				
0-11 months	**9.0**	**1.3**	**-0.3**	**142**
12-23 months	**17.5**	**4.4**	**-0.8**	**116**
24-35 months	**25.1**	**9.0**	**-0.9**	**164**
36-47 months	**15.7**	**4.4**	**-0.6**	**162**
48-59 months	**10.3**	**3.2**	**-0.6**	**160**
Caregiver's educational attainment2,a, b				
No education	**36.8**	**12.7**	**-1.4**	**125**
Less than primary	**15.6**	**5.0**	**-0.8**	**235**
Primary	**13.7**	**3.5**	**-0.5**	**275**
Secondary or more	**4.7**	**0.7**	**-0.2**	**105**
Gendered household type				
Male and female adults	**14.6**	**4.4**	**-0.6**	**599**
Female adult(s) only	**21.3**	**5.2**	**-0.8**	**141**
Male adult(s) only	**^**	**^**	**^**	**4**
Household size				
Small (1-5 members)	**13.6**	**3.0**	**-0.6**	**367**
Medium (6-10 members)	**17.0**	**5.5**	**-0.6**	**339**
Large (11+ members)	**26.0**	**15.1**	**-0.8**	**38**
Household hunger				
Little to no hunger	**14.0**	**4.2**	**-0.5**	**369**
Moderate or severe hunger	**17.5**	**5.0**	**-0.8**	**375**

Table A1.16 Continued	% Stunted (<-2 SD)[a]	% Severely stunted (<-3 SD)	Mean Z-score [b]	n[1]
RURAL (ZOI) population sampled				
Total (All children under 5 years)	**23.0**	**8.3**	**-1.0**	**623**
Sex of child b				
Male	**30.1**	**11.1**	**-1.3**	**302**
Female	**16.6**	**5.8**	**-0.8**	**321**
Child agea,				
0-11 months	**7.1**	**3.5**	**-0.6**	**108**
12-23 months	**19.2**	**5.0**	**-0.9**	**108**
24-35 months	**34.6**	**11.6**	**-1.3**	**137**
36-47 months	**26.3**	**10.8**	**-1.2**	**145**
48-59 months	**22.9**	**8.6**	**-1.1**	**125**
Caregiver's educational attainment2,a				
No education	**30.2**	**13.5**	**-1.3**	**170**
Less than primary	**26.3**	**10.4**	**-1.3**	**230**
Primary	**16.7**	**3.0**	**-0.8**	**180**
Secondary or more	**2.4**	**0.0**	**0.0**	**34**
Gendered household type				
Male and female adults	**23.5**	**8.3**	**-1.1**	**492**
Female adult(s) only	**21.5**	**8.6**	**-0.8**	**128**
Male adult(s) only	**^**	**^**	**^**	**3**
Household size a, b				
Small (1-5 members)	**11.8**	**1.3**	**-0.8**	**262**
Medium (6-10 members)	**31.8**	**13.0**	**-1.3**	**313**
Large (11+ members)	**25.7**	**14.4**	**-0.6**	**48**
Household hunger				
Little to no hunger	**17.9**	**7.2**	**-0.9**	**264**
Moderate or severe hunger	**26.5**	**9.1**	**-1.1**	**359**

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[2] Whenever the biological mother of the child resided in the household, the biological mother's education was reported. When the mother did not live with the child, the primary caregiver's level of education was used.

[a-b] A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between percent stunted and the child's sex. When an association between the column indicator and row variable is found to be significant ($p<0.05$), the superscript for the indicator in the column heading is noted next to the row variable.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A11.17 Wasting (weight-for-height) among children under 5 years old (in the 3DCs at midterm)

Characteristic	% Wasted (<-2 SD) [a]	% Severely wasted (<-3 SD)	% Overweight (> +2SD) [b]	% Obese (> +3SD)	Mean Z-score [c]	n[1]
URBAN population sampled from the 3DCs						
Total (All children under 5 years)	**4.9**	0.6	2.6	1.0	-0.2	**744**
Sex of Child						
Male	**6.2**	0.7	3.1	0.6	-0.2	**353**
Female	**3.9**	0.5	2.2	1.3	-0.2	**391**
Child age [a, c]						
0-11 months	13.1	1.4	2.6	0.0	-0.5	142
12-23 months	6.6	0.0	1.7	0.3	-0.3	116
24-35 months	2.8	1.2	3.3	1.8	0.1	164
36-47 months	1.8	0.0	1.7	0.0	-0.2	162
48-59 months	2.1	0.2	3.4	2.2	-0.2	160
Caregiver's educational attainment[2]						
No education	1.7	0.0	1.4	0.0	-0.3	125
Less than primary	3.9	0.2	1.7	0.0	-0.2	235
Primary	7.1	1.1	3.3	1.6	-0.1	275
Secondary or more	3.6	0.2	3.0	1.5	-0.1	105
Gendered household type						
Male and female adults	5.0	0.3	2.0	0.4	-0.2	599
Female adult(s) only	4.6	2.1	6.4	4.5	-0.2	141
Male adult(s) only	^	^	^	^	^	4
Household size						
Small (1-5 members)	6.1	1.0	3.0	1.2	-0.2	367
Medium (6-10 members)	3.8	0.1	1.7	0.1	-0.2	339
Large (11+ members)	0.9	0.0	6.4	6.4	0.5	38
Household hunger[c]						
Little to no hunger	3.7	0.5	2.9	1.1	-0.1	369
Moderate or severe hunger	6.4	0.7	2.1	0.8	-0.3	375
Table A1.17 Continued	**% Wasted (<-2 SD) [a]**	**% Severely wasted (<-3 SD)**	**% Overweight (> +2SD) [b]**	**% Obese (> +3SD)**	**Mean Z-score [c]**	**n[1]**

