### GFE Program Evaluation of Private Voluntary Organizations: Sample Design

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### I. Introduction

Monitoring and evaluation are critical components of the U.S. Department of Agriculture's (USDA) pilot Global Food for Education (GFE) program. In response to the need to monitor and evaluate implementation by private voluntary organizations (PVO's), USDA's Foreign Agricultural Service (FAS) asked its International Cooperation and Development (ICD) program area to hire qualified staff to manage and design a program to effectively accomplish this task. For statistical technical assistance with sampling and analysis, ICD asked USDA's National Agricultural Statistics Service (NASS) to help design a plan to adequately fulfill this requirement.

The GFE plan (designed by NASS) relies heavily on survey design and statistical sampling to accomplish its objectives effectively within the limited resources. The general approach is to identify what estimate(s) of some characteristic(s) of the target population are required. For GFE, the strategy is to define the objective and design a methodology that will efficiently monitor the program performance by the PVO's, and collect appropriate data for evaluation purposes to quantify program effectiveness.

To best accomplish the design objectives, the target population of interest is limited to the schools selected by the PVO's participating in the GFE feeding program. This is the target population from which all estimates will make inference. Considering that GFE is a pilot program, non-GFE schools can be excluded as they represent a nonparticipating sub-set of the total population of schools.

FAS' Export Credits program area is responsible for administering GFE through a series of agreements in partnership with a PVO. In some instances, a country may have several GFE programs, each with a separate and independent PVO. Due to the different and difficult nature associated with each participating country, each FAS agreement is unique.

The primary objective of a survey design is to specify the methodology used for making inferences of the target population. For GFE, the task is to specify a methodology to accomplish the monitoring and evaluation needs only. The first basic requirement is to

establish a separate and unique domain for sampling and analysis purposes that categorizes each PVO project as a separate population domain (entity) for sampling and making required inference as to population characteristics. By definition, a pilot program is usually reduced in scope and scale. Lessons learned from the pilot will be applied to subsequent program execution is a dynamic situation with a steep learning curve. Each country/PVO agreement varies considerably, which naturally tends to increase management needs for USDA administration. In some cases, the original agreement required amending due to unforeseen conditions and/or circumstances. Taking all factors into consideration and based on the pilot nature of GFE, the design for monitoring and evaluation of each country/PVO project is best handled as a separate case study.

Consistent with the nature of any pilot program, the monitoring and evaluation component will be streamlined for each case study based on budgetary constraints as well as on the limited number of trained and experienced in-country field personnel and resources. Each case study requires creation of a target population subset and designating it the case study domain as the subset of schools participating in each country/PVO feeding program and referred to as the population size  $(N_i)$  for the  $i^{th}$  agreement. Due to the limited monitoring and evaluation budget for each case study, the number of sample schools is limited to about 20 and will be referred to as the sample size  $(n_i)$  for the  $i^{th}$  country/PVO project.

For the case study's small sample to be more statistically representative of the target population, the sample methodology design needs to specify selection of a sample of schools using a purposeful sample technique. This will avoid bias and ensure that the small number of schools selected in the sample is sufficiently representative as to allow the necessary inferences for measurement of program effectiveness. If and when GFE expands beyond the pilot stage, it will be important to allocate sufficient resources to an adequate number of sample schools to establish an efficient monitoring and evaluation program. With adequate resources supporting a fully operational GFE, the requirements and specifications for survey design will need to be more demanding to achieve an acceptable level of statistical confidence and precision. The results of the GFE pilot will be necessary and useful for determining a future adequate sample size for an operational program.

### **II.** Sampling

Purposeful sampling becomes a powerful tool for the statistician and investigator when dealing with typically small sample sizes associated with case studies. In the context of GFE methodology in conjunction with a stratification matrix strategy, a purposeful sample is basically a random sample of schools that is more representative of the target population than a totally random sample with a small sample size. To further increase the efficiency of a purposeful sample, the form of stratification uses the matrix to sub-divide the target population  $(N_i)$  using as the matrix the important target population

characteristics or "factors" to control variability inherent within those factors affecting the school feeding programs associated with GFE. The matrix approach facilitates selection from each matrix cell a purposeful sample of schools  $(n_{ijk})$  from the matrix row *j* of the column *k* of the sub-divided target population  $(N_i)$ . The sum of  $n_{ijk}$  sampled schools equals the total number of schools  $(n_{i...})$  selected for monitoring and evaluation.

The use of the matrix approach for GFE sampling methodology is an effective mechanism to collect representative data objectively with a small sample in order to measure the program's effectiveness. Matrix factors are the most important elements within each country/PVO project and have the potential to contribute differences in program effectiveness. It is anticipated that the matrices will differ considerably from project to project, even within a single country, when PVO's have uniquely different feeding programs in different areas of the country. The matrix factors will be identified by the GFE regional coordinators during the initial phase of their work as the program, field staff, and participatory government/private agencies are fully defined.

Once the matrix factors are defined for each country/PVO project, each *ijk*-th target population school is systematically assigned to one and only one of the *ijk*-th cells of the matrix. The total count of schools in each cell,  $N_{ijk}$ , becomes the sub-target population size. During the analysis phase for modeling purposes, the sub-target population count,  $N_{ijk}$ , will be used as the model weights for the purpose of indicator calculation used to measure program performance.

The sub-population count,  $N_{ijk}$ , is used as the basis for allocation of the purposeful sample,  $n_{ijk}$ , within the matrix. Generally, the allocation will be proportional with a minimum of two schools selected from each matrix cell. The sample school selection process within each matrix cell will use systematic random sampling that requires the schools in each cell to be ranked and arrayed by student population size.

To determine whether the feeding programs achieved their program goals, the GFE methodology will use three measurement criteria (indicators): (1) enrollment, (2) attendance, and (3) performance. With operational programs, normally the target population variability will dictate the sample size necessary to achieve a certain precision of the estimate for the desired indicators. Statistically, the inherent target population variability can be controlled to a certain extent through stratification and classification factors for placing schools into groupings that are more homogeneous within groups than between groups or cells of the matrix.

