Country Policy and Funding Mechanism Study

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Country Policy and Funding Mechanism Study

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EXECUTIVE SUMMARY

This study explored policy and funding mechanisms that enabled five middle income countries to establish a country-owned and operated school feeding program. The study is designed to provide information that may assist other countries in their transition to a national school feeding program. Although each of the five target countries has supportive policy and funding for school feeding, the findings show that programs are implemented with flexibility to accommodate local needs and conditions.

Five geographically diverse countries were selected for this study. Each is a middle income country, as defined by the World Bank, and each has a national school feeding program that is country-owned and operated. All of the countries met additional criteria, including the availability of country program officials to participate in the study. The project's three-member professional assistance team developed the selection criteria and chose Egypt, Malaysia, South Africa, Jordan, and Nigeria as target countries for the study.

Although not target countries, information on Mali and Chile is included in this report. These country reports were researched and written by a Congressional Hunger Center (CHC) Fellow who was assigned to GCNF from 2008 to 2009. These additional country reports augment information on policy and funding mechanisms provided by the target countries.

A four-step process guided the direction of this project:

1. Develop research topics and questions.
2. Develop a survey instrument for data retrieval.
3. Invite country officials to participate in scheduled telephone interviews.
4. Collect, interpret and report findings.

Information was obtained from several sources, including telephone interviews with country officials and a review of current literature from organizations such as the World Bank and the United Nations World Food Programme (WFP).

Using a qualitative approach, the professional assistance team developed research questions to be used in a survey instrument, a questionnaire, for telephone interviews and data collection. These questions focused on topics such as: institutional framework; policy directives; program budget and funding mechanisms; program design; and food procurement. The data were recorded, reviewed, and studied for comparative findings.

The country telephone interviews on average lasted 1.5 hours. GCNF has numerous contacts in the target countries through delegates who have attended the past 11 Global Child Nutrition Forums. These contacts helped GCNF locate country leaders to participate in the telephone interviews. These participants were very helpful in providing detailed information and often forwarded additional documents highlighting specific aspects of their programs. These documents have been included as appendices at the end of this report.

Although there were varied responses, the countries reported consistent information in several key areas. For example, national policy was considered essential in establishing a school feeding program. Although funding mechanisms varied, federal funds were channeled through a variety of systems to provide school meals in local communities. In all countries studied in this report, school feeding, although a national program, is not universal and is available only to targeted poor children and other children with special needs. The interview participants were generally unclear about the source of funds, although taxes to support education and poverty reduction were sometimes mentioned. Although the local wet market is the usual food source, there were no policies that mandated local food procurement. Home grown school feeding (HGSF) is an increasingly common way to link school feeding to local small farm production and can have positive effects on the local economy. All countries have national policy that supports program monitoring and evaluation, either at the federal or local level. The comparative data showed significant variance in political will, program budget, community involvement and nutritional requirements.

The collective information indicates that several components support an effective national school feeding program: a separate line item dedicated to school feeding in the federal budget; strong political will; written supportive national policy; and community awareness and involvement. Conversely, school enrollment and attendance records are often lacking and are needed for effective budgeting, meal recipient targeting, and program evaluation.

This study generates interest in expanding the study to include additional middle income countries in Africa, as well as in other regions. It would be helpful to conduct follow-up interviews with each of the five target countries to obtain additional information on program progress.

School feeding is most effective when all students have access to nutritious meals at school. This becomes a goal for the future as more countries transition to a national school feeing program supported by local small farm production.

Lastly, GCNF recommends that the information shared in this report be published and used as a tool to guide other countries as they transition from external aid to a national school feeding program, or to expand upon a school feeding program that is already in place.

I. INTRODUCTION

A. Background

The global food, fuel, and financial crises have given new prominence to school feeding as a safety net and social support program. While responding to these emerging issues, these programs continue their long established roles of increasing school attendance, reducing drop out rates, and helping children learn while improving child nutrition. The data available today suggests that all countries, as perhaps never before in history, provide food in some way and at some scale to school children.[1] In fact, most countries that can afford food for school children do indeed provide it.

The need for school feeding is greatest in low income countries where food insecurity is most prevalent, as evidenced by poverty and hunger. School feeding is most likely to be an effective and sustainable intervention when it becomes a national program that is mainstreamed in the country's policies and plans. Several countries have made the transition to nationally-owned and operated programs; others are now starting the process. Experiences in countries like El Salvador, Chile, and Brazil indicate that policy development with supportive funding is a long, multi-year process. For example, the transition from a United Nations World Food Programme (WFP)-implemented program to a government-operated program in El Salvador took approximately 24 years to complete.

During the past 12 years, the Global Child Nutrition Foundation (GCNF) has conducted an annual Global Child Nutrition Forum that brings country leaders together for a five-day educational program that helps them develop plans for launching or expanding a sustainable school feeding program. These Forums respond to delegates' requests for technical assistance to develop policy and funding mechanisms to support their national feeding programs. GCNF's *School Feeding Toolkit: A Resource for Assessing Needs and Planning Sustainable School Feeding Programs* is distributed at these Forums and provides steps that help country delegates realize goals specific to their unique feeding programs. To date, over 200 leaders from 80 countries have participated in the Forum.

One of the global challenges is to provide information and guidance that will help expedite the transition process. Although each country's needs vary widely, there is consistent information available from countries operating national programs that could help guide other countries in the beginning phases of this transition process.

This five-country study intends to fill this information gap. It reports policy development processes and funding mechanisms that have successfully guided the development of a national school feeding program in each of these middle income countries. The diverse information shared in this report aims to direct other countries in establishing successful school feeding programs of their own.

[1] Bundy DAP, Burbano C., Grosh M., Gelli A., Jukes M., Drake L. (2009) *Rethinking School Feeding: Social Safety Nets, Child Development and the Education Sector.* Directions in Development, World Bank, Washington, DC.

B. Project Description

This project is designed to examine policies and funding mechanisms that support a national school feeding program in five middle income countries. These countries have successfully established nationally-owned and operated feeding programs, sometimes after transitioning from WFP support or other external aid.

Based on extensive research, this study's objective is to prepare a report explaining the policies and funding mechanisms these middle income countries have employed in securing a sustainable national school feeding program not dependent on outside assistance. GCNF sees this study as a tool that will ultimately guide other countries in launching self-sufficient school feeding programs independent of external support, whether through funding or technical training.

A four-step process guided the project's execution:

1. Review background information supportive of the study's scope and rationale.
2. Develop a research plan consistent with project objectives.
3. Collect, review, and interpret findings.
4. Prepare a detailed report with conclusions and possible recommendations.

An important first step was to identify the five countries suitable for data collection. Twelve countries were included in the first round of selections, and from this list five target countries were selected. Egypt, Jordan, Malaysia, Morocco, and South Africa were initially selected based upon the following criteria:

1. National school feeding program in place.
2. Government funding to support program implementation.
3. Policy framework to support program.
4. Sufficiently stable country for data collection.
5. Geographic diversity among all five countries.
6. Classified as a "middle income" country (either lower or upper) by the World Bank.
7. Accessible country officials for data collection.

These criteria were mapped out in the following chart, which helped facilitate the selection process:

	1	2	3	4	5	6	7[2]
Jordan	x	x	x	x	x	x (L)[3]	x
Brazil	x	x	x		x	x (U)	x
Malaysia	x	x			x	x (U)	x
India	x	x	x		x	x (L)	x
Morocco	x				x	x (L)	
Egypt	x	x	x	x	x	x (L)	x
Chile	x	x	x		x	x (U)	x
Bolivia	x	x	x		x	x (L)	x
Jamaica	x	x	x		x	x (U)	x
South Africa	x	x	x	x	x	x (U)	x
Botswana					x	x (U)	
Namibia					x	x (L)	

During the selection process, each country's criteria were not necessarily known at the outset and additional research was needed to accurately determine which countries should be included in the study. For example, while it was easy to use published World Bank data to determine if a country was categorized as middle income, classifying a country as politically stable was usually a more subjective process.

At the time interviews were scheduled, it become evident that Morocco lacked information relative to its school feeding program. Also, per the last criterion, there was difficulty securing an accessible and knowledgeable country leader to support data acquisition. Nigeria was thus substituted for Morocco due to GCNF's reliable contacts in Nigeria that could expedite data collection. Operating a national feeding program since 2005, Nigeria is an encouraging example of how school feeding initiatives can quickly thrive, and without outside assistance.

Although not target countries, information on Chile and Mali has been included in this report (see Appendixes A and B). These case studies will expand upon the information provided by the five core countries of Jordan, Malaysia, Egypt, Nigeria and South Africa that have been included in this study. This information was compiled by a Mickey Leland International Congressional Hunger Center (CHC) Fellow who was assigned to GCNF from 2008-2009. Both of these country case studies display different approaches to school feeding, each one meeting varied and specific country needs supported by unique funding and policy approaches.

[2] Numbers according to the selection criteria as listed directly above.
[3] "L" assigned to "lower middle income" countries, as defined by the World Bank ($936 - $3,705); similarly, "U" assigned to those countries designated as "upper middle income" ($3,706 - $11,455).

C. Research and Methodology

With an overall objective of collecting and reporting accurate information on policy and funding from each of the five target countries, the following steps guided the information gathering process:

1. Develop research topics and questions.
2. Develop a survey instrument for data retrieval.
3. Invite country officials to participate in scheduled telephone interviews.
4. Collect, interpret, and report findings.

A three-member GCNF professional assistance team, with staff support, was fully engaged in steps 1, 2, and 3 from July through September 2009. Information was obtained from a mixture of sources, including: telephone interviews with country officials, current literature available for review, and delegate reports submitted to GCNF Forums within the last three years. Findings depended on the quality and quantity of information available from each of these country's sources.

Research Topics and Questions

After the initial criteria and country selection, GCNF used an online delegate survey previously sent to representatives from 13 different countries to guide them in selecting study topics and questions. This delegate survey was presented at GCNF's 11th Annual Global Forum in Stellenbosch, South Africa, and was designed to pilot certain questions prior to interviewing country representatives, therefore testing its accuracy and effectiveness in gathering information relevant to this study's purposes.

The online delegate survey asked broad questions related to policy framework and funding. For example, country representatives were asked to estimate the number of children who participate in school feeding on a daily basis and to describe any major policies related to school feeding. Such questions laid the groundwork for developing this study's questionnaire that would later be used in each of the five country interviews.

Survey Instrument

In addition to focusing on the content areas piloted in the online delegate survey, namely funding and policy framework, additional topic areas were selected to meet this project's intents and purposes. Specifically, the following subject areas were selected:

1. Program background.
2. Transition to national program.
3. Institutional framework.
4. Policy framework.
5. Program design.
6. Food procurement.
7. Community participation and ownership.
8. Program funding.

Within each thematic subsection, detailed questions were then included. By doing so, it was hoped that a more in-depth, three-dimensional understanding would be gained.

Given that the study was conducted outside the targeted countries, the professional assistance team decided that conducting telephone interviews was the best method to gather primary information. Here, country officials could be probed for more concise information. These interviews would then complement the supplemental data found from credible print and online sources (i.e., World Bank, UNICEF, WFP, etc.) and from the delegate reports given at past GCNF Forums.

Using a qualitative approach, in which the "why" and the "how" are emphasized, a questionnaire (see Appendix E) was devised to organize the research topics and questions. This mechanism was revised various times so that it could capture the information provided in each of the five country interviews in an accurate, consistent manner.

Selection of Country Officials

GCNF has hosted 11 Forums and had the advantage of employing current, relevant contacts for this study. Specifically, GCNF aimed to use those officials most closely related to the country's school feeding programs, whether from the Ministry of Education or the local Governor's Office.