RURAL (ZOI) population sampled						
Total (All children under 5 years)	5.6	0.7	1.3	0.6	-0.2	623
Child sex [a]						
Male	7.8	1.2	2.2	1.3	-0.2	302
Female	3.5	0.2	0.5	0.0	-0.1	321
Child age						
0-11 months	11.3	3.5	0.8	0.0	-0.2	108
12-23 months	5.4	0.0	0.0	0.0	-0.3	108
24-35 months	4.1	0.0	1.4	0.0	-0.1	137
36-47 months	4.4	0.5	0.7	0.0	-0.2	145
48-59 months	4.0	0.0	3.4	3.0	-0.1	125
Caregiver's educational attainment [b 2]						
No education	5.0	0.0	0.3	0.0	-0.2	170
Less than primary	7.6	0.3	0.9	0.2	-0.2	230
Primary	1.9	0.0	0.3	0.0	0.0	180
Secondary or more	9.2	8.2	11.2	7.8	0.0	34
Gendered household type						
Male and female adults	4.8	0.7	1.3	0.8	-0.2	492
Female adult(s) only	8.4	0.6	1.2	0.0	-0.2	128
Male adult(s) only	^	^	^	^	^	3
Household size [a, b]						
Small (1-5 members)	3.7	0.0	0.8	0.0	-0.1	262
Medium (6-10 members)	8.0	1.4	0.9	0.2	-0.3	313
Large (11+ members)	0.8	0.0	5.7	5.7	0.1	48
Household hunger[c]						
Little to no hunger	2.8	0.3	2.1	1.4	0.1	264
Moderate or severe hunger	7.4	0.9	0.8	0.2	-0.3	359

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[2] Whenever the biological mother of the child resided in the household, the biological mother's education was reported. When the mother did not live with the child, the primary caregiver's level of education was used.

[a-c] A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between the percent wasted and the child's sex. When an association between the column indicator and row variable is found to be significant ($p<0.05$), the superscript for the indicator in the column heading is noted next to the row variable.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

Table A11.18 Underweight (weight-for-age) among children under 5 years old (in the 3DCs at midterm)

Characteristic	% Underweight (<-2 SD)[a]	% Severely underweight (<-3 SD)	Mean Z-score [b]	n[1]
URBAN population sampled from the 3DCs				
Total (All children under 5 years)	**9.2**	2.6	-0.5	**744**
Child sex				
Male	**7.0**	1.3	-0.5	**353**
Female	**10.9**	3.6	-0.5	**391**
Child age				
0-11 months	12.7	6.2	-0.6	142
12-23 months	11.3	2.5	-0.6	116
24-35 months	13.8	2.9	-0.4	164
36-47 months	3.9	1.7	-0.5	162
48-59 months	5.3	0.4	-0.5	160
Caregiver's educational attainment[2, b]				
No education	17.2	7.5	-1.1	125
Less than primary	7.2	1.9	-0.6	235
Primary	9.3	2.1	-0.4	275
Secondary or more	5.9	1.2	-0.2	105
Gendered household type				
Male and female adults	8.5	2.8	-0.5	599
Female adult(s) only	12.9	1.7	-0.6	141
Male adult(s) only	^	^	^	4
Household size				
Small (1-5 members)	10.5	3.3	-0.5	367
Medium (6-10 members)	8.0	1.8	-0.5	339
Large (11+ members)	3.4	2.1	-0.1	38
Household hunger[b]				
Little to no hunger	7.3	1.8	-0.3	369
Moderate or severe hunger	11.6	3.6	-0.7	375

Table A1.18 Continued

Characteristic	% Underweight (<-2 SD)[a]	% Severely underweight (<-3 SD)	Mean Z-score [b]	n[1]
RURAL (ZOI) population sampled				
Total (All children under 5 years)	10.7	4.0	-0.7	623

Child sex[a, b]				
Male	16.3	6.0	-0.9	302
Female	5.7	2.2	-0.6	321
Child age				
0-11 months	12.7	6.3	-0.6	108
12-23 months	8.2	1.1	-0.7	108
24-35 months	13.4	4.3	-0.7	137
36-47 months	9.7	4.6	-0.8	145
48-59 months	9.8	3.6	-0.7	125
Caregiver's educational attainment[2]				
No education	13.3	2.6	-0.9	170
Less than primary	13.3	6.5	-0.9	230
Primary	4.9	0.6	-0.5	180
Secondary or more	8.2	8.2	0.0	34
Gendered household type				
Male and female adults	11.1	3.9	-0.7	492
Female adult(s) only	8.9	4.5	-0.6	128
Male adult(s) only	^	^	^	3
Household size[a, b]				
Small (1-5 members)	5.5	0.5	-0.5	262
Medium (6-10 members)	14.5	7.0	-0.9	313
Large (11+ members)	13.9	3.2	-0.3	48
Household hunger[a,b]				
Little to no hunger	8.1	0.7	-0.5	264
Moderate or severe hunger	12.5	6.2	-0.9	359

^ Results not statistically reliable, n<30.

[1] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[2] Whenever the biological mother of the child resided in the household, the biological mother's education was reported. When the mother did not live with the child, the primary caregiver's level of education was used.

[a-b] A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between the percent underweight and the child's sex. When an association between the column indicator and row variable is found to be significant ($p<0.05$), the superscript for the indicator in the column heading is noted next to the row variable.

Sources: USAID Haiti FTF ZOI Interim Assessment, 2016 and the USAID Haiti 3DCs Midterm Assessment, 2016

ANNEX 111. METHODOLOGY

A111.1 Sampling and Weighting

Sampling

The sample of households for the interim survey followed a three-stage cluster sampling design to the HH level. Stratification is on the three development corridors; there is no further stratification in the sample. In the first stage, 144 enumeration areas (EAs) were selected from the 2003 Haiti Census in 3 corridors by probability proportional to estimated size sampling (PPES). There are 48 EAs in each of the three corridors. In the second stage, structures were first identified using satellite images then enumerated and selected randomly within each of the sampled EAs. A total of 3092 structures were selected for the survey: 1006 structures in the Saint-Marc Corridor, 1008 in the Cul-de-Sac corridor and 1078 in the North corridor.