When creating the matrix for each country/PVO project, the regional coordinators need to consider logical school groupings based on structure and environmental factors. Control of these factors is necessary because of the impact they can potentially have on program performance and success.

### III. Background on WFP Sampling Methodology

The World Food Program (WFP) has prepared a paper that describes the approach used for calculation of the sample size for its School Feeding Baseline Survey. The WFP has based its survey design on a stratified simple random sample approach and will sample a total of 3,700 schools in 23 countries, or roughly 161 sample schools per country. The actual country sample sizes range from the smallest (60 schools) to the largest (388 schools). If one makes the assumption that the issues facing WFP in these 23 countries are not statistically different in school characteristics from those schools in countries participating in GFE, then one would expect that comparable sample sizes would be appropriate for GFE if USDA/FAS implements the same WFP survey design.

The FAS plan developed for the GFE monitoring and evaluation component is somewhat different from that implemented by WFP. Limited resources requires tailoring the GFE survey design to produce comparable results more efficiently. The solution is to make each country and PVO a separate case study using an appropriate, purposeful sample of schools stratified using a matrix of factors to control the target population variability. In the case of WFP, it has chosen to use two different independent samples in its design— one for the Baseline Survey and a different sample of schools for its Follow-up Survey.

As with any start-up program, the WFP survey design sample methodology paper discusses the possibility that it may be necessary to adjust the Follow-up Survey sample size. As stated in its paper: "This can occur for instance when the indicators observed in the baseline survey showed different levels from those that were used when calculating the required sample sizes prior to the baseline survey. This would mean that the sample size used in the baseline survey would be too small to satisfy the precision requirements for the evaluation effort if used for the follow-up survey." Based on the proposed GFE case study design described in this paper, making sample size adjustments is not relevant.

### IV. The GFE Approach to Evaluation of PVO Projects

The GFE monitoring and evaluation approach in this pilot program is limited by available resources. While the GFE methodology is statistically sound and defensible, limited resources require adoption of a plan using a small, purposeful sample size tailored to a case study design requiring more stringent controls on sampling frame construction.

Rather than using the WFP's survey design based on two independent samples, the GFE case study approach requires that a simplified repeat visitation for the Follow-up Survey be completed for each of the Baseline Survey sample schools. The repeat-sample design approach eliminates inherent survey variability in the indicators due to differences by chance alone associated with the use of two independent samples of different schools used for the Baseline and Follow-up Surveys.

Details for implementation of a case study design for GFE will follow and build on the general discussion at the beginning of this paper. Detailed instructions will be developed as additional information becomes available for field supervision by the GFE regional coordinators. It is important to keep in mind that references to the WFP survey design are being used only as a basis for comparison, and such reference should not be considered in any way as making the WFP design a standard of comparison.

### V. GFE Methodology Guidelines for PVO Evaluation/Monitoring

There are basic guidelines that should be established for a design of the GFE case study methodology and for determining the optimum purposeful sample strategies. The following line items summarize the best approach for examination and determination of each country's critical design factors; i.e., they assess the as-yet-unknown varying conditions, infrastructure, and environmental issues.

1. The WFP form template of questions is used as the basis for developing the data collection form. For countries where specific data is not applicable, the questions should be dropped from the form used in that country. At a minimum, enrollment and attendance data will be collected.

2. Each GFE/PVO country project is unique and should be evaluated separately to determine the most efficient design and appropriate sample size.

3. If a PVO has collected "baseline data," this information can be useful if identical information was obtained from each participating school. This information, however, is not the GFE baseline data needed for evaluation, which must be collected using questions derived from the WFP form template. This is because even if each school asks for the same information, but asks for it using a slightly different question, then it is possible to get a different response. Thus, it is important that WFP and USDA use the same form template and follow the final questionnaire construction used in each country exactly as the questions come off the form template. This is another reason that PVO baseline data cannot be used as the basis for GFE baseline data.

4. PVO baseline data could be useful for "classifying" each of the participating schools in the GFE program for sampling and estimation purposes. WFP classified each school as either a "new" school or an "existing" school, the idea being that existing school enrollment would have already increased from some lower baseline prior to the schoolfeeding program. If the purpose is to entice enrollment, it would be problematic to compare a "new" school with no prior feeding program. The WFP strategy is to summarize these two groups separately so that the analysis of the new schools' overall performance will be most advantageously reflected in the report.

5. If resources are available for only a very small sample of program schools, the WFP suggested that more than two classification criteria, as described in number 4 above, be

used, because a small sample will not provide the same level of precision that the WFP has targeted; i.e., measure change with a precision of 10-20 percent with a .05 level of confidence. WFP suggested using a matrix approach with additional classification criteria—pre-school, primary schools (using the official government definition), and boarding schools. This approach requires scrutinizing the PVO information on each school to determine the relevant classification criteria. These would be used if the information is only available on every school in the program. Since the agreement signed with each PVO could have its own unique characteristics that could affect survey design and sampling, this process is required for each GFE/PVO project.

6. Sample sizes and sample selection procedures should be determined on a country/project by country/project basis once the population counts are determined for each cell ( $N_i$ ) in a country's classification matrix.

### VI. Detailed Discussion on GFE/PVO Project Sampling

Each country PVO project will have its own unique characteristics that will require tailoring the sampling design and data collection form to best accommodate the particular differences associated with each country PVO project. The basic data that must be collected relate specifically to the need to estimate the three measurement criteria (indicators). The WFP template needs to be scrutinized to ensure that only data that are needed are being collected and that the data collected will allow accurate estimation of the measurement criteria (indicators).

There are two general approaches to sampling: random selection, and purposeful selection. Generally, a random sample is used to make inferences about population characteristics and estimates of population totals, averages, ratios, etc. Purposeful samples are often used for expediency or to provide a cost-efficient indication of certain population characteristics, but will not produce unbiased estimates of population totals, averages, ratios, etc. For the purposes of GFE/PVO evaluation, a purposeful sample would accommodate the lower level of resources available for data collection, while providing a valid measure of change for the first two desired indicators. This is true when the survey design includes repeated sampling of identical observations to measure any possible change in population level of the desired indicators.