Once country officials were formally invited to participate in the study and confirmations were received, they were sent a copy of the questionnaire to help them prepare for the telephone interviews. The questionnaire was therefore a tool that simultaneously served as a study guide and a script for the interviewees and the interviewers alike.

The challenges of communicating with high-ranking officials from distinct geographical areas should not go unnoted. Not only did dealing with drastic time zone differences prove difficult (10 hours mark the difference in time between the Malaysia and Washington, DC offices, for example), but language barriers were often present, sometimes leading to miscommunication or misinterpretation that would later require further clarification. Also, the interviews were launched early September and coincided with Ramadan, the Islamic holy month of fasting. Three out of the five target countries are predominantly Muslim. Being sensitive to religious and cultural differences, as well as to varied office protocol, was imperative to moving this project forward.

Collection, Interpretation and Report on Findings

All countries were interviewed via telephone. With the exception of one interview, two professional assistance members were present on the call to ensure accuracy of data collection. These country interviews on average lasted 1.5 hours. In many cases, more than one official relevant to the country's school feeding program participated in the interview. For example, two Tetra Pak Egypt Ltd. employees facilitated the interview with Egypt's main Ministry of Education contact by translating questions from English into Arabic. All country interviewees were forthcoming with information, and in most

cases additional information, including tender agreements and school feeding photographs, were forwarded for inclusion as appendixes at the end of this report.

Following the conclusion of all country interviews, GCNF was able to interpret and compare findings. Although qualitative research typically leads to a greater variety in responses, it is more difficult to display such open-ended information in mathematical terms. Certain trends that easily depict hard data do not transfer as easily to qualitative research. However, there were some denominators common to all interviews, which will be represented in an easy-to-read chart later on in this report.

In addition to reporting the direct findings from the country interviews, both background and supplemental information have been included to better situate these countries and their school feeding programs. This data is presented in a coherent, three-part manner for each of the country findings that are presented in the section that immediately follows.

This study required ongoing fact-checking to ensure the validity of data. While all interviewees were school feeding professionals of considerable authority and credibility, it was GCNF's responsibility to corroborate the information provided in interviews with the supplemental information obtained from additional sources. In instances when certain discrepancies were found, interviewees were contacted via email to correct and reconcile the data for inclusion in this study.

Once the study's first draft was finalized, it was sent to the remainder of GCNF staff for a preliminary, internal review. By circulating the report to colleagues who were aware of the project's objectives but not directly involved, new sets of eyes were able to provide objective feedback that is sometimes difficult to do otherwise.

II. FINDINGS

A. Egypt

1. Country Snapshot

Source: CIA – The World Factbook

Total population	83,082,869 (July 2009 estimate)[4]
Ethnic groups	Egyptian 99.6, other 0.4% (2006 census)[5]
Total student enrollment (2004/2005)	15,511,818[6]
Male student enrollment	8,042,701
Female student enrollment	7,469,117
Literacy rate (total population)	71.4%[7]
Human Development Index (HDI)	116 (medium human development)[8]
World Development Indicator (WDI)	Lower middle income (2009)[9]
Global Hunger Index (GHI) value	<5 (2008)[10]

[4] CIA – The World Factbook. *Egypt.* https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html.
[5] CIA – The World Factbook. *Egypt.* https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html.
[6] Egypt State Information Service. *Education in Egypt*. Retrieved November 23, 2009, from http://www.sis.gov.eg/En/Story.aspx?sid=1693.
[7] CIA – The World Factbook. *Egypt.* https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html.
[8] United Nations Development Programme. *Human Development Report 2007 – 2008.*
[9] World Bank. *WDI 2009.*
[10] International Food Policy Research Institute (IFPRI). *Global Hunger Index: The Challenge of Hunger 2008.* The Global Hunger Index ranks countries on the basis of a figure arrived at by combining three

2. Interview

Background

Roughly 30 percent of the total student population, or 5 million students, participate in Egypt's school feeding program. Egypt's Ministry of Education uses a "poverty map" that determines which schools will receive school feeding. The country's poorest kindergarten and primary schools are targeted, as are some secondary schools based upon demonstrated high academic achievement.

Transition to National Program

Egypt's national school feeding program was established in 1951. Prior to this, there was a school milk program (SMP) and school meals were available for purchase by students. Government subsidies in the 1950s became available to support the school feeding program.

School feeding in Egypt began as a nationally-operated program before receiving external aid from WFP. From 2005 to 2006, WFP initiated a pilot milk program in Egypt and has remained involved in its current operation (2007-2011). In addition to recent WFP involvement, Catholic Relief Services (CRS) had a strong presence in the 1970s and provided technical assistance including teacher training program monitoring and evaluation. UNESCO and the Food and Agriculture Organization (FAO) sponsor some programs, especially in the poorest areas of Upper Egypt.[11]

Tetra Pak Egypt Ltd, established in 1981, also continues to have a strong presence in the country and facilitates a flavored milk program in all of the country's 27 governorates, the country's administrative divisions that are similar to states or provinces (see Appendix H for a detailed account of this tender document).

Institutional Framework

The Ministry of Education administers Egypt's feeding program and has a department specifically dedicated to school nutrition. Out of a total 70 Ministry employees, there are roughly 15 school nutrition employees at the Cairo headquarters, with additional employees at the government's other Egyptian satellite offices. The Ministry of Education works closely with the Ministry of Health, Ministry of Agriculture, Ministry of Industry, and the Social Solidarity Directorate (the equivalent of a social insurance company) to fully implement its program.

The Ministry of Education is responsible for the program's monitoring and evaluation, an often bureaucratic process that requires substantial technical paperwork. Although the

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indicators: level of child malnutrition, rates of child mortality, and the proportion of people who are calorie deficient. The ranking is updated annually by IFPRI.

[11] Upper Egypt is located in the south of the country; geographical areas in Egypt are designated in relation to the flow of the Nile River.

Ministry sets the main program policies at the federal level, the governorates actually administer their school feeding programs. These governorates oversee the program's main administrative functions with the help of local school feeding committees (see Appendix F for the program's detailed organizational flow chart).

Policy Framework

A national policy requires school feeding in Egypt. This policy is currently being revised, with the prime minister requesting that Egypt's program be a national project with private involvement. Article 18 of Egypt's 1971 Constitution provides for the basic primary education for all, and education was the country's major national project in 1991.[12]

To execute school feeding in Egypt, there is an exact procedure for everything, including the tender process, the number of school feeding days, food procurement, and nutritional requirements. The first national policy was written in 1951, with a primary emphasis on the SMP. There is a wide understanding of the importance of school feeding to physical and cognitive health. This is evident by its ties to the National Education Reform Program, which is part of the Presidential Decree. Although these policies are public, they are not well-known to the common Egyptian citizen.

Program Design

In addition to the SMP, biscuits and "sweet pies" are distributed to students. Biscuits and sweet pies are considered snacks and are served instead of a complete lunch. Milk and biscuits are typically targeted toward younger children, especially kindergartners. The more substantial sweet pies are targeted toward the older students.

The foods most commonly used in school feeding throughout Egypt are milk, sweet pies (consisting of sesame seeds, dates or raisins, and wheat), and biscuits (wheat, ghee, egg, sugar and salt). Milk for the SMP comes from Egyptian dairy processors and forms an informal milk market.

Procurement

While the food products used in Egyptian school meals come from local farms, there is no written policy that mandates the local procurement of food, and there is no objective to directly benefit local farmers. Because there is no official policy that requires the local procurement of food, it is impossible to estimate what percentage of school feeding items is produced within 50 kilometers of the school. However, it was reported that 100 percent of school feeding commodities are produced within Egypt and that there are no outside sources for food procurement.

A new sweet pie factory in Abu Sultan was established solely for school feeding purposes, thus directly benefiting the wheat and date farmers. Funded by the Ministry of

[12] Egypt State Information Service. *Education in Egypt.* Retrieved November 23, 2009, from http://www.sis.gov.eg/En/Story.aspx?sid=1693.

Agriculture and Land Reclamation, and located in the Ismailia Governorate, this is just one of 12 factories dedicated to school meal production in Egypt. Government authorities project that the Abu Sultan pie factory will provide 500,000 meals daily to primary school students during the 2009-2010 academic school year (see Appendix G for the press release explaining the opening of this factory).

Community Participation and Ownership

There is minimal community contribution to promote and support school feeding initiatives, although this is a priority. Neither parents nor local stakeholders are involved in the planning or evaluation of the local school feeding programs. There are, however, Parent-Teacher Councils that monitor each school's program, although these are generally regarded as being not very effective.

Funding

The current program budget is L.E.355 million (US$60 million).[13] This figure has changed over time and continues to increase each year, albeit minimally. Funds for school feeding are reflected as a single line item in the national budget. The primary source of funding for Egypt's school feeding program comes from the federal government. WFP receives partial funding from Cypress and Italy to support its mission in Egypt, and supports feeding programs in five of Egypt's 27 total governorates.

In the past, the Ministry's central offices in Cairo directed the flow of funds to equalize disparities between governorates. A recent decentralization has led to each governorate receiving funds according to its specific budget determined by the governorate's total number of enrolled students.

The Ministry of Finance oversees the school feeding budget. Both the Ministry of Finance and Ministry of Education conduct separate audits, which the ministries are required to share with one another. The final audit is ultimately generated by the Ministry of Finance. How much money the government allocates to a specific program, such as school feeding, depends on the ministry's overall budget and the particular feeding modality's expenses (i.e., milk versus a fortified biscuit). The anticipated costs for the school feeding program depend on the number of total students enrolled, particularly the number of poor students.

The central government reports that Egypt's school feeding funds are being correctly managed, although there have been rumors about one governorate's previous mismanagement of funds.

3. Supplemental Information

The five target goals currently guiding Egypt's feeding program are: (1) government commitment and political will; (2) institutional capacity; (3) community commitment and

[13] As of November 2009, 5.45 Egyptian pounds = 1 USD.

resource utilization; (4) design and implementation of school feeding; and (5) monitoring and evaluation of school feeding.[14] Of these, community commitment is the country's most urgent need. By increasing awareness and involvement at the local level, parents will understand the program's importance and be more inclined to send their children to school. A "community communication plan" is seen as a solution to increase program visibility by using media awareness, parent/teacher meetings, and suppliers/business partners support as strategic components of this plan. While cooperation at the micro-level remains a challenge, an increase in school enrollment is tangible proof of the program's success, especially in urban areas where there is a heightened awareness of feeding programs.[15]

WFP's Food-For-Education (FFE) program presently feeds more than 84,000 children in Egypt's poorest and most vulnerable areas.[16] FFE aims to have expanded coverage to 241,000 children by the time WFP's mission ends in 2011. These children receive nutritious, fortified snacks during the school day to increase their intake of nutrients and to improve their academic achievements. Additionally, more than 106,000 family members receive take-home rations (THRs), incentives that encourage families to send their children, especially girls, to school. The distribution of THRs is tied to regular school attendance and rewards those students with attendance rates that are 90 percent or higher.[17]

US$7.5 million was obtained under the Egyptian-Italian Debt-for-Development Swap agreement from 2003-2007. Additional support from the local public-private sector has supported WFP's efforts in Egypt. Through capacity building and technical support, WFP is currently assisting the Egyptian government's food-based social protection theme. WFP is also helping the government with a project to use fortified flour in *baladi* bread, a round local bread made with whole wheat. With increased levels of iron and folic acid, this fortified bread aims to reduce cases of iron-deficiency anemia.