Because the number of eligible households (EHH) within each structure could not be determined from the satellite images, the number was determined by the surveyors during fieldwork for all of the selected structures. Then, the third stage, a number of the EHHs were selected using the Kish grid and interviewed. How many EHHs in a structure were selected and interviewed depended upon the total number of EHHs within the structure as described in the methodology section of this report. The maximum number of EHHs selected in a structure is three.

Weighting

Data required for weighting of survey data were collected throughout the sampling process, and included: (1) EA measure of size (where size is in terms of number of population or number of households) used for selection of EAs; (2) measure of size of strata from which EAs are drawn; (3) measure of size of EAs at time of listing; and (4) response rates among households, women, and men. Weights were calculated for households, women, men, and children in the sample.

Design weights were calculated based on the separate sampling probabilities for each sampling stage and for each cluster. We have:

P_{1i} = first-stage sampling probability of the *i*-th cluster.

P_{2i} = second- and third-stage sampling probability within the *i*-th cluster (structure and household selection).

The probability of selecting cluster *i* in the sample is:

$$P_{1i} = \frac{m \times N_i}{N}$$

The second- and third-stage probability of selecting a household *j* in cluster *i* is:

$$P_{2ij} = \frac{n_i}{L_i} \times \frac{S_{ij}}{T_{ij}}$$

where:

m = number of sample EAs selected.

N_i = total population in the frame for the *i*-th sample cluster.

N = total population in the frame.

n_i = number of sample structures selected for the *i*-th sample cluster.

L_i = number of structures determined from the satellite images for the *i*-th sample cluster.

S_{ij} = number of households selected from the structure where the *j*-th household belongs to for the *i*-th sample cluster.

T_{ij} = total number of eligible households determined in the structure where the *j*-th household belongs to for the *i*-th sample cluster.

The overall selection probability of the *j*-th household in cluster *i* is the product of the selection probabilities of the two stages:

$$P_{ij} = P_{1i} \times P_{2ij} = \frac{m \times N_i}{N} \times \frac{n_i}{L_i} \times \frac{S_{ij}}{T_{ij}}$$

The design weight for the *j*-th household in cluster *i* is the inverse of its overall selection probability:

$$W_{ij} = \frac{1}{P_{ij}} = \frac{N \times L_i \times T_{ij}}{m \times N_i \times n_i \times S_{ij}}$$

The sampling weight was calculated with the design weight corrected for non-response for each of the selected EAs. Response rates were calculated at the cluster level as ratios of the number of interviewed units over the number of eligible units, where units could be household or individual (woman, child).

A111.2 Poverty Prevalence and Expenditure Methods

Data Source

The poverty prevalence, poverty gap, and mean per capita expenditures indicators for the ZOI Interim Assessment were derived using data collected in Section 5 on housing characteristics and Section 8 on household consumption of the Haiti 2016 ZOI interim survey. These sections are similar in content to the information collected by Living Standards Measurement Survey (LSMS),[50] and broadly, the analysis follows the methodology described by Deaton and Zaidi.[51] The representative survey included 2,789 completed household interviews, and among these, 2,764 households provided the requisite data for on household consumption, expenditures, and assets.

The poverty and expenditure analysis is best considered as two distinct phases: (1) calculating household consumption aggregates from the raw data and (2) calculating indicator values from the consumption aggregates. The first phase was guided by the Deaton and Zaidi "approach," which is a set of guidelines that are followed in preparing the consumption aggregates. Moreover, where feasible, decisions were made and measures were constructed following the methods used at the baseline, as described in the baseline report.

Consumption Aggregates

Food Consumption

Food consumption on 57 food items was measured with a seven day recall period. This included the total quantity of a food item that was consumed in the period, the cost of the purchased amount, and the quantity and price of the food as it is typically purchased. Roughly 94 percent of the approximately 63,000 records of consumed items were cases where the purchased and consumed quantities were the same. In these cases, the value of the consumed food (Question 807) was used as the value.

If more was consumed than was purchased, we would compute the median local cost per unit using the purchase value (Question 803) or as you reference specific question numbers, we should attach the questionnaire as reference the consumed from purchase value (Question 807). This imputed value would be applied to the quantity consumed within the past week (Question 806). In the case that an item was still missing or erroneous, we imputed the local median per capita cost of consumption and applied that to the household.

In many LSMS-like surveys, quantities are converted to kilograms or liters based on a market survey or other known conversions. We do not have evidence that conversions to kilogram / liters were performed at baseline. Moreover, we do not have access to market survey data in order to calculate

[50] Grosh, Margaret and Paul Glewwe. 1995. "A Guide to Living Standards Measurement Study Surveys and Their Data Sets." *Living Standards Measurement Study Group.* Working paper No. 120. The World Bank, Washington, DC.

[51] Deaton, A. 2008. The Analysis of Household Surveys: A microeconomic approach to development policy. Baltimore: The Johns Hopkins University Press.

these conversions. As such, the approach taken has been to calculate prices for each unit without converting the quantities to a common metric. For example, the price of corn per small pot, the price of corn per big pot, etc. will be calculated. Where logical, we have condensed units to produce more reliable price per unit estimates. We have converted gallons to liters and pounds and grams to kilograms. We have also converted quantities reported in "Dozen," "Lot," "Lot of 3," "Lot of 13," "Lot of 24," "Head," and "Bottle" into "Unit." These are all measures of an item in its singular form.

We identify the price per unit as reported in question 802 / 803 and 806 / 807. Based on these prices, we estimate the median "local" price based on the most local area that will provide 20 or more pieces of data to establish price per unit. In the case that there are fewer than 20 instances of an item being purchased in a unit, the price per unit will not be calculated. In these cases, we impute the value of the consumed food based on the per capita median of the consumption value in "local" households.