Random sampling is commonly used because it produces statistically sound population estimates. But a scientific basis does not guarantee that a random sampling will produce unbiased, accurate, and precise estimates. One never knows whether an estimate from a random sample is accurate, but one can calculate a confidence interval that allows a statement to be made with regard to the degree one can be confident that the true population value will fall within a range of values with a certain level of probability. Random samples will generally be less efficient as the sample size decreases. The advantage of a purposeful sample is that it will give a statistically defensible estimate of percentage change when calculated using repeated sampling of matched observations; i.e., repeat visits to identical schools. If one takes two random samples at two different periods of time, the ability of results to measure the true change in the population over the time period between surveys can be problematic. While each survey will make an independent estimate of the population characteristic, one does not know for sure whether any difference in level between the survey estimates is a true population level change or a change due to the difference in the different sample elements that compose each independent sample. The strength of the repeat sample to measure population characteristic changes is based on the strength of its application with purposeful sampling under GFE.

To help facilitate the effectiveness of using a small sample, it is essential to consider a strategy to stratify or classify the population (N) into smaller and more homogeneous sub-populations using a matrix with X&Y axis criteria to classify each school in the population (N) into one and only one of the matrix cells. Such a survey design allows making valid inferences to the percent change with respect to the desired indicators at the national level as long as the proper weights are all applied to estimates for each classification criteria (cell in the matrix). The weights are calculated using the number of schools in each cell.

The following steps will be applied for each country/PVO project:

1. Decide on the classification criteria and assign each of the total N schools participating in GFE into its appropriate  $N_i$  strata or cells. The number of classification criteria is understandably important. For example, WFP has deemed it necessary to use two classification criteria—existing and new schools.

2. Select a sample of schools (*n*). A total of 20 schools have to be selected as the target sample size. As a general rule of thumb, a minimum sample size per cell is two. A general approach to allocation of the total samples to cells, given that schools in each cell are homogenous, would be using a proportional scheme based on the number of schools in each cell. If the number of samples is sufficient, then a random sample of  $n_i$  schools ( $n_i =$  two minimum) can be selected from each of *i* strata or matrix cell. Depending on the type of classification data available and its quality, the schools in each strata could be ranked and a small sample size would provide a more representative, purposeful sample. This decision will to be made on a country/project-by-country/project basis. The extent to which the purposeful sample is representative and accuracy of the indicators are both contingent on careful selection of  $n_i$  schools and proper weighting of the summarized data.

3. Tailor the form template for each country to collect the appropriate data needed and available for the baseline survey calculations for the  $n_i$  sample schools. The decision to collect four months of data for specific data items was a decision by WFP to best estimate the baseline from which to measure future change, or measure the effectiveness of the program. The GFE/PVO methodology is to collect data for measurement of the baseline

(first survey), and to resurvey the identically sampled schools and collect corresponding data (follow-up survey). WFP suggested selecting four months during the school year that reflected seasonal trends in attendance to best estimate the baseline. Likewise, those same four months of data will be collected during the school year under the program to allow accurate measurement of the feeding programs' effect on the education program.

WFP also qualifies the baseline survey to encompass the last complete academic year. Traumatic effects in the country anytime during that last complete academic year can cause participation in the educational program to be uncharacteristic or atypical for that year and can cause problems with analysis and interpretation of the resulting indicators. The same holds true for traumatic events that might occur during the feeding program academic year. Collecting data for more than one prior full academic year for baseline purposes was discussed by WFP as a solution to tempering the effects that traumatic events can have on indicator analysis.

### VII. GFE Project Matrix Construction and Sampling

With the onset of project implementation, the regional coordinators investigated the conditions in GFE participating countries and other factors that might impact project effectiveness to develop a sampling matrix for unique classification of each participating school. Since each participating countries' project is unique and operating under different conditions, the matrices should be tailored differently to meet each country's specific conditions and project needs. Generally, the regional coordinators tailored each matrix to obtain as much information about the schools' program and operational characteristics as could be obtained from a sample of twenty schools. Due to the limited number of samples, it was important to reduce the number of identified factors to an absolute minimum to maintain the number of matrix cells at a reasonable number (10 or fewer).

To illustrate the use of the matrix for sampling purposes, the following two examples will detail the process used by the regional coordinators to first create the matrix and then select the sample of schools:

1. The first example is Bosnia, where a complex set of factors was considered in the country for matrix creation. Due to recent armed conflict, one of the most important considerations was social vulnerability, which could potentially affect program implementation. Similarly, whether schools were rural or urban affects the ability of the PVO to effectively execute its food feeding activities. Third, whether participating schools had a parent-teacher Association (PTA) was deemed an extremely important factor in the school's ability to execute and support its programs. These three major factors were considered important at the onset when little information was readily available. The whole purpose of the matrix is to ensure that representative data will be collected from the small sample to determine the project's effectiveness.

The matrix used for sampling the Bosnia/Catholic Relief Services (CRS) program schools is below. Within each cell of the matrix are two numbers. The first number is the population of schools or total number in the CRS feeding program classified with that cell's characteristics. The second number is the number of sample schools selected from the total population for that cell. In all cases, some manner of random selection was used by the regional coordinators to select the actual sample schools from each cell.

	High Social V	ulnerability	Lower Social		
PTA	Rural	Urban	Rural	Urban	TOTAL
Yes	$Pop^n = 4$	2	13	14	33
	n = 1	1	3	3	8
No	7	7	25	34	73
	2	2	4	4	12
TOTAL	11	9	38	48	106
	3	3	7	7	20

Sample for Bosnia/CRS Project Schools

Pop – Total schools participating in feeding program.

<sup>n</sup> – Number of samples.

The sample allocation within the matrix of participating schools was proportionate to the total number of schools in each cell. This method of sample allocation allows the analysis of the maximum amount of information with the least amount of resources expended on data collection.

2. A second example is the Vietnam Land O' Lakes (LOL) project, which is a more typical of a developing country program situation. The regional coordinator met with education ministry officials to discuss the details and characteristics associated with the educational system in Vietnam to identify the best factors to use for developing the classification matrix.