According to Save the Children, which has been operating in Egypt since 1982, roughly 40 percent of the country's rural school children are anemic, while 2.7 million children engage in some form of work.[18] Fifty-four percent of rural Upper Egyptian girls ages 13 to 15 are not enrolled in school. In contrast, only 11 percent of boys in the same age group do not attend school.[19] School feeding, particularly THRs, is often viewed by country officials as a viable means to narrow this education gap between genders.

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[14] GCNF country delegate report. (May 2009) *Egypt.* Presented at the Global Child Nutrition Forum, Stellenbosch, South Africa.
[15] GCNF country delegate report. (May 2009) *Egypt.* Presented at the Global Child Nutrition Forum, Stellenbosch, South Africa.
[16] Lambers, W. *Los Angeles Chronicle.* (April 26, 2009) "Ending Child Hunger: School Feeding in Egypt." http://www.losangeleschronicle.com/articles/view/100164.
[17] Lambers, W. *Los Angeles Chronicle.* (April 26, 2009) "Ending Child Hunger: School Feeding in Egypt." http://www.losangeleschronicle.com/articles/view/100164.
[18] Save the Children. *Egypt.* Retrieved October 26, 2009, from http://www.savethechildren.org/countries/middle-east-eurasia/egypt.html.
[19] Save the Children. *Egypt.* Retrieved October 26, 2009, from http://www.savethechildren.org/countries/middle-east-eurasia/egypt.html.

Save the Children's Infant Health and Nutrition and Communication for Healthy Living programs include infant nutrition classes in 25 villages in the Upper Egyptian governorates of Qena, Minya and Fayoum. These classes give healthy lifestyle messages and nutrition information for expecting and recent mothers. Using the Positive Deviance method (http://www.positivedeviance.org/), mothers are taught effective local practices that improve children's nutrition and support their growth and ability to learn. Additionally, Save the Children's School Health and Nutrition program works alongside the Basic Education Program to simultaneously improve the health status and educational performance of students. Improved sanitation, annual check-ups and access to health insurance services are all part of this initiative.[20]

While undernutrition remains a threat to the country's overall well being, overweight and obesity are increasing phenomena that contributes to the two-sided challenge of malnutrition. A shift in modern dietary habits has resulted in an increased consumption of cheaper food with a lesser nutritional value, which will potentially spike long-term healthcare costs.[21] Subsidies on sugar and cooking oil can "make a balanced diet less attractive because unhealthier ones become more affordable" (Alston, Summer, and Vosti, 2006).[22] Such subsidies are most likely responsible for the obesity rates in Egypt, which are now higher than those in the United States where obesity is at 32 percent.[23]

Egypt is testing an electronic "smart" card for its ration system that will eventually include cash transfers and health insurance. However, it may be more difficult to implement this system in rural areas, where compromised infrastructure and limited education may reduce usage rates.

[20] Save the Children. *Egypt.* Retrieved October 26, 2009, from http://www.savethechildren.org/countries/middle-east-eurasia/egypt.html
[21] World Bank. (2009) *Improving Food Security in Arab Countries.*
[22] World Bank. (2009) *Improving Food Security in Arab Countries.*
[23] World Bank. (2009) *Improving Food Security in Arab Countries.*

B. Jordan

1. Country Snapshot

Source: CIA – The World Factbook

Total population	6,342,948 (July 2009 estimate)[24]
Ethnic groups	Arab 98%, Circassian 1%, Armenian 1%[25]
Literacy rate (total population)	89.9%[26]
Total student enrollment (2007/2008)	1,598,211[27]
Male student enrollment	806,990
Female student enrollment	791,221
Human Development Index (HDI)	90 (medium human development)[28]
World Development Indicator (WDI)	Lower middle income (2009)[29]
Global Hunger Index (GHI)	<5 (2008)[30]

[24] CIA – The World Factbook. *Jordan.* https://www.cia.gov/library/publications/the-world-factbook/geos/jo.htm.
[25] CIA – The World Factbook. *Jordan.* https://www.cia.gov/library/publications/the-world-factbook/geos/jo.htm.
[26] CIA – The World Factbook. *Jordan.* https://www.cia.gov/library/publications/the-world-factbook/geos/jo.htm.
[27] Jordan Ministry of Education.
[28] United Nations Development Programme. *Human Development Report 2007 – 2008.*
[29] World Bank. *WDI 2009.*
[30] IFPRI. *Global Hunger Index: The Challenge of Hunger 2008.*

2. Interview

Background

In 2002, Jordan's Ministry of Planning developed a study to identify the country's poverty "pockets" that are used to target school feeding recipients. As a result of this study, approximately 50 percent of enrolled school children currently benefit from school feeding. Specifically, an estimated 530,000 students ages seven through 12 receive meals in Jordan all 130 school days.

Transition to National Program

Since WFP phased out in 1998, after 34 years of service, Jordan has operated a school feeding program at the national level. National studies reported frequent cases of student malnutrition that led to the government's decision to establish a country-operated program. Allocating funding sources was a major step in transitioning away from external aid. Neither technical training nor special funding was received in making this transition.

Ten years prior to the national program's launch, the Ministry of Education and the Jordanian WFP worked together to pilot the feeding program. In addition to WFP's steady presence in Jordan, the Jordanian Alliance Against Hunger (JAAH) has been active and works closely with the United States Alliance to End Hunger. In 2007, the JAAH and the Global FoodBanking Network (GFN) signed a treaty in the country capital of Amman that helped establish food banks throughout Jordan. A March 24, 2009 ceremony held in Amman launched the country's first food bank, which was attended by Her Royal Highness Princess Basma Bint Talal, chairperson of JAAH.[31] JAAH is optimistic that their partnership with GFN will help feed more students. From April to June 2008, JAAH provided food to 800 children in three schools previously nominated by the Ministry of Education in the Eastern part of Amman. JAAH has since renewed support to a different set of schools, which was expected to have begun following Ramadan 2009.

In addition to WFP and JAAH, Jordan receives support from the Greater Amman Municipality which aims to provide high-quality, community services in the country's capital and to target certain schools that participate in school feeding.

Institutional Framework

The Ministry of Education's Managing Director administers Jordan's school feeding program. Jordan's school feeding program is housed within the Ministry's Department of General Education and Student Affairs and is known as "School Feeding Project." The Ministry of Education receives help from the School Feeding Project Committee that is composed of the Ministry of Health, Ministry of Planning, the Jordanian Army and the Ministry of Interior Affairs.

[31] Global FoodBanking Network. (2009) *Food.* "Jordan Launches Food Bank."

The Ministry of Education manages the school feeding program at the national level. Although there is no additional administration at the local level, state governments help monitor the program locally.

Both the Ministry of Education and the Jordanian Army are responsible for monitoring different aspects of the program: the Ministry monitors the financial aspects while the Army monitors program materials, seeing that equal quantities of food are distributed to each school.

Additional technical assistance is to be provided in 2010, with the implementation of a revised monitoring and evaluation process contingent upon sponsored funding (see Appendix I to learn more about this initiative). As well as developing a monitoring and evaluation system that will accurately measure the program's success, officials specifically want to understand the program's impact on student health by comparing baseline survey indicators with two-year follow-up results. This benchmark is deemed crucial in evaluating the program's overall success.

Policy Framework

Improving the overall nutritional status of students in Jordan is a major national policy. Reducing the amount of student health problems and increasing the effectiveness of student learning are two specific goals related to this policy.

Political will has been key to establishing a sustainable feeding program in Jordan. King Abdulla II and Her Royal Highness Princess Basma Bint Talal are conscious of food insecurity issues in Jordan and are strong advocates of school feeding. A contract at the national level between the Ministry of Education and the Jordanian Army mandates that the country's armed forces transport and deliver food for school meals since schools are not equipped with onsite kitchen cooking facilities. The Jordanian Army plays a crucial role in administering school feeding in Jordan by monitoring and delivering food items in a timely manner. In addition to actively supporting school feeding, the Army provides other vital community services, such as constructing schools.

A child receives a school meal in Jordan.[32]

Program Design

A school meal in Jordan is delivered to students in the morning and consists of a 50g fortified biscuit and one piece of fruit. The fruit varies and alternates between apples, oranges and bananas. Milk previously supplemented school meals, but has since been omitted due to transportation problems.

It is likely that a hot meal will be substituted for this high-quality snack. While the funding is now available, the only real hurdle to incorporating a hot meal is the time required for its design and implementation.

There are currently no daily nutritional requirements that must be met when planning school meals.

Local Procurement

The local procurement of food items, namely the fresh fruit that complements the fortified biscuits, is not mandatory. As a result, local farmers are not directly linked to school feeding. However, oranges and apples are often sourced from within Jordan.

The Jordanian Army manufactures the fortified biscuits, and these biscuit factories have helped stimulate the country's economy.

[32] Photo credit: Jordan Ministry of Education.

Fortified school biscuits are manufactured by the Jordanian Army.[33]

Community Participation and Ownership

Local community involvement is not particularly strong for school feeding in Jordan. In fact, most parents are barely aware that school feeding exists. In the past, THRs were given to students to take home to their families, which increased program awareness. However, this modality is no longer being used. The Ministry of Education is presently working to increase program awareness.

While not specific to school feeding, there are community-sponsored feeding activities during Ramadan that give meals to the country's poor and target Iraqi refugees in particular.

Funding

The current program budget for school feeding in Jordan is JD20 million (US$28.2 million).[34] This number has increased since the program began in 1999. The recent food crisis, as well as rising transportation costs and normal fluctuations in total school enrollment, has impacted the budget.

The program is managed at the federal level, with the Ministry of Planning allocating funds that are dispersed by the Ministry of Education.

To date, there are no documented allegations that report the mishandling of school feeding funds.

Update: Jordan continues to make progress in expanding its commitment to alleviate child hunger, both domestically and internationally. In October 2009, three members from JAAH spent one week in Chicago visiting food banks. In December 2009, Mr. Maurice Weaver, Vice President, Communication of GFN, is scheduled to visit Jordan's school feeding sites. This exchange stresses the sound relationship that exists between both the U.S. and Jordanian Alliances.

[33] Photo credit: Jordan Ministry of Education.
[34] As of November 2009, 0.78 Jordanian dinar = 1 USD.

3. Supplemental Information

Jordan is among the world's five most water-deficit countries and is a perpetual food and water-deficit country with a per capita income of US$2,345.[35] The country's financial well-being is further challenged by the roughly 500,000 displaced Iraqi refugees residing in Jordan.

While school feeding often prevents hunger-related dips in school enrollment, in 2008 nearly four percent of families in Jordan's so-called poverty pockets were forced to withdraw their children from school due to increased food prices.[36] Identified as an essential part of the country's overall social safety net, WFP is currently working with the Ministry of Education to improve the school feeding program's monitoring, evaluation, food handling, storage, and advocacy.[37] Public information campaigns will hopefully generate overall program awareness. A 2008 WFP food security survey showed that only 30 percent of families with children attending school reported receipt of school meals, even though all children were receiving such meals.

JAAH has proposed to provide meals to 45,000 school children for three years with direct support from GFN. To help guide feeding efforts, JAAH and WFP are developing a database with food accessibility information on the country's poorest zones.[38] GFN is also working to link a large Jordanian dairy to hunger reduction efforts, possibly restoring the discontinued SMP. Similar to school feeding programs, food banking is a strategy to relieve food insecurity issues.

Since 1985, Save the Children has facilitated social and economic progress by improving access to health care services and education.[39] According to Save the Children, Jordan is experiencing a "youth bulge:" 60 percent of Jordan's population is age 24 or younger. Because 70 percent of youth one year out of school are unemployed, Save the Children pays particular attention to early childhood development, primary school education and non-formal youth education. Such dedication to the formative years is a means to guarantee more stable economic success in the future. School feeding is a tangible means that can be used to improve the cognitive and physical health of students during these formative years.