Expenditure on Durable Goods

Purchases of durable goods and assets are large and infrequent. Represent large and relatively infrequent expenses, and only a small number of households will make these kind of purchases in the recall period of the survey. As indicated by Deaton and Zaidi (2002), "From the point of view of household welfare, rather than using expenditure on purchase of durable goods during the recall period, the appropriate measure of consumption of durable goods is the value of services that the household receives from all the durable goods in its possession over the relevant time period."[52]

The annual rental equivalent of owning an item was calculated at baseline. This approach was followed at the mid-term. The rental equivalent was computed as the interest lost on the income that was tied up in the durable good and the depreciated value of the item.

The baseline and interim calculations of the durable good consumption aggregate differed due to translation differences in the surveys. At baseline, respondents reported the initial purchase price of a good and the current value of the item in its current condition. The mid-term survey asked about the initial purchase price and the current purchase price of the item. The translation of the current price question did not reflect the depreciation or age of the item, and as such, the difference in the two measures cannot be used to calculate the items' depreciation as was done at baseline.

We have used the average real interest rate for Haiti from 1999 to 2014, which is 11.81.

The rate of depreciation was calculatedly differently at interim. Question 842 was poorly translated, and as a result, we cannot calculate the asset rental values as was done at baseline. Question 842 was intended to solicit the current value of the item in its current state. However, as it was translated, respondents report how much it would cost to purchase the item today. Therefore, the difference between the purchase value and the value reported in question 842 reflects the respondents' perception of inflation in price of the object, rather than an assessment of the item's depreciation.

[52] Deaton and Zaidi. 2002. p. 33.

In order to calculate the rental value of assets, we first calculate a depreciation rate and then estimate a current value based on the estimated depreciation rate. The depreciation rates were calculated as constant annualized depreciation rate for each item. Therefore, objects will lose more value in absolute terms when it is newer than when it is older. The rate was calculated with an expected lifespan of an item that was estimated to be two times the average age of the item. We have assumed that the majority of an objects value has depreciated at the end of its life span. We assume that five percent of the value of the item remains at the end of its life span. Thus, we create an annualized rate following the following formula.

$$\text{Rate (R)} = \frac{\ln(5/100)}{\text{Expected Life Span}}$$

Having derived the depreciation rate, we estimate the current value (Vt) of the item by applying the depreciation rate to the original purchase price (V0) and the age of the item (T) as shown in the following formula.

$$V_t = V_0\, e^{RT}$$

As performed at baseline, the asset rental value is the value of money invested in the durable good (i.e., the interest) and the amount of money lost to depreciation. We measure this in a manner identical to baseline. The rental value of the asset (R) is calculated as the interest rate (I) times the current value of the item (Vt) plus the amount of value lost to depreciation between its current value and the following year

$$\text{Rental Value} = \text{Interest} + \text{Depreciation Loss}$$

$$\text{Interest} = V_t * I$$

$$\text{Depreciation Loss} = V_0 - V_0 e^{R}$$

Expenditure on Housing

The value of housing is estimated as the monthly rental value of a dwelling, divided by 30.

The interim survey collects information on household rental values, for renters. For all households various household characteristics were measured. The measurement of rental values for renters is straightforward. For non-renters, a rental equivalent was estimated using a hedonic Ordinary Least Squares (OLS) regression model as suggested by Grosh and Muñoz (1996). The model was built on the sample of households reporting non-zero rent, with the log of rent paid by renters as a dependent variable and several predictor variables.

The model used at the interim followed the baseline hedonic model in spirit, but was performed with different predictor variables. While variations in regional rental markets are important, we did not include fixed effects of local areas. As renters will tend to be concentrated in certain areas with more

robust rental markets, the inclusion of very specific, local measures (e.g., local fixed effects) will limit the ability of the overall model to predict the rental value of non-renters based on housing characteristics. In addition, the step-wise regression approach taken at baseline likely produced a model that was overly sensitive to the idiosyncrasies of the baseline data.

We have developed a model that includes the following variables: Corridor, urban, number of rooms, log of the household size, indicator that the household has a bank account, log of value of household assets, whether the household has improved flooring material, whether the household has improved wall material, whether the household has a cement roof, whether the household has improved sanitation, whether the household has access to electricity, and the number of hectares of agricultural land available to the household. The model includes the same housing characteristics used at baseline. It is different in that is only includes measures that have sufficient sample sizes or variation to provide useful predication, and it does not include geographic variables beyond the level of corridor and area type.

The final model had an adjusted R-square of .63, which is slightly better than the baseline model, due to the limited number of variables. As with baseline, we use the model coefficients to predict a fitted rental value for non-renting or households with missing values.

Calculating Indicator Values From Consumption Aggregates

Total per capita consumption in 2016 HTG is used to calculate the poverty prevalence (or poverty headcount ratio) – PH(z), the poverty gap – PG(z), and the average expenditure shortfall among the poor – PIG(z). Please consult the World Bank's poverty measurement publication for a detailed discussion of the poverty headcount ratio and poverty gap.[53]

The poverty headcount ratio is the ratio of the number of individuals whose total daily expenditures falls below a poverty threshold, q, divided the total population, N. The average expenditure shortfall of the poor is the average amount of expenditures necessary to bring a poor individual to the poverty threshold. The computation of the average expenditure shortfall is shown in equation 1, where the expenditure shortfall (z – xn) is normalized by z such that the average expenditure shortfall is expressed as a percentage of the poverty threshold.

Equation 1:

$$P_{IG}(z) = \frac{1}{q}\sum_{n=1}^{q}\frac{z - x_n}{z}$$

The poverty gap can be easily derived from the average expenditure shortfall of the poor and the poverty prevalence. This manner of calculating the poverty gap is presented in equation 2. As the average expenditure shortfall is normalized, the poverty gap is also normalized.