The major factor identified was the significant difference between the administration of "main" and "branch" schools. The main schools were further classified by Ho Chi Minh City proper and two other major provinces. These schools also have large enrollments. The administration of the feeding program could be different between large and small schools. To examine and analyze these differences, the main schools were further classified by their enrollment size; i.e., less than 360 students enrolled, versus 360 or more students.

Fewer students were enrolled in the branch schools in the more rural areas. The administration of the rural educational system was more uniform across the country and the need for more definitive regional classification was not necessary. However, the size of rural schools was deemed important, and classification criteria based on enrollment

were used to collect data for analysis of the project's effectiveness in the rural economy compared to the more urban areas.

The matrix used for sampling the Vietnam LOL program schools is below. Within each cell of the matrix, the two numbers represent the same statistical characteristics as described for the Bosnia matrix.

	Main School		
City/Province	< 360	\$ 360	TOTAL
Ho Chi Minh City	$\begin{array}{l} Pop^n = 15\\ n = 2 \end{array}$	16 3	31 5
Long An Province	8	14	22
	2	2	4
Dong Thap	18	25	43
Province	2	2	4
TOTAL	41	55	96
	6	7	13

Sample for Vietnam/LOL Main Schools

Pop – Total schools participating in feeding program.

<sup>n</sup> – Number of samples.

City/Province	< 30	31 - 99	\$ 100	TOTAL		
Country Total	$\begin{array}{c} \text{Pop}^n = 81\\ n = 2 \end{array}$	101 2	23 2	205 6		

### Sample for Vietnam/LOL Branch Schools

Pop – Total schools participating in feeding program.

<sup>n</sup> – Number of samples.

The random sampling methodology used in Vietnam was essentially the same as that for Bosnia. The major difference between the two methodologies is the size of the feeding program's school populations. In Bosnia, the total number of schools was 106 and a sample of 20 schools represents nearly a 20 percent sampling rate. In Vietnam, the total number of main and branch schools was 301, or a 6.6 percent sampling rate. The power of the matrix sampling approach is evident in Vietnam where a great deal of school characteristic data was collected with a limited number of sampled program schools.

The remaining GFE program country/PVO project matrices listed below are similar to the matrices for Bosnia and Vietnam.

	School Districts						
School Gender	Cobli	Materi	Copargo- Djougou	Pehunco	Kerou	TOTAL	
Girls	$\begin{array}{c} \text{Pop}^n = 14\\ n = 2 \end{array}$	11 2	12 2	14 2	9 2	60 10	
Boys	14 2	11 2	12 2	14 2	9 2	60 10	
TOTAL	28 4	22 4	24 4	28 4	18 4	120 20	

### Sample for Benin/CRS Project Schools

Pop –Total schools participating in feeding program. <sup>n</sup> – Number of samples.

Sam	ole f	or B	olivi	a/Pro	viect (	Concern	International	(PCI)	<b>Project Scl</b>	hools
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Location	Ru	ıral	U		
	New Program	Previous Program	New Program	Previous Program	TOTAL
Potosi	n = 3	2	2		7
Oruro	5				5
Cochabamba	3	3	2		8
TOTAL	11	5	4		20

	School			
City/Province	Girls	Boys	TOTAL	
Pointe Noire	$Pop^{n} = 100$	100	200	
	n = 2	2	4	
Brazzaville	300	300	600	
	2	2	4	
Pool	120	120	240	
	2	2	4	
Nairi	40	40	80	
	2	2	4	
Deloise	40	40	80	
	2	2	4	
TOTAL	600	600	1200	
	10	10	20	

### Sample for Congo/International Partnership for Human Development (IPHD) **Project Schools**

Pop –Total schools participating in feeding program. <sup>n</sup> – Number of samples.

	1	ř I	v	
Location	< 29%	30% - 39%	\$ 40%	TOTAL
Highlands	$\begin{array}{l} Pop^n = 21 \\ n = 4 \end{array}$	45 4	24 2	90 10
Lowlands	7 4	32 4	21 2	60 10
TOTAL	28 8	77 8	45 4	150 20

### Sample for Eritrea/Mercy Corps Project Schools

Sample for Georgia/International Orthodox Christian Chari	ties (IOCC)
Project Schools	

	East		West		South			
School Size	Urban	Rural	Urban	Rural	Urban	Rural	TOTAL	
Large	7		2	1	2	1	13	
Small	2		2	1	2	1	8	
TOTAL	9		4	2	4	2	21	

Pop –Total schools participating in feeding program. <sup>n</sup> – Number of samples.

Sample for Guatemala/WorldShare	<b>Project Schools</b>
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	Schoo			
Location	# 99 \$ 100		TOTAL	
Region 1	9	5	14	
Region 2	1	1	2	
Region 3	2	2	4	
TOTAL	12	8	20	

Pop –Total schools participating in feeding program. <sup>n</sup> – Number of samples.

	PRAF Bonus		No PRA		
Teacher	Vehicle	No Vehicle	Vehicle	No Vehicle	TOTAL
Location	Access	Access	Access	Access	
Resident	$Pop^{n} = 10$ $n = 3$	6 2	12 4	1 	29 9
Non-	14	4	5	4	27
Resident	5	2	2	2	11
TOTAL	24	10	17	5	56
	8	4	6	2	20

### Sample for Honduras/CRS Project Schools

	Lo		
Community	North	South	TOTAL
Bishkek	$\begin{array}{l} Pop^{n} = 92\\ n = 3 \end{array}$		92 3
Urban	52	81	133
	3	4	7
Rural	132	158	290
	5	5	10
TOTAL	276	239	515
	11	9	20

### Sample for Kyrgyzstan/Mercy Corps Project Schools

Pop – Total schools participating in feeding program. <sup>n</sup> – Number of samples.

	<u> </u>			
Region	Boys	Girls	Both	TOTAL
Greater Beirut	$Pop^n = 4$	11	18	33
	n = 2	2	6	10
South	1	1	28	30
Lebanon/Bakaa	1	1	2	4
North Lebanon	2	3	20	25
	2	2	2	6
TOTAL	7	15	66	88
	5	5	10	20

### Sample for Lebanon/IOCC Project Schools

	1 9			
	Local			
Location	Large	Small	TOTAL	
North	$\begin{array}{l} \operatorname{Pop}^{n} = 8\\ n = 3 \end{array}$	7 3	15 6	
Central	10 3	6 4	16 7	
South	9 4	10 3	19 7	
TOTAL	27 10	23 10	50 20	

### Sample for Moldova/IPHD Project Schools

Pop –Total schools participating in feeding program. <sup>n</sup> – Number of samples.