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[35] WFP. *Countries: Jordan.* Retrieved July 13, 20009, from http://www.wfp.org/countries/jordan.
[36] WFP. (2008). *Food Security Survey in the Poverty Pockets in Jordan.*
[37] WFP. (2009). *Enhancing School Feeding Program of the Government of Jordan.*
[38] The Alliance to End Hunger. *Building the Will to End Hunger in the Middle East: Jordanian National Alliance for Combating Hunger and Enhancing Food Security.* Retrieved September 29, 2009, from http://www.alliancetoendhunger.org/creating-global-connections/national-partners/jordan.html.
[39] Save the Children. *Jordan*. Retrieved October 27, 2009, from http://www.savethechildren.org/countries/middle-east-eurasia/jordan.html.

C. Malaysia

1. Country Snapshot

Source: CIA – The World Factbook

Total population	25,715,819 (July 2009 estimate)[40]
Ethnic groups	Malay 50.4%, Chinese 23.7%, indigenous 11%, Indian 7.1%, others 7.8% (2004 est.)[41]
Total student enrollment (2009)	5,416,924[42]
Male student enrollment	2,750,152
Female student enrollment	2,666,772
Literacy rate (total population)	88.7%[43]
Human Development Index (HDI)	63 (high human development)[44]
World Development Indicator (WDI)	Upper middle income (2009)[45]
Global Hunger Index (GHI)	6.5 (2008)[46]

[40] CIA – The World Factbook. *Malaysia*. https://www.cia.gov/library/publications/the-world-factbook/geos/my.html.
[41] CIA – The World Factbook. *Malaysia*. https://www.cia.gov/library/publications/the-world-factbook/geos/my.html.
[42] Koon, P.B. University of Kebangsaan Malaysia. November 4, 2009 email.
[43] CIA – The World Factbook. *Malaysia*. https://www.cia.gov/library/publications/the-world-factbook/geos/my.html.
[44] United Nations Development Programme. *Human Development Report 2007 – 2008.*
[45] World Bank. *WDI 2009.*
[46] IFPRI. *Global Hunger Index: The Challenge of Hunger 2008.*

2. Interview

Background

There are roughly 10,000 schools in Malaysia, all of which participate in school feeding to some degree. Malaysia has four types of school feeding programs: (1) food supplementary program; (2) "hostel" (boarding school) program; (3) pre-school program; and (4) school milk program (SMP), which was recently removed from Malaysia's school feeding scheme, but is expected to be restored in the future.

In 2009, 771,000 students participated in the food supplementary program; 154,161 pre-school students in the pre-school program; 371,342 boarders in the boarding school program; and an estimated 621,000 students would have participated in the SMP had it not been withdrawn in 2007.

Transition to National Program

School feeding in Malaysia began as a national program in the 1980s, and was funded at the federal level with no external assistance from outside organizations such as WFP. The Malaysian government wanted to encourage healthy eating habits among children, especially those residing in rural areas where there is often not even enough food for even breakfast. The aim was to begin each school day with a meal so students would not start the school day hungry. There is a strong emphasis on breakfast as the main feeding modality.

Institutional Framework

The Ministry of Education administers school feeding in Malaysia with assistance from the Ministry of Health for menu planning. Additionally, the Ministry of Education works with other ministries and departments to review the program so it can be adequately evaluated. The Education Planning and Research Department, which is housed within the Ministry of Education, conducts these evaluations on a regular basis. There is also collaboration with local universities to evaluate Malaysia's school feeding program.

It should be noted that all program funding comes from the federal level with no support from the local levels.

Policy Framework

The Ministry of Education stresses the importance of using school feeding to reduce the gap between rural and urban accessibility to education. There has been a written policy in place since the program began in the 1980s, which is based on a Cabinet decision. The Ministry of Education implements its school feeding program based on such Cabinet decisions.

Malaysia's Education Act of 1971 mandates compulsory education for all children ages six and above. Primary schools in Malaysia range from age six to 12, and secondary

schools range from ages 12 to 17. The country's various school feeding models take this mandatory education and its respective age groups into consideration.

School feeding in Malaysia is indirectly related to the national building program, which is part of the Ninth Malaysia Plan (9MP) that has addressed certain socio-economic inequalities in the country from 2006 to 2010. The Malaysian government strives to use school feeding as a tool to support promising students who can make future community contributions.

Program Design

There are certain nutritional requirements that must be met and there is an emphasis on reaching a minimum amount of calories. Which students participate in each feeding program depends on the criteria they are able to meet. For instance, students participating in the food supplementary program must have a family income below the RM400[47] national poverty line level. This supplementary program consists of breakfast and costs RM1.80 per child.

However, all pre-school students are eligible for the pre-school feeding program, which consists of breakfast and costs RM1.50 per student. The cost of meal packages for boarding students, which includes breakfast, lunch and dinner, varies between RM12-RM14, depending on the food cost.

Since 2007, the SMP has been temporarily terminated due to cases of food poisoning. In years past, companies such as Dutch Lady and Nestle distributed 45ml milk cartons as breakfast to eligible students. The price of milk per student depended on the bidding process.

Procurement

There are no specific objectives that link local agriculture to school feeding. Although local farms are typically not located within close proximity to schools, there are some local markets that receive goods from one source within a district. It is typically easier to procure local food from the country's highlands, which has a temperate climate and strong agricultural production. Malaysia's open markets sell a variety of food that schools purchase on a daily basis. Distributors adhere to the program's budget and source items accordingly.

More than 90 percent of Malaysia's school feeding items is produced within the country. The items most frequently used in school meals include: fried rice; noodles; fruit; beverages (coffee and tea); and animal-sourced protein including meat, poultry and fish.

There has been a recent Cabinet decision to include local fish in the menus for students residing at boarding schools. However, this will not go into effect until 2011, when the

[47] As of November 2009, 3.37 Malaysian ringgit = 1 USD.

Ministry of Education will be able to obtain a new tender. The program will first be piloted in certain targeted schools before being nationally implemented.

Children in Malaysia eat a school meal.[48]

Community Participation and Ownership

Although there is no direct community support for school feeding, there are Parent Teacher Associations (PTAs) where local community members can voice concerns about school feeding. In instances where schools have limited onsite cooking facilities, as is sometimes the case in rural schools, parental contribution to the program is more common.

Funding

The Ministry of Education's financial department is responsible for the overall financial administration of Malaysia's school feeding program. The federal government disburses allocations to each of the 16 states, which all participate in school feeding. Each state is responsible for forwarding funds to the schools where children receive meals. Each school has its own bank account where feeding funds are wired. Students and their families never pay for school meals. Instead, schools pay canteen operators using federal stipends to cover the costs of student meals.

The 2009 budget for each of Malaysia's active feeding program is as follows: RM270.4 million (US$80.39 million) for the food supplement program; RM53.1 million (US$15.78 million) for the pre-school program; and RM1.4 billion (US$416.24 million) for the boarding school program. The allocation for the discontinued SMP would have been RM27.4 million (US$8.14 million).

To project program costs, school enrollment statistics are taken each October, a month deemed stable for making realistic projections. Adjustments are made in April of the following year. As school feeding participation increases, so does the budget. This increase in the number of school feeding beneficiaries is most likely due to an overall increase in student enrollment.

[48] Photo credit: University Kebangsaan Malaysia, Department of Nutrition and Dietetics.

Although funding comes from the Ministry's general budget, a separate line item (coded as "4200") is reserved for school feeding. Federal sales taxes, in addition to other country development programs, supplement the government's school feeding program budget. The government gives additional incentives for all development programs in Malaysia, including school feeding.

An audit process determines if feeding funds have been mismanaged and is conducted by the Ministry of Education's School Audit Division. These audits typically take place once a year. In the past, funds for school feeding have been "lost" when transferring from the federal to the state level. In other instances, the money is simply misused. These discrepancies are reflected in the audits. Corrective and disciplinary action is taken when Ministry officials visit the area of the disputed financial mishandling.

3. Supplemental Information

Malaysia's School Supplementary Feeding Program (SSFP), referred to as the "food supplementary program" in the interview, was originally executed by the British Military Army after World War II as an emergency relief fund (Ministry of Education, 1986).[49] Two decades later, in 1964, the SSFP's main advocates were voluntary agencies like Malaya Children Welfare Association and legislative authorities like the Federal Land Development Authority. CRS also supported the program during this time. In 1976, in tandem with the national Applied Food and Nutrition Program pilot project, the Malaysian government formally launched the SSFP under the Prime Minister's Department. Initially covering 12 districts in six states, the program expanded to all districts in all 16 states by 1979. At first the program was limited to schools with a student enrollment of 200 or less, but by 1989 the program had reached all schools regardless of student enrollment.[50]

As of 2000, the financial and account management of Peninsular Malaysia's SSFP included the tracking of cash books and bank accounts, voucher payments, bank statements, and the program's monthly and yearly income and expenditure statements. Each school's principal prepares a budget estimate that helps the State Education Department claim expenses the following year. The principal also updates the cash book at the end of every month for balance approval.[51] Before budgets are allocated, schools are responsible for submitting the names of eligible students to the District Education Office. These names are then sent to the State Education Office. The amount allocated for each child's school meal is then determined by the Ministry of Education and depends on the availability of funds. The federal government releases funds to schools in either one warrant (150 school days) or two warrants (the first 50 school days, followed by the remaining 100 school days). Disbursements in one lump sum are usually preferred since

[49] Mohd Shahril Md. Arop, AminahAbdullah, Suriah Abdul Rahman, Mohd Fauzi Mohd Jani. (2000) *Evaluation of the School Supplementary Feeding Program in Peninsular Malaysia.*
[50] Mohd Shahril Md. Arop, AminahAbdullah, Suriah Abdul Rahman, Mohd Fauzi Mohd Jani. (2000) *Evaluation of the School Supplementary Feeding Program in Peninsular Malaysia.*
[51] Mohd Shahril Md. Arop, AminahAbdullah, Suriah Abdul Rahman, Mohd Fauzi Mohd Jani. (2000) *Evaluation of the School Supplementary Feeding Program in Peninsular Malaysia.*

this avoids possible delays in settling claims and the cash flow of food operators. When disbursements are received up front, schools are able to make regular payments throughout the year.

Family size and parental income are key factors in determining which students are eligible for school feeding. Other criteria the Ministry of Education uses in targeting school feeding recipients consider the number of siblings a student has, the student's overall health, and the distance they must travel from home to school. Additionally, orphans and students with either extremely high or low academic records are targeted.[52] The actual school committees use Ministry guidelines to select which students will participate in school feeding.

In 2004, an estimated 38 percent of primary school children received a school feeding plan, or *Rancangan Makanan Tambahan* (RMT), costing the Malaysian government roughly RM124 million.[53] Literally translated as "additional food plan,"[54] the RMT program is targeted only to primary school children from poor families. The RMT program is not meant to replace food served in the students' homes, but intends to provide additional nutrients to supplement diets. RMT is managed by the Ministry of Education and provides schools with 20 standard menus, from which the school canteen management selects five for each of the five school days in a week. Using foods common to the Malaysian diet, menus are rotated to prevent monotony and can be modified to adapt to local tastes.

One main challenge common to school feeding in Malaysia is a school's ability to assess which students are qualified to participate in the RMT program. Unqualified students either bring food from home or purchase food sold in the school canteens. However, following the December 26, 2004 Indian Ocean tsunami that killed over 300,000 people, the Ministry of Education temporarily provided RMT to all school children in devastated areas as a preventive measure to avoid an increase in malnutrition.