[53] Foster, James, Suman Seth, Michael Lokshin and Zurab Sajaia. 2013. *A Unified Approach to Measuring Poverty and Inequality: Theory and Practice*. The World Bank, Washington, DC. 115-118.

Equation 2:

$$P_G(z) = P_H(z) * P_{IG}(z)$$

The average expenditure shortfall of the poor and the poverty gap can be expressed in the currency metric of the poverty threshold. The normalized (i.e., percentage) estimates can be multiplied by the poverty threshold to produce the shortfall and gap in terms of the threshold's currency metric.

Currency Conversions using CPI and PPP

The Haiti 2016 CPI used for all conversions is the average CPI reported for April and May of 2016. These are the two months of data collection for which CPI values had been published by the IHSI. [54] The CPI values were rebased to 2015 and then rebased again using annual CPI values provided by the World Bank. The 2016 CPI value used in this analysis 231.44 (2005=100).

Other than the 2016 CPI value, the CPI values used for the currency conversions\ were taken from the World Bank's Databank.[55] CPI values were adjusted to a base year of 2005 from a base year of 2010.

The $1.25 2005 PPP poverty threshold was converted to 2016 HTG by using the Haiti 2005 PPP value of 19.37 and the Haiti 2016 CPI of 231.44 (2005=100). The $1.25 2005 PPP threshold is equivalent to 56.04 HTG, per person, per day in 2016 prices. These calculations are shown in the formulas below.

$$Threshold\ in\ HTG_{2016} = 1.25_{2005} * PPP_{2005} * {}^{CPI_{2016,HTG}}/_{CPI_{2005,HTG}}$$

$$56.04 = 1.25 * 19.37 * {}^{231.44}/_{100}$$

The national poverty thresholds were established with the ECVMAS1 in 2012. We used the annual CPI for 2012, which is 172.60 (2005=100), to inflate the thresholds to 2016 prices. Specifically, we multiplied the poverty thresholds by 1.34 (i.e., 231.44 / 172.60), as shown in the following formulas.

$$Threshold\ in\ HTG_{2016} = Threshold_{2012} * {}^{CPI_{2016,HTG}}/_{CPI_{2012,HTG}}$$

$$Moderate\ national\ threshold = 110.22 = 82.2 * {}^{231.44}/_{172.60}$$

$$Extreme\ national\ treshold = 55.92 = 41.7 * {}^{231.44}/_{172.60}$$

[54] IHSI. 2016. Indice des Prix à la Consommation. January 2015 – May 2016. Retrieved June 23, 2016. Retrieved from http://www.ihsi.ht/produit_economie_indice_coins_statistique.htm.

[55] World Bank. 2015a.

Consumption aggregates were converted to 2010 USD by adjusting for 2005 PPP. We converted to 2010 USD by using the formula (HTI CPI 2005 / HTI CPI 2016) * (1/PPP 2005)* (2010 USD CPI /2005 USD CPI) where HTI CPI 2016 = 231.44, HTI CPI 2005 = 100, PPP 2005 = 19.37, 2010 USD CPI =111.65, and 2005 USD CPI = 100. The conversion factor was 0.024905.

$$Conversion\ Factor = {}^{CPI_{2005,HTG}}\Big/_{CPI_{2016,HTG}} * {}^{1}\Big/_{PPP_{2005}} * {}^{CPI_{2010,USD}}\Big/_{CPI_{2005,USD}}$$

$$024905 = {}^{100}\Big/_{231.44} * {}^{1}\Big/_{19.37} * {}^{111.65}\Big/_{100}$$

All indicators and analyses presented in this report have utilized the 2005 PPP to convert between HTG and USD. The only use of the 2011 PPP was to create Table A1.2. The $1.90 2011 PPP poverty threshold was converted to 2016 HTG by using the Haiti 2011 PPP value of 20.71. The $1.90 2011 PPP threshold is equivalent to 39.35 HTG per person per day in 2011 prices. Using the 2011 CPI of 162.41 (2005=100) and the 2016 CPI of 231.44 (2005=100), the $1.90 2011 PPP threshold is 56.07 HTG in 2016 prices.

$$Threshold\ in\ HTG_{2016} = 1.90_{2011} * PPP_{2011} * {}^{CPI_{2016,HTG}}\Big/_{CPI_{2011,HTG}}$$

$$56.07 = 1.90 * 20.71 * {}^{231.44}\Big/_{162.41}$$

Poverty Thresholds

The national poverty lines were established using data collected by ECVMAS1 in 2012. The household survey was accompanied by a market survey to identify prices. The poverty lines were estimated using a basic needs approach, which consists of determining a monetary value of food that provides a defined number of calories and adding to this monetary value of the established minimum of non-food items and services.[56] The food poverty line was set at 41.7 HTG per person per day and the total poverty line was set at 82.2 HTG per person per day.[57,58]

Table A2.1 presents poverty thresholds for the international thresholds of $1.25 2005 PPP and $1.90 2011 PPP, the national thresholds, and the national extreme thresholds. To aid in comparisons, threshold values have been converted between the 2005 PPP, 2011 PPP, 2016 HTG. The 2016 HTG conversions correspond to the period when the Haiti ZOI Interim Survey was collected.

Table A2.1. Poverty thresholds

Table A2.1	Threshold	Daily, per capita values

[56] Marzo, F., P. Backiny-Yetna, and N. Garbiras. 2014. *Pauvreté à Haïti: Éléments méthodologiques: Version de travail*. IHSI: Port-au-Prince, Haiti.

[57] World Bank. 2014. *Pauvreté et inclusion sociale en Haïti: gains sociauxà petits pas*. World Bank: Washington, DC.

[58] The two documents reviewed present thresholds with negligible differences. We have selected the latter document, prepared by the World Bank as the methodological document is a working paper.