Sumple for Meuruguu/1 er i rojeet Schools						
	Distance fr	Distance from School				
Municipality	0 - 3 km.	3+ km.	TOTAL			
Yali	$\begin{array}{c} \operatorname{Pop}^{n} = 32\\ n = 4 \end{array}$	14 2	46 6			
L. Concordia	2	21 3	23 3			
S. Rafael N.	21 2	11 1	32 3			
Pantasma	57 6	20 2	77 8			
TOTAL	112 12	66 8	178 20			

### Sample for Nicaragua/PCI Project Schools

Education	Prede			
System	Fishing	Farming	Mixed	TOTAL
Formal	$\begin{array}{c} Pop^n = 7\\ n = 4 \end{array}$	7 4	3 3	17 11
Non-Formal	4 4	5 4	1 1	10 9
TOTAL	11 8	12 8	4 4	27 20

### Sample for Uganda/Save the Children Project Schools

### APPENDIX 2: BASELINE SURVEY

### School Feeding Support Unit Baseline Survey

1	ID/Sa	mple nu	umber				
2	Count	try					
3	Proje	ct code					
	Е		EMOP				
	Х		PRRO				
	D		Develop	ment			
Date	of surv	/ <b>ev</b>		Mont	h	Year	
Name	e of en	umerato	or				
Conta clarif	act det ication	ails for 1)	enumerator (	this is in c	ase issue	es arise which nee	ed
Telepł	ione:						
Fax:							
E-mai	l <b>:</b> :						

### Part 1. School Location

4	Name o	f school

5	Province/District/etc.
6	Location – name of municipality/town/village

### Part 2. School Description

### Type of school

7	Day school	У	n	
8	Boarding?	у	n	
8a	Informal boarding?	У	n	
9	Is attendance full day or half day	full	half	
10	How many 'shifts' in the school day			
Schoo	l's mode of operation			
11	Is there a parent-teacher association? (or equivalent)	У	n	
12	Number of women on PTA (or equivalent) execut	tive		
13	Number of men on PTA (or equivalent) executiv	/e		
14	Do parents contribute to school financially?	у	n	
14a	School fees are required	у	n	
15	Do parents contribute to school in kind?	у	n	

16	Is health/nutrition on the curriculum?	у	n	
17	Is there a kitchen?	у	n	
Туре	of water source for the school			
18	Is water piped?	у	n	
19	Is there a well/borehole/spring?	у	n	
20	Is rainwater collected?	у	n	
21	Is water drawn from a river/lake/dam?	у	n	
Sanit	ation at the school			
22	Is the school linked to main sewerage system?	У	n	
23	Is there a septic tank?	у	n	
24	Are there pit latrines?	у	n	
25	Is there a separate toilet/latrine block for girls?	у	n	

(The toilet block may simply be divided, with some facilities to be used by the girls and others by the boys)

Other donor activity at the school What other programs are there at the school?

26	Nutrition (and related)	У	n	
	Donor		 	
27	Worm eradication (de-worming)	У	n	
	Donor _		 	
28	Water supply	у	n	
	Donor		 	
29	Sanitation	У	n	
	Donor		 	
30	Curriculum development (all subjects)	У	n	
	Donor			

31	HIV/AIDS education	У	n	
	Donor		 	
32	Reproductive health issues	у	n	
	Donor		 	
33	Teacher training and in service	У	n	
	Donor		 	
34	Materials (books, etc.)	у	n	
	Donor		 	
35	Infrastructure (classrooms, etc.)	у	n	
	Donor			
36	Other health services (include government sponsored)	У	n	
	Donor			
37	Other (what?)	у	n	
	Donor		 	
38	Is the school supported by a religious organization? (Church/mosque, etc.)	У	n	

### **Future Plans**

39	Is there a new school being built, planned in the near future, or	r jus	t completed	close-by?
	У		n	

### Nature of GFE program at school

40	Breakfast	У	n	
41	Snack	у	n	
42	Lunch	у	n	
43	Dinner	у	n	
44	Take-home ration for boys	у	n	
45	Take-home ration for girls	у	n	
45a	Do teachers get rations?	у	n	

46	Year GFE program first started at school				
47	Please give an estimate of the proportion of child provided at school, ex: .22=22%	dren wh	ose only r	neals in	the day are the o
47a	Does meal in 47 replace meal at home?	у		n	
47b	If yes to 047 what happens to food at home?	<u> </u>			
Sch	ool feeding days				
48	Which grades are fed?	Pre-s Seco	school ndary	]	Primary
49	School feeding days in the school year 3 years ago				
50	School feeding days in the school year 2 years ago				
51	School feeding days in the school year last year				
52	School feeding days planned for this school year				
Rat	ions delivered				
53	Is a record kept of the number of rations distributed	l daily?		<b>y</b> [	n
54 ]	Is a record kept of the quantity of commodities distr	ibuted o	each day?	у [	n
Sun	nmary of Enrollment				
55	Boys enrolled three years ago				
56	Girls enrolled three years ago				
57	Total pupils enrolled three years ago				
58	Boys enrolled two years ago				
59	Girls enrolled two years ago				
60 '	Total pupils enrolled two years ago				

61	Boys enrolled last year	
62	Girls enrolled last year	
63	Total pupils enrolled last year	
64	Boys enrolled this year	
65	Girls enrolled this year	
66	Total pupils enrolled this year	