In years past the now inactive SMP enhanced student nutrition by boosting calcium and mineral intake. Additionally, the program cultivated milk drinking habits that stimulated local milk industries. When it was implemented, Malaysia's SMP had two components: (1) the distribution of free milk products to poor children and (2) the distribution of subsidized milk to all other children.[55] In 2004, the SMP cost the Ministry of Education approximately RM16 million (US$4.75 million).

The boarding school meal plans are coordinated at the state level by the State Education Department. Each school's canteen operator selects a one or two-week cycle menu. At

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[52] Mohd Shahril Md. Arop, AminahAbdullah, Suriah Abdul Rahman, Mohd Fauzi Mohd Jani. (2000) *Evaluation of the School Supplementary Feeding Program in Peninsular Malaysia.*

[53] Koon, P.B. (July 2005) *School Nutrition Programs: Malaysia Report.* Presented at the Global Child Nutrition Forum, Baltimore, MD, USA.

[54] This is the same as the "food supplementary program" and the "School Supplementary Feeding Program (SSFP)" mentioned in the interview and in the supplementary information directly above.

[55] Koon, P.B. (July 2005) *School Nutrition Programs: Malaysia Report.* Presented at the Global Child Nutrition Forum, Baltimore, MD, USA.

these boarding schools, children receive three snacks in addition to the three main meals of the day.

Most private schools in Malaysia have specially catered meal plans.[56] Students are sometimes allowed to choose their own meals, which often leads to less nutritious selections on behalf of the student. Private schools typically offer meals that are more varied and "westernized" than those options available in government schools.[57] In a sample menu provided for private school lunches, options like chicken nuggets, mashed potatoes, French fries, and cream of mushroom soup were available.

[56] Private school feeding programs were not specifically mentioned during GCNF's interview.
[57] Koon, P.B. (July 2005) *School Nutrition Programs: Malaysia Report.* Presented at the Global Child Nutrition Forum, Baltimore, MD, USA.

D. Nigeria

1. Country Snapshot

Source: CIA – The World Factbook

Total population	149,229,090 (July 2009 estimate)[58] *Note:* Estimates for this country explicitly take into account the effects of excess mortality due to AIDS; this can result in lower life expectancy, higher infant mortality, higher death rates, lower population growth rates, and changes in the distribution of population by age and sex than would otherwise be expected.
Ethnic groups	Nigeria, Africa's most populous country, is composed of more than 250 ethnic groups; the following are the most populous and politically influential: Hausa and Fulani 29%, Yoruba 21%, Igbo (Ibo) 18%, Ijaw 10%, Kanuri 4%, Ibibio 3.5%, Tiv 2.5%[59]
Total student enrollment (2003)	25,765,969[60]
Male student enrollment	14,430,214
Female student enrollment	11,335,755
Literacy rate (total population)	68%[61]
Human Development Index (HDI)	154 (medium human development)[62]
World Development Indicator (WDI)	Lower middle income (2009)[63]
Global Hunger Index (GHI)	18.4 (2008)[64]

[58] CIA – The World Factbook. *Nigeria.* https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html.
[59] CIA – The World Factbook. *Nigeria.* https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html.
[60] Uhiene, S. Universal Basic Education Commission Nigeria. October 26, 2009 email.
[61] CIA – The World Factbook. *Nigeria.* https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html.
[62] United Nations Development Programme. *Human Development Report 2007 – 2008.*
[63] World Bank. *WDI 2009.*

2. Interview

Background

In 2003, the African Union (AU) adopted school feeding as a strategy to meet the United Nations' Millennium Development Goals (MDGs).[65] All members of the AU were committed to establishing school feeding programs and Nigeria, an oil rich country with a strong military presence, was chosen as one of the countries to participate in this school feeding mission.

Nigeria's school feeding program, herein referred to as the Home Grown School Feeding and Health Programme (HGSFHP), was launched September 26, 2005 by the former President of Nigeria, Chief Olusegun Obasanjo, at a primary school near the capital of Abuja. Roughly 10,000 people attended the launch, which was also broadcast live on national television.[66] Nigeria's HGSFHP is designed to meet the needs of rural, peri-urban, and educationally disadvantaged children. By boosting school enrollment rates, the government hopes to achieve universal primary education, which is Goal 2 of the MDGs.

Since its inception, Nigeria's State Steering Committee has worked hard to target all primary schools in each of the 12 pilot states.

Transition to National Program

There is no documented evidence of external assistance to Nigeria's HGSFHP before its 2005 inauguration. However, some mission schools previously offered a version of school feeding where students could purchase meals prepared by outside vendors. Although it is a national project, only targeted rural schools within the 12 states piloting HGSFHP are participants. Additionally, some urban schools are targeted for school feeding.

Institutional Framework

Nigeria's HGSFHP is administered by the Ministry of Education but is inter-ministerial in its true function. All departments are essential to the program's success, with the Ministry of Agriculture and the Ministry of Water playing active roles. While the Programme Coordinator of the Universal Basic Education Commission (UBEC) administers HGSFHP at the federal level, each of the 12 pilot states separately operate their respective programs. At the state level, supervision of the school feeding programs resides in the Governor's Office.

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[64] IFPRI. *Global Hunger Index: The Challenge of Hunger 2008.*

[65] MDGs respond to the world's main development challenges and consist of eight specific goals to be achieved by 2015. To learn more about the MDGs, visit the United Nations Development Programme website at http://www.un.org/millenniumgoals/.

[66] International Institute for Management Development. (2006) *A School Feeding Program in Nigeria: Tetra Pak's Business and Development Goal.*

New institutional framework is pending approval and will hopefully be passed by the end of the 2009 calendar year. Once approved, HGSFHP would operate in the Presidential Office where it has more potential to function properly. Once the program transitions from the Ministry of Education to the Presidential Office, the Secretariat, and not the Programme Coordinator, would oversee HGSFHP (see Appendix J for a detailed flow chart of Nigeria's current HGSFHP).

This pending transfer to the Presidential Office at the federal level has affected the program's monitoring and evaluation process, which was last completed in 2007 at the federal level. Although the tools are currently in place to conduct such assessments, a monitoring and evaluation team is unable to convene due to the program's transfer of supervision.

Due to country politics, program training and support are stifled even though the budget provides the funds to carry out this training. WFP and UNICEF have both provided technical training in the past, however this training varies from state to state. For example, Enugu State has received UN-sponsored technical training while Osun State has not.

Policy Framework

Nigeria has a written legal basis for its HGSFHP. Section 15 of the Compulsory, Free, Universal Basic Education (UBE) Act of 2004 mandates that specific services be provided to guarantee the universal basic education for all, including: books, instructional materials, classrooms, furniture, and free lunch. Additionally, the administration of HGSFHP is found in the national framework document that was created the same day the program was launched on September 26, 2005. This document specifically discusses how HGSFHP should be monitored.

In addition to reflecting the national priorities, legislation at the state level supports HGSFHP in Nigeria.

Program Design

While there is currently no concrete figure reflecting the number of total students benefiting from HGSFHP throughout all of Nigeria, 130,000 students in Osun State receive school meals. Lunch, which is usually a hot meal, is always the modality used to feed children.

In Osun State, all schools partake in HGSFHP because there is no urban metropolis and all schools are rural by default. In Nigeria, there is a priority to feed primary school students ages six through 11, and then secondary school students ages 12 through 14. In Abuja, there is a mandate to feed children up to age 14, but this policy is not enforced in the other 12 pilot states where HGSFHP operates.

In Osun, lunches are complemented by a beverage consisting of milk, sugar and cocoa. School meals in Osun are served at 11 am, although the other pilot states may serve meals anywhere between 11 am to 1 pm. When meals are provided depends on the age of the targeted students. School meals are designed to be balanced and to meet one-third of the RDA of nutrients. The School-Based Management Committee (SBMC) is comprised of parents and teachers and is supposed to oversee the national guidelines for local food procurement, however this needs more direction.

Procurement

Although there is no national mandate to procure locally produced foods, local market items are frequently used in Nigeria's school lunches. In theory, each school assumes local procurement responsibility.

One hundred percent of food used in Nigeria's HGSFHP is grown within the country due to cost and convenience factors. It is estimated that roughly 80 percent of food used in school lunches is grown within 50 kilometers, or 30 miles, of the school. However, frozen fish such as mackerel is sometimes imported since it is not readily available at the local wet markets. Items most commonly used in school lunches include: grains (millet, rice, sorghum, maize); tubers (cassava, ginger); fruits and vegetables (tomatoes and melon); cocoa; imported frozen fish; and meat from local livestock (goat, sheep, chicken and cattle).

Community Participation and Ownership

Strong community support helps bring HGSFHP's national policies to fruition at the local level. Although families rarely donate cash to supplement their children's school meals, parents often provide food items, such as fresh seasonal fruit, to be incorporated into student meals. In Osun State, parents are usually happy to contribute to their child's HGSFHP and will help build school kitchens and prepare school meals.

Each pilot state's SBMC has a procedure for monitoring and evaluating its own feeding program. However, there are presently no records that document these community monitoring activities.

Funding

Since its launch in 2005, there has been a provision to fund Nigeria's feeding program at the federal level. This funding comes from Nigeria's Consolidated Revenue Fund (CRF), of which two percent of its total budget is disbursed to states for various social programs. Such programs include educating physically and mentally challenged children and addressing educational imbalances among all states. From this two percent, five percent is purely dedicated to school feeding. These federal funds are then dispersed to each of the 12 states piloting HGSFHP.

The budget for HGSFHP continues to steadily increase. In the program's first year, the overall two percent CRF budget was N24.3 billion. In 2006, it was N30.48 billion and in 2007 it was N35 billion (US$230.79 million).[67] When taking HGSFHP's five percent share from this amount, the 2007 program budget was thus US$11.54 million.

At the federal level, HGSFHP is included in the CRF, where it receives five percent of the total budget. However, at the state level, there is a dedicated line item directing that funds specifically be used for "home grown school feeding." The Accountant General within the federal government is responsible for the overall financial administration of Nigeria's HGSFHP. Each state has a "home grown school feeding" bank account that directly receives these federal funds.

An audit must be passed for accountability. The Accountant General completes audits at the federal level and each state is responsible for conducting its own audit. For example, HGSFHP's accountant in Osun keeps books to prepare for the state audits. By submitting their unique HGSFHP budgets, states also play a crucial role in helping the federal government project overall program costs.

While there have not been any formal allegations regarding the program's financial mismanagement, some funds have been "held up" at the federal level. This means that HGSFHP funds are not being dispersed to each of the 12 pilot states. This delayed transfer of funds was referred to as a "gray area," and it was suggested that perhaps officials wanted to use these funds for other purposes. To date, states have only received one installment, in 2006, which led to a disbursement of N88.78 million per state. In 2008, the funds that had accrued for HGSFHP at the federal level were never sent to the states. This is still being evaluated.

Update: In October 2009, the UBEC Programme Coordinator and Osun State's Programme Officer met with the President of Nigeria, Umaru Musa Yar'Adua, in Abuja. Along with members from the National Assembly, the Ministry of Education, and other stakeholders, the meeting's purpose was to shift Nigeria's HGSFHP from a pilot to a national program.[68] HGSFHP representatives met with one Senator, two members of the House of Representatives, and the CEO of the National Primary Health Care Development Agency.

3. Supplemental Information

In 2005, although roughly 25 million children in Nigeria were enrolled in schools, some 7.3 million school-aged children were not, the majority of whom were girls.[69] HGSFHP was launched to supplement UNICEF's education program in Nigeria, which emphasizes female education and the promotion of child-friendly schools.