	2005 PPP	2011 PPP	2016 HTG
International extreme thresholds			
$1.25 2005 PPP, per person per day	1.25	n/a	56.04
$1.90 2011 PPP, per person per day	n/a	1.90	56.07
			National thresholds (HTG 2012)
Moderate (82.2 per person per day)	2.46	3.73	110.22
Extreme (41.7 per person per day)	1.25	1.89	55.92

Weights

Expenditure estimates are reflective of the consumption and poverty of individuals within the ZOI. The data are collected at the household level, and individual estimates are produced by multiplying the household sampling weight by the number of *usual* household members in the household.

A111.3 Criteria for Achieving Adequacy WEAI Indicators

The below table presents the Women's Empowerment in Agriculture five dimensions of empowerment, their corresponding empowerment indicators, the survey questions that are used to elicit the data required to establish adequacy or inadequacy for each empowerment indicator, and how adequacy criteria are defined for each empowerment indicator.

WEAI Dimension	Indicator name	Survey questions	Aggregation of adequacy criteria	Inadequacy criteria
Production	Input in productive decisions	G2.02 A-C, F How much input did you have in making decisions about: food crop farming, cash crop farming, livestock raising, fish culture; G5.02 A-D To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to: agriculture production, what inputs to buy, what types of crops to grow for agricultural production, when or who would take crops to market, livestock raising	Must have at least some input into or can make own personal decisions in at least two decision-making areas	Inadequate if individual participates BUT does not have at least some input in decisions; or she does not make the decisions nor feels she could.
Resources	Ownership of assets	G3.02 A-N Who would you say owns most of the [ITEM]? Agricultural land, Large livestock, Small livestock, chicks etc.; Fish pond/equip; Farm equipment (non-mechanized); F arm equip (mechanized); Nonfarm business equipment ;House; Large durables; Small durables; Cell phone; Non-agricultural land (any); Transport	Must own at least one asset, but not only one small asset (chickens, non-mechanized equipment, or small consumer durables)	Inadequate if household does not own any asset or only owns one small asset, or if household owns the type of asset BUT she does not own most of it alone
	Purchase, sale, or transfer of assets	G3.03-G3.05 A-G Who would you say can decide whether to sell, give away, rent/mortgage [ITEM] most of the time? G3.06 A-G Who contributes most to decisions regarding a new purchase of [ITEM]? Ag land; Large livestock, Small livestock; Chickens etc.; Fish pond; Farm equipment (non-	Must be able to decide to sell, give away, or rent at least one asset, but not only chickens and non-mechanized farming equipment	Inadequate if household does not own any asset or only owns one small asset, or household owns the type of asset BUT she does not participate in the decisions

WEAI Dimension	Indicator name	Survey questions	Aggregation of adequacy criteria	Inadequacy criteria
		mechanized); Farm equipment (mechanized)		(exchange or buy) about it
	Access to and decisions on credit	G3.08-G3.09 A-E Who made the decision to borrow/what to do with money/item borrowed from [SOURCE]? Non-governmental organization (NGO); Informal lender; Formal lender (bank); Friends or relatives; ROSCA (savings/credit group)	Must have made the decision to borrow or what to do with credit from at least one source	Inadequate if household has no credit OR used a source of credit BUT she did not participate in ANY decisions about it
Income	Control over use of income	G2.03 A-F How much input did you have in decisions on the use of income generated from: Food crop, Cash crop, Livestock, Non-farm activities, Wage & salary, Fish culture; G5.02 E-G To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to: Your own wage or salary employment? Minor household expenditures?	Must have some input into decisions on income, but not only minor household expenditures	Inadequate if participates in activity BUT she has no input or little input on decisions about income generated
Leadership	Group member	G4.05 A-K Are you a member of any: Agricultural / livestock/ fisheries producer/ market group; Water, forest users', credit or microfinance group; Mutual help or insurance group (including burial societies); Trade and business association; Civic/charitable group; Local government; Religious group; Other women's group; Other group.	Must be an active member of at least one group	Inadequate if not an active member of a group or if unaware of any group in the community or if no group in community
	Speaking in public	G4.01 – G4.03 Do you feel comfortable speaking up in public: To help decide on infrastructure (like small wells, roads) to be built? To ensure proper payment of wages for public work or other similar programs? To protest the	Must feel comfortable speaking in at least one public setting	Inadequate if not at all comfortable speaking in public

WEAI Dimension	Indicator name	Survey questions	Aggregation of adequacy criteria	Inadequacy criteria
		misbehavior of authorities or elected officials?		
Time	Workload	G6 Worked more than 10.5 hours in previous 24 hours.	Total summed hours spent toward labor must be less than 10.5	Inadequate if works more than 10.5 hours a day
	Leisure	G6.02 How would you rate your satisfaction with your available time for leisure activities like visiting neighbors, watching TV, listening to radio, seeing movies or doing sports?	Must rate satisfaction level as at least five out of 10	Inadequate if not satisfied (<5)