### Teaching staff at the school

67	Certified male teachers at school three years ago	
68	Uncertified male teachers at school three years ago	
69	Certified female teachers at school three years ago	
70	Uncertified female teachers at school three years ago	
71	Certified male teachers at school two years ago	
72	Uncertified male teachers at school two years ago	
73	Certified female teachers at school two years ago	
74	Uncertified female teachers at school two years ago	
75	Certified male teachers at last year	
76	Uncertified male teachers at school last year	
77	Certified female teachers at school last year	
78	Uncertified female teachers at school last year	
79	Certified male teachers at school this year	
80	Uncertified male teachers at school this year	
81	Certified female teachers at school this year	
82	Uncertified female teachers at school this year	
Cl	assrooms at School (physical assets)	
83	Number of classrooms three years ago	

- 84 Number of classrooms two years ago
- 85 Number of classrooms last year

86 Number of classrooms this year

### Part 3. Children at School

## Number of boys and girls of primary school age enrolled in school (from school records) – <u>official enrollment figures for last school year</u>

87a	Boys enrolled in pre-school last year	
87b	Girls enrolled in pre-school last year	
87	Boys enrolled in grade one last year	
88	Girls enrolled in grade one last year	
89	Boys enrolled in grade two last year	
90	Girls enrolled in grade two last year	
91	Boys enrolled in grade three last year	
92	Girls enrolled in grade three last year	
93	Boys enrolled in grade four last year	
94	Girls enrolled in grade four last year	
95	Boys enrolled in grade five last year	
96	Girls enrolled in grade five last year	
97	Boys enrolled in grade six last year	
98	Girls enrolled in grade six last year	
99	Boys enrolled in grade seven last year	
100	Girls enrolled in grade seven last year	
101	Boys enrolled in grade eight last year	
102	Girls enrolled in grade eight last year	
103	Boys enrolled in grade nine last year	
104	Girls enrolled in grade nine last year	
104a	Boys enrolled in grade above nine last year	
104b	Girls enrolled in grade above nine last year	

104c	Boys enrolled in pre-school this year	
104d	Girls enrolled in pre-school this year	
105	Boys enrolled in grade one this year	
106	Girls enrolled in grade one this year	
107	Boys enrolled in grade two this year	
108	Girls enrolled in grade two this year	
109	Boys enrolled in grade three this year	
110	Girls enrolled in grade three this year	
111	Boys enrolled in grade four this year	
112	Girls enrolled in grade four this year	
113	Boys enrolled in grade five this year	
114	Girls enrolled in grade five this year	
115	Boys enrolled in grade six this year	
116	Girls enrolled in grade six this year	
117	Boys enrolled in grade seven this year	
118	Girls enrolled in grade seven this year	
119	Boys enrolled in grade eight this year	
120	Girls enrolled in grade eight this year	
121	Boys enrolled in grade nine this year	
122	Girls enrolled in grade nine this year	
122a	Boys enrolled in grade above nine this year	
122b	Girls enrolled in grade above nine this year	

### Children completing primary school last year who went on to higher level education this year

123	Number of girls enrolling in higher education	
124	Number of boys enrolling in higher education	

\_\_\_\_

#### **Children Learning**

125 On a scale of 1 to 5, make an assessment of the significance of school feeding in relieving shortterm hunger and relieving children's difficulties in maintaining attention (focus group with school teachers)

	Not significant at all		Marginally significant			
	Moderately significant					
	Highly significant		Very highly significant			
126 hun grou	26 On a scale of 1 to 5 make an assessment of the significance of school feeding in relieving short term unger and relieving children's difficulties in maintaining attention (focus group with pupils –mixed group)					
	Not significant at all		Marginally significant			
	Moderately significant					
	Highly significant		Very highly significant			

#### Children absent from school

Rank the following five reasons for nonattendance of enrolled children during the year (focus group with school teachers) - with 1 being the most important and 5 the least important.

Boys		1	2	3	4	5	
127	sickness/health						
128	weather (rain, floods, storms)						
129	family, household, farming commitments						
130	other employment						
131	other						
132	Detail						

Girls		1	2	3	4	5
33	sickness					
134	weather (rain, floods, storms)					
135	family, household economy commitments					
136	other employment					
137	other					
138	Detail					

#### Children not enrolled in school

Rank the following nine reasons for non-enrollment of eligible children (focus group of staff) with 1 being the most important and 9 the least important.

Boys	Family, household aconomy	1	2	3	4	5	6	7	8	9
139	commitments									
140	Alternative employment									
141	Marriage									
142	Health and disabilities									
143	Personal safety									
144	Cost of schooling									
145	Distance from school									
146	Attitudes of parents									
147	Other									
148	Detail									

Girls		1	2	3	4	5	6	7	8	9
149	Family, household econo commitments	my								
150	Alternative employment									
151	Marriage									
152	Health and disabilities									
153	Personal safety									
154	Cost of schooling									
155	Distance from school									
156	Attitudes of parents									
157	Other									
158	Detail									
159	Please make an estimate of enrolled in school, ex: .22=2	the proj 22%	portion (	of prima	ry scho %	ol-age	girls in	the are	ea who	are not
160 F e	Please make an estimate of t enrolled in school, ex: .22=22	he prop 2%	ortion o	f prima	ry schoo	ol-age t	ooys in '	the are	a who	are not
					%					
Com	munity involvement in	the ma	anagen	ient of	feedin	ig pro	gram			
161	Are the parent-teacher as feeding program and in c	ssociatio listribut	on and o ting the	ther con ration?	nmunit	y meml	oers inv	olved i	in man	aging the
					Y			I	N	
162	How many women (not s distributing the ration?	chool te	achers)	are invo	lved in	manag	ing the	feeding	g prog	ram and
163	How many men (not scho distributing the ration?	ool teach	iers) are	involve	d in ma	naging	the fee	ding p	rograr	n and

164	How many male school teachers are involved in the management of the feeding program and in distributing the ration?
165	How many female school teachers are involved in the management of the feeding program and in distributing the ration?
166	Are school teachers involved more than the PTA or community members in the management of the feeding program and the distribution of the ration?
l66a	Please describe the source of data for this section
.66b	Please provide a brief explanation of the attendance data; who records attendance and when, and how is attendance defined.
.66c	Please provide a brief description of the attendance/nonattendance situation at the school. For example, is afternoon nonattendance a problem that is not shown because of the way the attendance register is kept?