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[67] From these numbers, take five percent to determine the specific amount allocated to school feeding. As of November 2009, 149 Nigerian naira = 1 USD.
[68] Uhiene, S. Universal Basic Education Commission Nigeria. October 18, 2009 email.
[69] UNICEF. (September 27, 2005). *UNICEF-supported school launches feeding programme in Nigeria.* http://www.unicef.org/media/media_28398.html.

A 2006-2007 survey monitored Nigeria's HGSFHP in participating pilot states and the results were recorded by the National Programme Secretariat in an unpublished report.[70] This study's main objective was to determine if HGSFHP was successful in reducing hunger among Nigerian school children. From each pilot state, 270 urban and rural schools were selected, and the study was supplemented by detailed data gathered from the Ministry of Education and other stakeholders. Together, the National Bureau of Statistics, Ministry of Education, National Programme Office, National Planning Commission, and NEPAD developed the survey questionnaire. This questionnaire was piloted to determine its ability to accurately capture information. An instruction manual was then used to thoroughly train all personnel before the questionnaire was employed in the field.

The survey results highlighted the program's challenges and future goals and would later be used to guide policy decisions. Some of the main challenges the study found were: program "hang-up" at the federal level due to former mismanagement within the Ministry of Education; poor coordination and collaboration between HGSFHP and other related programs at the national and local levels; poor strategy for the integration of sustainable agriculture and nutrition education into the school curriculum; and the need for capacity building.

In Nasarawa State, a pilot school feeding program began in 2005 when the Governor of Nasarawa (also Chairman of the Presidential Committee on Dairy Development) was asked to distribute fortified nutritional supplements to targeted primary school children.[71] Nasarawa State School Feeding Programme aimed to fight hunger and to not only correct but prevent nutrient deficiencies of the targeted primary school children. Tetra Pak's Food for Development Office previously provided technical assistance in Nasarawa and developed Nutri-Sip, a nutritional supplement beverage that was a blend of pre-cooked maize and soy isolates and fortified with 30 nutrients. Using 250ml Tetra Brik Aseptic packages, Nutri-Sip was specifically designed to correct known nutrient deficiencies, namely iron, zinc and vitamin A, as recognized by the World Health Organization (WHO).[72]

Despite Nigeria's strong milk-drinking culture, and the potential to produce dairy products locally, powdered and tinned milk had been imported since a spike in food prices shifted agricultural production away from export cash crops to food crops. Due to the political and economic hurdles of local milk production, Nutri-Sip was imported from South Africa.[73] The South African-produced beverage was a way to jumpstart school feeding before Nigeria's local fragmented milk production could heal and before local Nigerian materials like sorghum and cassava could be used in lieu of dairy products.

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[70] GCNF country delegate report. (May 2009) *Nigeria's Home Grown School Feeding and Health Programme (HGSFHP): Successes, Challenges and Hopes for the Future.* Presented at the Global Child Nutrition Forum, Stellenbosch, South Africa.
[71] Tetra Pak. (2005) *Nasarawa State School Feeding Programme.*
[72] Tetra Pak. (2005) *Nasarawa State School Feeding Programme.*
[73] International Institute for Management Development. (2006) *A School Feeding Program in Nigeria: Tetra Pak's Business and Development Goal.*

Nasarawa State now uses solid foods in its school meals and the Nutri-Sip pilot beverage has since ceased to be developed, although surplus supplies are still distributed at some schools. The Nutri-Sip program, which began one year before HGSFHP was formally launched, was an important step that paved the way for school feeding initiatives in Nigeria.

E. South Africa

1. Country Snapshot

Source: CIA – The World Factbook

Total population	49,052,489 (July 2009 estimate)[74]
Ethnic groups	Black African 79%, white 9.6%, colored 8.9, Indian/Asian 2.5% (2001 census)[75]
Total student enrollment (2009)	12,214,845[76]
Male student enrollment	6,131,374
Female student enrollment	6,083,471
Literacy rate (total population)	86.4%[77]
Human Development Index (HDI)	125 (medium human development)[78]
World Development Indicator (WDI)	Upper middle income (2009)[79]
Global Hunger Index (GHI)	6.9 (2008)[80]

[74] CIA – The World Factbook. *South Africa.* https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html.
[75] CIA – The World Factbook. *South Africa.* https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html.
[76] Department of Education, Republic of South Africa. *2009 School Realities.* http://www.education.gov.za.
[77] CIA – The World Factbook. *South Africa.* https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html.
[78] United Nations Development Programme. *Human Development Report 2007 – 2008.*
[79] World Bank. *WDI 2009.*
[80] IFPRI. *Global Hunger Index: The Challenge of Hunger 2008.*

2. Interview

Background

In 2008, 18,000 primary schools representing approximately 60 percent of South Africa's school system participated in the National School Nutrition Programme (NSNP), formally known as the Primary School Nutrition Programme. With the additional inclusion of 2,000 targeted secondary schools from the country's poorest zones, the total amount of schools participating in school feeding is 20,000. In the 2008-2009 school year, 6.3 million primary school students, plus 796,000 secondary school students, benefited from school feeding.

South Africa's Department of Education employs a quintile system to target poverty distribution within the country. These trends are generated by Statistics South Africa (http://www.statssa.gov.za/) and identify income by percentages. This quintile system, which specifically targets quintiles 1-3, determines which schools within a particular zone will receive school feeding. Preference is almost always given to rural schools. An example of this is the targeting of townships, previously all-black areas in the country that are the poorest areas ranked in the first quintile. According to this quintile system, these areas would receive school feeding due to their high poverty levels.

Since school days begin early at 7 am, meals must be served before 10 am. Meals are typically served hot, although this depends on each school. Sometimes the food provided is a ration of bread served with some sort of spread, such as margarine or jam. Currently, only one out of nine provinces provides THRs. These THRs depend on the amount a supplier can provide for the month (i.e., whether there was a surplus) and is typically given to those students who need school meals the most. Although some schools have milk sponsors, there is no official milk program. Ingredients common to South African school meals include: samp, beans, rice, canned fish, soya, fortified maize meal, fortified bread, and fruits and vegetables.

Items commonly used in South African school meals.[81]

[81] Photo credit: Paul Alberghine.

Transition to National Program

In 1994, along with the democratic election of President Nelson Mandela, momentum for a school feeding initiative in South Africa was initiated. A presidential-led initiative, the NSNP was part of the government's Reconstruction and Development Programme that occurred along with the country's administrative change. A Cabinet decision in 2002 decided that the program should be transferred from the Department of Health to the Department of Education. This transfer of authority occurred in 2004.

Institutional Framework

There is both a national and a provincial monitoring and evaluation process that must be adhered to for a province to receive the Conditional Grant money issued by the National Treasury. There are also external evaluations and studies conducted by NGOs and research consultants that are either independently commissioned or commissioned by the Public Service Commission. These external evaluations take place nearly every year. For example, a 2008 audit was sponsored by UNICEF and commissioned by KPMG, a global network of professional services firms that provides audit, tax and advisory services. In 2006, Stellenbosch University assessed the NSNP targeting criteria to ensure that the needs of the country's poorest people were being met.

The National Treasury sends a team of specialists to provinces to demonstrate how template business models should be used. These teams are specifically trained in business plan management and continually evaluate the program's activities and outcomes. Critical indicators are highlighted during these training sessions to track accurate reporting, including whether or not objectives are being met and if the program is efficient.

In addition to the Department of Education, there is an integrated Security Task Team that helps oversee South Africa's NSNP. This team, which consists of representatives from various Departments (i.e., Department of Health and Department of Agriculture), addresses poverty issues related to food insecure households. Collaboration and coherence among this team is important and they work together to receive funding for special projects, such as the Programme for Food Production. In this project, the Department of Education is responsible for providing meals from local food markets.

The provincial department hires district managers who are responsible for several schools at the local level. The provincial governments monitor schools and focus on capacity building and provide training and development, ultimately reporting back to the national government.

South Africa occasionally receives external assistance for its NSNP, especially from NGOs and the private sector. These entities may target two schools within a province, for example, or sponsor the actual school feeding equipment. Contracted service providers help augment the scope and supply of food within South Africa, as is the case in Western Cape where additional feeding programs have been created.

Procurement
Since the program transferred in 2004, the Department of Education currently follows almost exactly the same procurement process that the Department of Health followed. Previous quotas and contracts have been maintained so as to not disrupt continuity.

Although there is no written policy to promote local farm production, recent cooperation with the Department of Agriculture has led to an increase in school food gardens. Students help cultivate the crops from these gardens that will be used in their school meals. The Department of Agriculture provides funding for this endeavor as well as for agricultural equipment and training. As of March 2007, it was estimated that there were nearly 6,400 school gardens throughout all of South Africa.[82]

Some schools and provinces rely more heavily on local agriculture than others. Most service providers aim to buy food at community markets, and local farmers play an indirect role in South Africa's feeding program when these contracted providers visit markets for their purchases. Considering the expense of importing outside commodities, these providers often default to local markets to stay within their budgets.

Procurement preference is given to local female cooperatives. As a minority group, these women will receive more points during the bidding process.

Policy Framework
South Africa demonstrates that having strong government support of a social initiative like school feeding strongly impacts a program's success. The founding principles of South Africa's NSNP are mentioned in its constitution, which makes a provision for the basic education for all. Chapter 2 of the Bill of Rights (1996), Section 28 (1) c says every child has the right "to basic nutrition, shelter, basic health care services and social services."[83] In Section 29 that immediately follows, it says everyone has the right: "(a) to a basic education, including adult basic education; and (b) to further education, which the state, through reasonable measures, must make progressively available and accessible."[84] It is the government's responsibility to take those measures necessary to achieve this universal basic education, and basic nutrition is seen as a conduit to reach this objective.

Program Design
The three key pillars of South Africa's national school feeding policy are: (a) to have a school feeding program in place, (b) to use school gardens to stimulate local farm production, and (c) to promote healthy lifestyles. These three components help guide related policies, such as the government's aim for meals to meet the RDA within the

[82] Republic of South Africa (RSA) National School Nutrition Programme. (July 2008) *Status of School Feeding Report in South Africa*. Presented at the Global Child Nutrition Forum, Philadelphia, PA, USA.
[83] South African Government Information. *Chapter 2 – Bill of Rights.* http://www.info.gov.za/documents/constitution/1996/96cons2.htm#28.
[84] South African Government Information. *Chapter 2 – Bill of Rights.* http://www.info.gov.za/documents/constitution/1996/96cons2.htm#28.

allocated program budget. The growing importance of school gardens helps the government reach this goal. Nutrition education places a strong importance on environmentally-sound practices while also promoting overall healthy lifestyles.

School menu specifications are in place and approved national guidelines, which are in the process of being published, agree on a certain minimum of these requirements to be met. Each province has a priority to meet these guidelines, such as the mandatory feeding of students in quintiles 1-3. Current policy has increased the number of school feeding days from 156 to 196. Data taken from the Department of Health ensures that 30 percent of the RDA is met each day that school meals are served. These menu specifications play an important role in the procurement process and as a result, service providers are aware of the exact quantity and quality of food they should be giving to schools.

There is ongoing consultation with the Department of Health, which provides frequent recommendations so the Department of Education can act accordingly. A concrete example of this is when Coca-Cola wanted to pilot a new cold beverage in South African schools. The Department of Health did not permit this because the drink offered no nutritional value and could potentially result in health damages to those children who drank it.

Community Participation and Ownership

In addition to School Governing Bodies that are comprised of parents, there is advocacy at the micro-community level. These community forums, known locally as *imbizos*, are used to promote and advance health initiatives, as well as provide some resources to schools. For example, plates and cups will be donated to those schools in need of materials. Also, parents engage in the preparation and cooking of school meals. These food handlers receive a monthly minimum stipend of R500, or around US$66.86.[85]

Funding

The 2009 budget for school feeding in South Africa is R2.324 billion, or US$316.26 million. There has been a substantial increase in the program budget, which started at R832 million (US$113.2 million) in 1994. While there is no formal method to account for school meal costs, program estimates are made and adjusted on an annual basis. The Department of Education submits a proposal to the financial Deputy Director to increase the NSNP budget based on annual inflation. Prior to developing this overall budget, provinces are consulted for input. Such local participation is helpful in anticipating overall national program costs.