ANNEX IV SAMPLED EAS FOR THE 3DCS AT MIDTERM

Corridor	MILIEU	DEPARTEMENT	COMMUNE	SECTION_COMMUNALE	EA/Cluster
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	3ème Martissant	1
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	3ème Martissant	2
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	3ème Martissant	3
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	2ème Morne l'Hôpital	4
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	5
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	6
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	2ème Morne l'Hôpital	7
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	2ème Morne l'Hôpital	8
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	9
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	10
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	3ème Martissant	11
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	12
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	13
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	14
Cul de Sac	URBAN	Ouest	PORT-AU-PRINCE	1ère Turgeau	15
Cul de Sac	URBAN	Ouest	DELMAS	1ère Saint Martin	16
Cul de Sac	URBAN	Ouest	DELMAS	1ère Saint Martin	17
Cul de Sac	URBAN	Ouest	DELMAS	1ère Saint Martin	18
Cul de Sac	URBAN	Ouest	DELMAS	1ère Saint Martin	19
Cul de Sac	URBAN	Ouest	DELMAS	1ère Saint Martin	20
Cul de Sac	URBAN	Ouest	DELMAS	1ère Saint Martin	21
Cul de Sac	URBAN	Ouest	CITE SOLEIL	1ère Varreux	22
Cul de Sac	URBAN	Ouest	CITE SOLEIL	1ère Varreux	23
Cul de Sac	URBAN	Ouest	CITE SOLEIL	1ère Varreux	24
Cul de Sac	URBAN	Ouest	CITE SOLEIL	1ère Varreux	25
Cul de Sac	URBAN	Ouest	TABARRE	4ème Bellevue	26
Cul de Sac	URBAN	Ouest	TABARRE	4ème Bellevue	27
Cul de Sac	RURAL	Ouest	CARREFOUR	4ème Procy	28
Cul de Sac	URBAN	Ouest	CARREFOUR	11ème Rivière Froide	29
Cul de Sac	URBAN	Ouest	CARREFOUR	11ème Rivière Froide	30
Cul de Sac	URBAN	Ouest	CARREFOUR	11ème Rivière Froide	31
Cul de Sac	URBAN	Ouest	CARREFOUR	10ème Thor	32
Cul de Sac	URBAN	Ouest	CARREFOUR	10ème Thor	33
Cul de Sac	URBAN	Ouest	CARREFOUR	11ème Rivière Froide	34
Cul de Sac	URBAN	Ouest	CARREFOUR	10ème Thor	35

Corridor	MILIEU	DEPARTEMENT	COMMUNE	SECTION_COMMUNALE	EA/Cluster
Cul de Sac	RURAL	Ouest	PÉTION-VILLE	3ème Etang du Jonc	36
Cul de Sac	RURAL	Ouest	PÉTION-VILLE	5ème Bellevue Chardonnières	37
Cul de Sac	URBAN	Ouest	PÉTION-VILLE	3ème Etang du Jonc	38
Cul de Sac	URBAN	Ouest	PÉTION-VILLE	3ème Etang du Jonc	39
Cul de Sac	URBAN	Ouest	PÉTION-VILLE	5ème Bellevue Chardonnières	40
Cul de Sac	URBAN	Ouest	PÉTION-VILLE	5ème Bellevue Chardonnières	41
Cul de Sac	RURAL	Ouest	KENSCOFF	5ème Grand Fond	42
Cul de Sac	RURAL	Ouest	CROIX-DES-BOUQUETS	3ème Petit Bois	43
Cul de Sac	RURAL	Ouest	CROIX-DES-BOUQUETS	3ème Petit Bois	44
Cul de Sac	RURAL	Ouest	CROIX-DES-BOUQUETS	**5ème** Petit Bois	45
Cul de Sac	URBAN	Ouest	CROIX-DES-BOUQUETS	3ème Petit Bois	46
Cul de Sac	RURAL	Ouest	THOMAZEAU	2ème Grande Plaine	47
Cul de Sac	RURAL	Ouest	GANTHIER	2ème Balan	48
St. Marc	RURAL	Ouest	ARCAHAIE	3ème des Vases	49
St. Marc	RURAL	Ouest	ARCAHAIE	3ème des Vases	50
St. Marc	RURAL	Ouest	ARCAHAIE	5ème Délices	51
St. Marc	RURAL	Ouest	ARCAHAIE	5ème Délices	52
St. Marc	RURAL	Ouest	ARCAHAIE	6ème Matheux	53
St. Marc	RURAL	Ouest	ARCAHAIE	6ème Matheux	54
St. Marc	RURAL	Ouest	ARCAHAIE	2ème Fonds Baptiste	55
St. Marc	RURAL	Ouest	ARCAHAIE	2ème Fonds Baptiste	56
St. Marc	RURAL	Ouest	ARCAHAIE	2ème Fonds Baptiste	57
St. Marc	RURAL	Ouest	ARCAHAIE	4ème Montrouis	58
St. Marc	RURAL	Ouest	ARCAHAIE	4ème Montrouis	59
St. Marc	RURAL	Ouest	ARCAHAIE	4ème Montrouis	60
St. Marc	RURAL	Ouest	ARCAHAIE	4ème Montrouis	61
St. Marc	URBAN	Ouest	ARCAHAIE	3ème des Vases	62
St. Marc	URBAN	Ouest	ARCAHAIE	3ème des Vases	63
St. Marc	RURAL	Ouest	CABARET	1ère Boucassin	64
St. Marc	RURAL	Ouest	CABARET	1ère Boucassin	65
St. Marc	RURAL	Ouest	CABARET	2ème Boucassin	66
St. Marc	RURAL	Ouest	CABARET	4ème Fonds des Blancs (Casale)	67
St. Marc	RURAL	Ouest	CABARET	3ème Source Matelas	68
St. Marc	URBAN	Ouest	CABARET	2ème Boucassin	69
Northern	RURAL	Nord	CAP-HAÏTIEN	3ème Petite Anse	70
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	71
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	72
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	73
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	74