# **Part IV.** The School Catchment – Number of boys and girls of primary school age in the school catchment area.

167	Boys aged between six and nine this year	
168	Girls aged between six and nine this year	
169	Boys aged between ten and fifteen this year	
170	Girls aged between ten and fifteen this year	

Monthly Attendance (add up the total attendance for the month) for four months in the school year

		Month A	Month B	Month C	Month D
171	Month A				
172	Number of school days in mo	onth			
172a	Average teacher attendance	in month			
172b	Total attendance of boys in r	nonth – pre-sch	ool		
172c	Number of boys enrolled in 1	month–pre-scho	ool		
173	Total attendance of boys in r	nonth grades 1	- 4		
174	Number of boys enrolled in	month grades 1	- 4		
175	Total attendance of boys in r	nonth grades 5	- 9		
176	Number of boys enrolled in	month grades 5	5 – 9		
176a	Total attendance of boys in r	nonth – above g	grade 9		
176b	Number of boys enrolled in 1	month – above g	grade 9		

	I	Month A	Month B	Month C	Month D
176c	Total attendance of girls in month-	– pre-school			
176d	Number of girls enrolled in month	– pre-school			
177	Total attendance of girls in month	grades 1- 4			
178	Number of girls enrolled in month	n grades 1 - 4			
179	Total attendance of girls in month	grades 5 - 9			
180	Number of girls enrolled in month	ı grades 5 - 9			
180a	Total attendance of girls in month	ı – above grade	9		
180b	Number of girls enrolled in month	1– above grade	9		

### APPENDIX 3: PROJECT STATUS, LOGISTICS, AND MONETIZATION REPORT TEMPLATES

	U.S. Department of Agriculture Global Food for Education (GFE) Reporting Format PROJECT STATUS REPORT						
Note: This is a suggested format for complying with GFE Agreement reporting requirements. Cooperating Sponsors may provide this information in another format as long as 1. the alternative format provides all of the required information; and 2. the alternative format is an electronic spreadsheet. Remember, the GFE Project Status report is an additional reporting requirement, in addition to the Logistics and Monetization Reports required for all food aid projects.							
1. Cooperating Sponsor							
2. Agreement Number							

3. Country Name(s)					
4. Final Report?	YES	NO		5. Report # (1,2, etc.)	
6. Report Date				7. Reporting Period	

8. Report on the number, frequency, and average size of meals provided. This will include snacks, meals, and/or take-home rations that are given in a school setting. Required data for this table are: Number of meals provided each month Frequency with which meals are provided Average size of meals (in grams)

Table A. TOTAL MEALS PROVIDED

IOTAL MEALS PROVI

School Name:

	Month #1		Month #2		Month #3		Month #4		Month #5		Month #6	
Frequency* Please select	Num of meal (#)	Avg. Size/ meal (g)	Num (#)	Avg. Size/ meal (g)	Num (#)	Avg. Size/ meal (g)	Num (#)	Avg. Size (g)	Num (#)	Avg. Size (g)	Num (#)	Avg. Size (g)
Each Day												
Each Week												
Each Month												
Other												

\*Please select the appropriate distribution frequency and provide data only for that frequency type. If other is selected, please indicate the frequency below:

	U.S. Department of Agriculture Global Food for Education (GFE) Reporting Format PROJECT STATUS REPORT
Note: This is a requireme format as 1. the al 2. the al Remember, requireme for all f	a suggested format for complying with GFE Agreement reporting ents. Cooperating Sponsors may provide this information in another a long as ternative format provides all of the required information; and ternative format is an electronic spreadsheet. the GFE Project Status report is an additional reporting ent, in addition to the Logistics and Monetization Reports required food aid projects.
Cooperating Sponsor	
Agreement Number	

9. Report on monthly enrollment for each school in your program. Required data for this table are: Name of school Total enrollment at beginning of the month by gender Monthly count of those who dropped out of the program by gender Monthly count of those who attended < 10 days in that month by gender Monthly count of those who attended < 50% of the time, during that month by gender</p>

Table B. ENROLLMENT AND ATTENDANCE RECORDS

	Schoo	ol Name:										
	Mo	nth #1	Month #2		Month #3		Month #4		Month #5		Month #6	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Femal e
Beginning enrollment												
Number who dropped out												
<pre># Attending &lt; 10 days per month</pre>												
<pre># Attending &lt; 50% of the time</pre>												

	U.S. Department of Agriculture Global Food for Education (GFE) Reporting Format PROJECT STATUS REPORT
Note: This is a requireme format as 1. the al 2. the al Remember, requireme for all f	suggested format for complying with GFE Agreement reporting nts. Cooperating Sponsors may provide this information in another long as ternative format provides all of the required information; and ternative format is an electronic spreadsheet. the GFE Project Status report is an additional reporting nt, in addition to the Logistics and Monetization Reports required ood aid projects.
Cooperating Sponsor	
Agreement Number	

10. Report on monthly attendance by student. Required data for this table are: The name of the school The unique name (or other identifier) of each student in the school The gender of each student in the school The number of days per month that the student attended school, when food was distributed The number of days per month that the student attended school, when food was NOT distributed.

#### ATTENDANCE RECORDS

Cooperating Sponsors are required to maintain attendance records of all students from schools that are participating in the GFE program. CCC may request, on a random basis, copies of such records. Attendance records must be maintained by gender and stipulate if the child received food under the GFE program.

	U.S. Department of Agriculture Global Food for Education (GFE) Reporting Format PROJECT STATUS REPORT
Note: This is a requireme format as 1. the al 2. the al Remember, requireme for all f	a suggested format for complying with GFE Agreement reporting ents. Cooperating Sponsors may provide this information in another a long as ternative format provides all of the required information; and ternative format is an electronic spreadsheet. the GFE Project Status report is an additional reporting ent, in addition to the Logistics and Monetization Reports required food aid projects.
Cooperating Sponsor	
Agreement Number	

11. In the space below, please provide information on the establishment of any parent-teacher associations, or training courses offered to parents and/or teachers. Also, report any assistance received from any other donors, and any special health and nutrition components of this GFE program.

12. In the space below, please provide information on the establishment of any infrastructure provided to any school provided for under the GFE agreement.