The Division of Revenue Act sees that special funds are used to provide children with school meals in each province. Funded by the National Treasury, there is a separate line item clearly dedicated to South Africa's NSNP. The national government directly distributes these funds to the provincial bank accounts. This transferring of funds is an official process that is overseen by the National Treasury, and it must comply with

[85] As of November 2009, 7.46 South African rand = 1 USD.

certain specifications. For example, if there is a discrepancy regarding the use of local funds, the National Treasury will place a hold on the province's funds until an explanation is given and the discrepancy is clarified.

In the past a commission was formed to investigate the mishandling of funds in one or two provinces. The investigation reached the court level, and payment to service providers was stopped until the investigation concluded.

3. Supplemental Information

During a 2004 briefing, then-Director of South Africa's NSNP, Ms. Cynthia Mpati, said that efficiently paying service providers was a great challenge, and that greater cooperation at the school level was needed to overcome this obstacle.[86] Additionally, provinces used different methods to target school feeding recipients. While only primary schools in Kwazulu-Natal Province received school feeding, some secondary schools in Gauteng were targeted. Mr. Duncan Hindle, previous Deputy Director-General of Planning and Monitoring, explained that Gauteng had used its own budget to target these additional secondary schools.

To help supplement overall feeding initiatives in South Africa, the country's first community food bank was launched March 2, 2009, in Cape Town. In addition to FoodBank Cape Town and the subsequent rural FoodBanks that opened throughout the country, FoodBank South Africa was formed to nationally manage the country's food bank operations and to manage government support. FoodBank South Africa is part of the Global FoodBanking Network (GFN), a non-profit organization founded in 2006 that supports food banks worldwide in other countries including Argentina, Colombia, India, and Jordan. The establishment of FoodBank South Africa, in tandem with the expansion of the country's NSNP, demonstrates a clear national priority to reach the 2015 MDGs by simultaneously eliminating hunger and increasing student participation.

[86] Parliamentary Monitoring Group. (December 9, 2004) *National School Nutrition Programme: Briefing.* http://www.pmg.org.za.

F. Country Comparison

Based on the individual country findings presented in the previous section of this study, the chart below compares different key areas that measure the strengths of each of the school feeding programs GCNF studied.

PROGRAM COMPONENTS	Egypt	Jordan	Nigeria	South Africa	Malaysia
Budget as separate line item	X[87]		X	X	X
Began as national program	X		X	X	X
Political will		X	X	X	
Written national feeding policy	X	X	X	X	X
Monitoring and evaluation	X	X	X	X	X
Nutritional requirements	X		X	X	X
Mandatory local procurement					
Community involvement			X	X	

This comparative information indicates that:

1. Each country has a national school feeding policy in place.
2. Each country monitors and evaluates the program in some way, either at the federal and/or state level.
3. With the exception of Jordan, although each country uses home grown school feeding (HGSF) as a major food source, there is no federal mandate that requires the local procurement of food.

The comparative data also shows a greater variance in program budget, political will, community involvement, and national nutritional requirements.

[87] An "X" denotes that this component is active and strong in the country's school feeding program.

III. CONCLUSIONS

Information provided in the interviews, coupled with pertinent background literature and statistics, showed certain underlying factors present in each country's school feeding program. Regardless of country size or location, or the program's overall budget, successful feeding programs are established by focusing on several key, interrelated areas that are discussed below in further detail.

National Program

With the exception of Jordan, which received WFP support from 1964 to 1998 before transitioning to a nationally-owned and operated program, each country interviewed launched its school feeding program at the national level. Although external aid from WFP would sometimes later come into play, such as in the case of the Cyprian- and Italian-funded WFP mission in Egypt, each country would have already formulated its own strategies to establish a program suitable to its specific needs.

A national program should not be confused with a universal program. As of 2009, none of the five countries included in this study provide meals for all students. Instead, only the poorest students from primary schools are targeted. Secondary school students are sometimes targeted under certain circumstances.

Political Will

Political will is a nebulous term that is difficult to measure. Nevertheless, there are indicators that demonstrate that government support can catapult a social program to the next level. As evident in Latin American countries like El Salvador, Chile and Brazil, strong political will demonstrates how visible political leaders have used their authority to realize important initiatives such as school feeding.

In Jordan, Her Royal Highness Princess Basma Bint Talal has passionately advocated to end hunger, especially among children. Former President of Nigeria, Chief Olusegun Obasanjo, was present at the 2005 televised launch of Nigeria's HGSFHP in the capital of Abuja, thus showing his support for the program. Nelson Mandela was instrumental in securing school feeding in South Africa.

Although individual leadership was not always identified, there was clearly a political interest that evolved into a national movement. School feeding programs often undergo a multi-year evolution process, even when initiated at the national level. Having consistent government commitment helps facilitate program sustainability.

National School Feeding Policy

Policy has developed over time as countries have responded to the growing need for school feeding. Jordan, Egypt, Malaysia, South Africa and Nigeria all have written policies that recognize school feeding as both a fundamental right and a necessary strategy to improve child malnutrition, boost education enrollment, and enhance the country's overall well-being. Strongly related to political will, and often a byproduct

of such political enthusiasm, incorporating legal mandates into a country's constitution elevates the program's prominence when its objectives are clearly stated.

In South Africa's Bill of Rights (1996), Section 28 (1) c makes the provision for the basic nutrition, shelter, social service and health care services for every child. Section 15 of Nigeria's Compulsory, Free, Universal Basic Education Act of 2004 lists those services that must be provided to guarantee the universal basic education for all, and free lunch is included in these mandatory services. Egypt initially had a primary emphasis on the SMP, as noted in the 1951 policy that was written the same year its school feeding initiative was launched.

Funding Mechanism

While a country's school feeding budget is generally relative to the size of its program, how countries receive their funds and disburse them to schools is important. Egypt, South Africa and Malaysia all have separate line items dedicated to school feeding in their national budget. In Nigeria, while HGSFHP funds at the federal level are part of the overall UBE budget, funds at the state level are reflected in a specific line item.

The federal government usually disburses funds directly to the states or provinces for allocation to the schools. For example, in South Africa the national government directly distributes funds to the provincial bank accounts. The National Treasury oversees this official transferring of funds, which must comply with certain specifications. The Treasury will place a hold on provincial funds if there is any discretionary use of local school feeding funds. In Egypt, a recent decentralization in the government has led to each province receiving its funds according to its specific budget, which is determined by that area's total student enrollment. However, to equalize disparities between provinces, the Ministry of Education's main office in Cairo previously decided which funds would be allocated where.

While it was clear that all countries received funds from the federal government, it was usually unclear how country governments sourced these school feeding funds. Malaysia did report that sales taxes help facilitate funding for its school feeding program.

Local Procurement

There is extensive research showing the benefits of linking school feeding to local agricultural production: nutritious, seasonal foods are available for purchase at fair market rates; the logistics and costs of transporting and storing goods are reduced; and agricultural production is stimulated, with a sustainable local market benefiting small local farmers.

However, local procurement is presently not required in any of the five countries included in this report. While all countries rely on the local wet markets to some degree to supplement school meals, there is no provision to exclusively do so. Jordan

and South Africa are two examples that show a variance in local procurement. As there are no onsite cooking facilities in Jordan, and the meal consists of a fortified biscuit, the only opportunity for local procurement lies in the piece of fresh fruit that complements these biscuits. In contrast, South Africa has witnessed a sharp interest in the expansion of school gardens. A hands-on tool that allows children to grow some of the food items used in their meals, school gardens do not replace the local wet markets but complement them.

Program Administration
Only two of the countries studied, South Africa and Nigeria, operate school feeding programs at the local level. While the Ministry of Education and other related agencies oversee the program at the federal level, Jordan, Egypt and Malaysia do not administer school feeding at the state or provincial level.

The country interviews proved there is no single, absolute way to administer a school feeding program.

Community Involvement
Not all countries interviewed demonstrate a high prevalence of community involvement. Parents are often minimally involved with their child's feeding program, usually because they are unaware of it. Sometimes they are peripherally involved, such as in the case of Malaysia, where parents are able to voice program concerns during community PTA meetings.

In instances where communities are closely tied to the program's planning and implementation, their enthusiasm is overwhelming. In South Africa, local community forums known as *imbizos* promote health issues and provide resources to schools so the feeding programs can continue. Parental support is also very strong in Nigeria. While parents will not donate money to the program, they will provide food items and sometimes even help with the monitoring and evaluation process at the local level.

The following "best practices" and "lessons learned" are based upon the conclusions provided above, and are intended to help other countries that want to establish national and sustainable school feeding programs:

Best Practices:

- **Individual budget line item dedicated to school feeding.** Although it does not guarantee that funds will not be mishandled, clearly stating which funds are to be used for school feeding helps minimize discretionary and unethical behavior detrimental to the success of school feeding.
- **Strong political will.** Having support from country leaders increases school feeding's visibility, and means that program awareness will be heightened among community members fundamental to sustaining the program.
- **National written policy.** Clearly articulating the purpose of school feeding and incorporating it into a legislative document guides policy decision makers

to form strategies in line with program goals and objectives. Also, legally mandating school feeding means that in theory there will be certain legal consequences if the program is not upheld.

- **Community involvement and awareness.** School feeding initiatives are often developed from the bottom-up; it is crucial that local stakeholders are mobilized to support school feeding within their communities. However, if a community is unaware that schools are providing school meals, it will be difficult for them to commit to this initiative. Monitoring and evaluation at the community level is also necessary to ensure the program's integrity and efficacy.

Lessons Learned:

- **Accurate student enrollment records.** As the program's outreach depends on a country's total student enrollment, it is imperative that countries keep current and accurate student enrollment records. Moreover, it is important to compare this number with the total number of school-aged children residing within that particular country. The reason is two-fold: (1) to accurately target school-going children to maximize the number of school feeding beneficiaries, and (2) to measure the effect of school feeding in boosting –and retaining– school enrollment rates.
- **Mandatory local procurement.** Although all five countries willingly rely on locally-produced items to support school meals, they are not legally required to do so. Incorporating a legal policy to use available local food commodities will link school feeding with local small farm production, thereby directly benefiting local small farmers. Providing students with healthy, safe, and affordable meals, while helping local economies, is a balancing act that is often difficult to achieve. However, by using local procurement, a country's overall economy can be strengthened by increasing employment and by stimulating the infrastructure necessary to produce, transport and prepare school meal items within the community.

IV. Recommendations

The following recommendations are relative to the school feeding programs studied, and to the future of school feeding in other developing countries. These recommendations are provided to help guide countries in establishing sustainable, nationally-owned and operated school feeding programs:

Study Expansion

1. **Expand this study to include additional middle income countries in Africa and other regions.**

   Rationale: As there is no single model that promises program success and sustainability, it is important that countries with burgeoning school feeding programs evaluate a variety of models before designing their program of choice.

2. **Conduct a "reverse" study to evaluate other countries that are currently struggling to establish or administer national school feeding programs.**

   Rationale: Although focusing on the trials and tribulations of school feeding can potentially discourage other countries that seek to form unique feeding programs, anticipating certain challenges and avoiding particular courses of action would benefit the entire global school feeding community.