Corridor	MILIEU	DEPARTEMENT	COMMUNE	SECTION_COMMUNALE	EA/Cluster
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	75
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	76
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	77
Northern	URBAN	Nord	CAP-HAÏTIEN	3ème Petite Anse	78
Northern	URBAN	Nord	CAP-HAÏTIEN	2ème Haut du Cap	79
Northern	URBAN	Nord	CAP-HAÏTIEN	2ème Haut du Cap	80
Northern	URBAN	Nord	CAP-HAÏTIEN	1ère Bande du Nord	81
Northern	URBAN	Nord	CAP-HAÏTIEN	2ème Haut du Cap	82
Northern	URBAN	Nord	CAP-HAÏTIEN	2ème Haut du Cap	83
Northern	URBAN	Nord	CAP-HAÏTIEN	2ème Haut du Cap	84
Northern	RURAL	Nord	QUARTIER MORIN	1ère Basse Plaine	85
Northern	RURAL	Nord	QUARTIER MORIN	3ème Morne Pelé	86
Northern	RURAL	Nord	LIMONADE	2ème Bois de Lance	87
Northern	RURAL	Nord	LIMONADE	2ème Bois de Lance	88
Northern	URBAN	Nord	LIMONADE	3ème Roucou	89
Northern	RURAL	Nord	ACUL DU NORD	2ème Bas de l'Acul (Basse Plaine)	90
Northern	RURAL	Nord	ACUL DU NORD	3ème Mornet	91
Northern	URBAN	Nord	ACUL DU NORD	2ème Bas de l'Acul (Basse Plaine)	92
Northern	RURAL	Nord	PLAINE DU NORD	1ère Morne Rouge	93
Northern	RURAL	Nord	PLAINE DU NORD	3ème Grand Boucan	94
Northern	RURAL	Nord	MILOT	2ème Bonet à l'Evèque	95
Northern	RURAL	Nord	MILOT	3ème Genipailler	96
Northern	RURAL	Nord	LIMBÉ	2ème Chabotte	97
Northern	RURAL	Nord	LIMBÉ	5ème Ravine Desroches	98
Northern	RURAL	Nord	LIMBÉ	6ème Ilot à Corne	99
Northern	URBAN	Nord	LIMBÉ	5ème Ravine Desroches	100
Northern	URBAN	Nord	LIMBÉ	5ème Ravine Desroches	101
Northern	RURAL	Nord	BAS LIMBÉ	2ème Petit Howard (La Fange)	102
Northern	URBAN	Nord-Est	FORT-LIBERTÉ	1ère Dumas	103
Northern	URBAN	Nord-Est	FORT-LIBERTÉ	1ère Dumas	104
Northern	URBAN	Nord-Est	FERRIER	1ère Bas Maribahoux	105
Northern	RURAL	Nord-Est	OUANAMINTHE	1ère Haut Maribahoux	106
Northern	RURAL	Nord-Est	OUANAMINTHE	2ème Acul des Pins	107
Northern	RURAL	Nord-Est	OUANAMINTHE	3ème Savane Longue	108
Northern	URBAN	Nord-Est	OUANAMINTHE	1ère Haut Maribahoux	109
Northern	URBAN	Nord-Est	OUANAMINTHE	1ère Haut Maribahoux	110
Northern	URBAN	Nord-Est	OUANAMINTHE	1ère Haut Maribahoux	111
Northern	RURAL	Nord-Est	TROU DU NORD	2ème Roucou	112

Corridor	MILIEU	DEPARTEMENT	COMMUNE	SECTION_COMMUNALE	EA/Cluster
Northern	URBAN	Nord-Est	TROU DU NORD	2ème Roucou	113
Northern	URBAN	Nord-Est	TROU DU NORD	2ème Roucou	114
Northern	URBAN	Nord-Est	TERRIER ROUGE	2ème Grand Bassin	115
Northern	URBAN	Nord-Est	TERRIER ROUGE	1ère Fond Blanc	116
Northern	URBAN	Nord-Est	CARACOL	1ère Champin	117
St. Marc	RURAL	Artibonite	SAINT MARC	2ème Bois Neuf	118
St. Marc	RURAL	Artibonite	SAINT MARC	2ème Bois Neuf	119
St. Marc	RURAL	Artibonite	SAINT MARC	3ème Goyavier	120
St. Marc	RURAL	Artibonite	SAINT MARC	4ème Lalouère	121
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	122
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	123
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	124
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	125
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	126
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	127
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	128
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	129
St. Marc	RURAL	Artibonite	SAINT MARC	5ème Bocozelle	130
St. Marc	RURAL	Artibonite	SAINT MARC	6ème Charrette	131
St. Marc	RURAL	Artibonite	SAINT MARC	6ème Charrette	132
St. Marc	URBAN	Artibonite	SAINT MARC	5ème Bocozelle	133
St. Marc	URBAN	Artibonite	SAINT MARC	6ème Charrette	134
St. Marc	URBAN	Artibonite	SAINT MARC	6ème Charrette	135
St. Marc	URBAN	Artibonite	SAINT MARC	2ème Bois Neuf	136
St. Marc	URBAN	Artibonite	SAINT MARC	2ème Bois Neuf	137
St. Marc	URBAN	Artibonite	SAINT MARC	6ème Charrette	138
St. Marc	URBAN	Artibonite	SAINT MARC	6ème Charrette	139
St. Marc	URBAN	Artibonite	SAINT MARC	6ème Charrette	140
St. Marc	URBAN	Artibonite	SAINT MARC	6ème Charrette	141
St. Marc	URBAN	Artibonite	SAINT MARC	5ème Bocozelle	142
St. Marc	RURAL	Artibonite	GRANDE SALINE	1ère Poteneau	143
St. Marc	RURAL	Artibonite	GRANDE SALINE	1ère Poteneau	144

ANNEX V: LOG/INVENTORY - COMPOSITION OF STRUCTURES FOUND BY FIELD TEAMS

Appendix A

ENQUETE INTERMEDIAIRE USAID/HAITI
COMPOSITION DES STRUTURES

CORRIDOR: Cul de Sac

COMMUNE: Port-au-Prince

SECTION COMMUNALE: 3ème Martissant

NUMERO DE LA SDE: 001

Numero de la Struture	Residentiel? (1=oui, 2=non)	Nombre de menage	Nombre de menages selectionnes	Commentaire (en particulier si ce n'est pas un menage)
1	2	0		Garage
2	1	1	1	
3	1	2	2	
4	1	1	1	
5	1	2	2	
6	1	2	2	
7	1	1	1	
8	1	1	1	
9	1	0		Maison vide
10	1	1	1	
11	1	1	1	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				

Note: Si la structure n'a pas de menages, utlisez les deux dernieres colonnes pour donner brievement un explication. Par exemple, une raison peut etre que la structure est en construction ou encore ce n'est pas une maison mais un commerce.