13. If students are monitored for weight and/or growth circumferences, please attach that information to this report.

Save completed report locally as a WordPerfect document. Submit report as an e-mail attachment to <u>PEBReports@fas.usda.gov.</u> E-mail questions and comments about this form to the same e-mail address.

Mailing address (for audits and/or hard copy reports):

Branch Chief Evaluation and Special Projects Branch PPDED, Export Credits, Stop 1034 1400 Independence Avenue Washington, D.C. 20250

Table A. GENERAL COMMODITY INFORMATION (quantities in actual MT) Include sub-totals (by commodity) and totals											
Commod	ity Agr Allo	eement cation	Amount Rec	ceived	Date Received Month/Year	Bala	nce E	Expected Delivery Date			
Total											
Table B.			COMM <sup>6</sup> Include su	ODITY RECH (quantities in ub-totals (by c	EIPT AND LOS actual MT) commodity) and	SES totals					
				Losses/Damages (L/D)							
Report # (1,2, etc.)	Commo- dity	Bill of Lading Amount	Amount Rec'd at Port (Survey Report)	Ocean Tran- sport L/D	Inland Transport L/D	Ware- Distri- house L/D butior L/D		Total Losses/ Damages	Balance		
Total											

9. Provide an explanation for any commodity losses/damages, and any problems encountered in the commodity delivery process. (Specify when, where, and why.)

10. List any claims on lost or defective goods. What is current status of these claims?

11. Was the port able to adequately handle the commodity offloading without a large loss of commodity; did the port authorities and customs authorities handle the commodity clearance process efficiently? Was the surveyor present? Was he cooperative? Note name and firm of surveyor.

12. Were any measures taken to cut down on warehouse expenses, i.e. sharing space with other commodities, other PVOs, etc.?

13. Were there any security measures that worked well or not well (warehousing)?

14. Did the country's intermodal system (trucking, rail, etc.) provide timely delivery? What were your experiences?

#### DIRECT DISTRIBUTION INFORMATION If no commodities were used for direct distribution/feeding during this reporting period, go directly to the Monetization Information section of this report. Table C. DIRECT DISTRIBUTION (quantities in actual MT) Include sub-totals (by commodity) and totals Report # Commodity Amount Distribution Type of Number of Number of Distributed Region Institution Recipient Beneficiaries (MT) (Include Food for Work) Institutions Subtotal Total 15. What have been the project impacts on the beneficiaries and the community? How did the targeted recipients/participants respond to the food aid/donation?

16. Compare the progress to date with planned project targets.

17. Describe how the monitoring procedures as outlined in the agreement are functioning, noting any adjustments or changes made.

18. Was the commodity appropriate for the country/region? If not, could another commodity and/or package type have been used that would have improved the program?

19. Has this distribution program helped reduce the need for future food aid? Have new or are potential development prospects evident?

	<u>MONETIZATION INFORMATION</u> (Use this section only if program involves sale of commodities)															
20. Sales - Were any commodities sold during this reporting period?																
Y	ΈS		NO													
If NO, use this block to provide a brief explanation and fill out only the Aggregate section in Table D.																
Table	D.						SALES (Include Tota	als)								
Repor	rt # Con	nmod- ity	Dat (N	e(s) of /onth/	f Sale /Yr)		Amount Sold (MT	')	Price per MT (LC)	Exchange Rate (LC to F USD) G				Procee Genera (LC)	eds ited )	
						+										
	Sub	totals														
	Agg	regate														
21. Ba	arter - Were	any c	ommoditie	es bart	tered in	exc	hange for other con	nmo	odities or service	s?						
If yes,	I ES NO															
22. Ha	2. Has a separate special interest bearing account been established? YES NO															
Table E. SPECIAL FUNDS ACCOUNT Include Totals																
Re- port #	Beginning Balance (LC)	g D	Sales Deposits (LC)	Int Ea (I	terest urned LC)		Other Program Income (LC)	Т	Total Deposits (LC)	Dis	Total Account Disbursements (LC) Account			count nce (LC)	)	
	Aggr. Total															

23. Use o	23. Use of Funds - Were any funds disbursed from the Special Funds Account during this reporting period?					
YES	NO					
If NO, us	se this block	to provide a brief explanation.				
Table F.		USE OF FUNDS (values in thousands) Include Totals				
Report #	Amount (LC)	Use of Funds				
Total						
24. Descr	ibe any issu	es or discrepancies in the monetization process and procedure.				
25. Descri	ibe any prob	plems encountered in the receipt and disbursement of funds:				
26. Desci nature?	ribe your ex	perience with the local banking system. Is it more capable of dealing with future transactions of a similar				

#### <u>FINAL INFORMATION</u> (Complete this section for all programs)

27. Describe how this program has helped develop infrastructure/marketing channels (i.e. ports, warehouses, inter-mobile transportation systems, stores, commodity markets, etc.)

28. Is there an increase in privatization?

29. Were taxes levied on the imported commodities? If so, was it at a level such that program implementation was jeopardized?

30. If the (salvageable) commodity had to be reconstituted, what was done to minimize the commodity loss? Would dual language commodity labels aid in the program's effectiveness? Why or why not?

31. Were program objectives accomplished as defined in the signed agreement? If so, to what degree? (Both qualitative and quantitative if feasible). What objectives were left unaccomplished? Why?

32. What were the short and long-term direct/indirect impacts of the program to the targeted recipients/participants?

33. Unexpected project outcomes, both positive and negative, as defined in the signed agreement should be noted. (Both qualitative and quantitative if feasible).

34. Has your organization had an audit (which meets the A-133 audit guidelines) within the last year? If yes, please submit audit, with a cover letter, to the address below. If no, please explain.

35. How were your dealings with USDA? Did you encounter problems with any of the regulations or rules regarding the program? Do you feel that the forms, web sites, and staff are friendly and useful? What recommendations would you make to improve or streamline these or other areas?

Save completed report locally as a WordPerfect document. Submit report as an e-mail attachment to <u>PEBReports@fas.usda.gov</u>. E-mail questions and comments about this form to the same e-mail address.

Mailing address (for audits and/or hard copy reports):

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