3. **Conduct follow-up interviews with each of the five countries studied in this report.**

   Rationale: A follow-up interview would gauge program progress in Malaysia, Jordan, Egypt, Nigeria and South Africa. Anywhere between one to five years is recommended to determine what developments, if any, have occurred respective to the school feeding programs since the countries were first interviewed in 2009.

4. **Use this report as a training module for other countries looking to establish or expand school feeding programs.**

   Rationale: It is important to GCNF that this report becomes an instrument that guides countries in developing their own sustainable school feeding programs.

   It is recommended that the information provided in this report be published, both online and in print, so it can be used as a training module. It is likely that

the contents of this study would have to be restructured for it to supplement the technical assistance that would help additional countries establish their national school feeding programs.

School Feeding Program Improvements

5. Expand the school feeding program to target more students.

Rationale: One factor that was common to each of the five programs studied was that school feeding reached only some children. While the logistics for this targeted selection are clear, it is recommended that these countries expand their feeding programs to reach all students. By increasing the number of school feeding recipients –regardless of geographic or need-based criteria–, targeting issues related to logistics, jealousies or stigma can be mitigated.[88]

6. Provide more substantial feeding modalities.

Rationale: Only roughly half of the countries included in this study serve a hot meal to students. Although some countries serve fortified food items along with fresh produce and/or milk, giving a more nutritionally-balanced meal that is served hot would greatly improve the overall nutrition of students.

[88] Bundy DAP, Burbano C., Grosh M., Gelli A., Jukes M., Drake L. (2009) *Rethinking School Feeding: Social Safety Nets, Child Development and the Education Sector.* Directions in Development, World Bank, Washington, DC.

Appendix A – Chile Case Study

This case study was previously submitted in June 2009 by Mickey Leland International Fellow Rachel Winch for the Congressional Hunger Center (CHC).
Photography by Elizabeth Whelan for CHC.

Political Will, Equality of Opportunity, and Innovation: Foundations of the Success of the School Feeding Program in Chile

Introduction

Child nutrition programs in Chile, which are administered by the government and implemented by private contractors, are among the most renowned in the world.[89] Serving over 2.2 million meals a day to 1.8 million school aged students in 9,800 schools across the country, Chile's child nutrition programs have played a major role in improving the nutrition of the nation's children and increasing Chile's school participation rate to nearly 100 percent, while dramatically reducing incidences of malnutrition[90, 91] In addition to nutrition programs for school aged children, the government of Chile provides specially designed nutrition programs for infants and toddlers in the nation's 3,340 government run free child care centers.[92] Strong and consistent government support as well as innovative public-private partnerships have been driving forces in the programs' success.

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[89] Among its honors, the school feeding program in Chile was recognized by the United Nations World Food Program as one of the top five in the world. Source: "JUNAEB Background." Govierno de Chile JUNAEB website. Accessed in Google translation at http://74.125.91.132/translate_c?hl=en&ie=UTF-8&sl=es&tl=en&u=http://www.junaeb.cl/mundo/resena_historica.htm&rurl=translate.google.com&usg=ALkJrhiI1dF1X7FcLbMYz2IM1n0c_vVRgw on May 15, 2009.

[90] Sources: "Balance Internal Management: Year 2007." *National Board of School Assistance and Scholarships*. Santiago, Chile.

[91] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.

[92] Figure as of the end of 2008. "¿Qué Es La JUNJI?" JUNJI publication.

School Feeding in Chile: A History of Political Will

> *Q: There are many countries in the world were school feeding programs are nonexistent. Why do you think that in Chile it is a priority?*
>
> *I will give you a personal opinion. I think we, the Chileans, look at ourselves as a non-developed country, with lots of vigor to improve and become a developed country. We realized education is the base of everything. So by having students with better nutrition, we will assure that students perform better. That is why the school feeding program is so central to us.*
>
> -Ramón Solís Cácares—Chief of the School Feeding Department, JUNAEB[93]

Consistent government support has been one of the main drivers of success for child nutrition and school support programs in Chile. Since the government of Chile passed compulsory education in 1920, the government has established institutions and initiatives to ensure that all students have the tools they needed to succeed within these schools.[94] Beginning with the Directorate of Primary Education and the School Boards of Communal Assistance, established in the late 1920s to support the "promotion and organization of school food services and other aid to students in public schools," the government of Chile has administered school feeding programs as one of the primary forces to reduce inequality in the school system.[95] In 1953, the government established the National Board of School Aid, JUNAE, to support students in primary schools throughout Chile. In 1964, the government passed Chilean Law No. 15720, which strengthened the work of JUNAE through adding school scholarships for vulnerable children and families. The National Board of School Assistance and Scholarships (La Junta Nacional de Auxilio Escolar y Becas), or JUNAEB, which currently administers school feeding programs in Chile, was and continues to be mandated by this law.

Six years after the law was passed that created JUNAEB, in 1970, the Chilean government passed Law No. 17301, which created The National Board of Day Care and Kindergartens (La Junta Nacional de Jardines Infantiles), or JUNJI. Since that time, JUNJI centers have been created that offer free, government-run child care centers for eligible infants and toddlers whose parents opt to participate.

While the programs of both JUNAEB and JUNJI have changed and developed since their inception, because both were established through law and hold strong political clout, they have operated consistently since their inception. The programs have not only maintained, but have actually strengthened during times of radical political changes, serious economic

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[93] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.

[94] "JUNAEB Background." Govierno de Chile JUNAEB website. Accessed in Google translation at http://74.125.91.132/translate_c?hl=en&ie=UTF-8&sl=es&tl=en&u=http://www.junaeb.cl/mundo/resena_historica.htm&rurl=translate.google.com&usg=ALkJrhiI1dF1X7FcLbMYz2IM1n0c_vVRgw on May 15, 2009.

[95] "JUNAEB Background." Govierno de Chile JUNAEB website. Accessed in Google translation at http://74.125.91.132/translate_c?hl=en&ie=UTF-8&sl=es&tl=en&u=http://www.junaeb.cl/mundo/resena_historica.htm&rurl=translate.google.com&usg=ALkJrhiI1dF1X7FcLbMYz2IM1n0c_vVRgw on May 15, 2009.

crisis, and social instability. As Gerardo Weisstaub et al. wrote in their 2008 article "Child Malnutrition: Prevention and Control at the National Level," "Any changes to the supplementary feeding programs have always been undertaken with extreme caution by governments, since they are reluctant to take risks on a matter of such high political sensitivity."[96] Child nutrition programs have been central issues in political campaigns, such as the 1970 Presidential election campaign, when all three candidates proposed "eradication of malnutrition" as one of the *key targets* of their administration. The victor in the election, Salvador Allende, from the Socialist party, was elected with the promise of providing half a liter of milk each day to all Chilean children up to age 15.[97]

A Mission of Equity in Education

Q: What effect has school feeding had on Chilean society?

Kids who could not go to school are now going to university. Practically all kids are going to school. Chile is a country where 99.9% of children go to school. If JUNAEB knows that there are children having a hard time going to school, they will give a scholarship to make sure kids can go. For example, if a family earns so little that they need their children to work, JUNAEB will pay the family to send their child.

-Ramón Solís Cácares—Chief of the School Feeding Department, JUNAEB[98]

While both JUNAEB and JUNJI operate large-scale child nutrition programs, neither of their missions is focused on feeding children. Rather, their missions are focused on providing vulnerable children the tools they need to be successful in Chile's education system. JUNAEB's stated mission is "to facilitate the incorporation, retention, and success in the educational system of children and young people living in social, economic, or psychological disadvantage by delivering quality services that contribute to equality of opportunity in the educational process" [99]

To carry out its mission, JUNAEB maintains a three pronged approach to assisting target students that focuses on the following areas: school meals, health, and scholarships. JUNAEB health services provide students with eyeglasses, dental care, hearing aids, and psychological counseling, thereby reducing barriers—such as dental pain or not being able to see clearly—to succeeding in the classroom.[100] Additionally, while there are no school fees for public schools in Chile, some families have difficulties meeting needs such as school supplies; JUNAEB runs a scholarship program at the primary and secondary levels to help meet needs associated with the cost of school. At the University

[96] Weisstaub, Gerardo et al. "Child Malnutrition: Prevention and Control at the National Level." In *Nutrition in Pediatrics 4*. Edited by Christopher Duggan, John Watkins, and Allan Walker. 2008: 143-152.
[97] Weisstaub, Gerardo et al. "Child Malnutrition: Prevention and Control at the National Level." In *Nutrition in Pediatrics 4*. Edited by Christopher Duggan, John Watkins, and Allan Walker. 2008: 143-152. Page 149.
[98] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[99] "Balance Internal Management: Year 2007." *National Board of School Assistance and Scholarships.* Santiago, Chile.
[100] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.

level, JUNAEB offers scholarships including the "Presidente de la República (President of the Republic) scholarship, which is an amount of money the student gets every month for his or her education and living expenses. JUNAEB provides eligible university students with food voucher scholarships (20 a month, $2 per voucher) that may be redeemed for lunch at participating restaurants on school days. JUNAEB's annual operating budget for these programs is $640 million USD, including scholarships and health programming; $430 million USD of those funds are designated for school meals for primary and secondary school students.[101]

JUNJI's mission, which has a similar focus on equity, is "to provide early education to boys and girls under four years of age who live in a situation of vulnerability and guarantee them equal development opportunities through the creation, supervision, and certification of day care centers and preschools either directly or through third parties."[102] JUNJI child care centers with high quality supervision and instruction free of charge to eligible children all over the country. As part of its mission, JUNJI provides free meals at its centers and offers nutrition and health counseling programs for parents of young children.

JUNJI has expanded significantly since 2006 when President Michelle Bachelet took office and called for a rapid and wide-scale expansion of the programs to reach more families who may benefit from the services. In 2005 there were 708 JUNJI centers in the country. Between 2006 and 2007, Chile extended its day care coverage by 240%, building 1700 new child care centers in the country over the two years. By 2010, it is projected that 3,500 new public and free day care centers will have been built that will educate 70,000 vulnerable infants in the country's poorest 40% of families.[103] In addition to government run JUNJI centers, a private nonprofit offers the same service of free child care and school meals for infants and toddlers. Fundación Integra, an organization within the Network of Foundations of the Presidency of the Republic, was established in 1990 to further expand the reach of child care services. There are currently 1031 Fundación Integra centers in Chile that educate and feed 80,000 children.[104] In addition to expanding JUNJI programs, President Bachelet's administration has influenced the expansion of Fundación Integra. The strong political will exercised in her administration through these programs will greatly increase the impact of the infant nutrition and education program to reach the nation's most vulnerable children.

Determining Vulnerability: Targeting of students to participate in assistance programs

While the child nutrition programs of JUNAEB and JUNJI together reach over two million children a day, neither of the programs are universal, nor are they intended to be.

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[101] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[102] JUNJI History. www.junji.cl Accessed on June 20, 2009.
[103] JUNJI History. www.junji.cl Accessed on June 20, 2009.
[104] "What is Integra?" Fundación Integra Website. http://www.integra.cl/integra.nsf/data/6232AE64B74F3F3E8425744200619A7F#. Accessed on June 1, 2009.

Rather, food in the JUNAEB and JUNJI programs is considered "a benefit that allows vulnerable children to have equal opportunities in the education system."[105] With a few exceptions, such as very rural schools where meals are provided for all students regardless of income, JUNAEB and JUNJI programs target vulnerable students to ensure they have equal opportunities. For JUNAEB, this targeting assessment determines participation in school meals, health, and scholarship programs; for JUNJI, the targeting assessment determines whether infants and toddlers are eligible to participate in the JUNJI centers at all.

Unlike the United States, where the burden for applying for government child nutrition programs falls on vulnerable families, Chile has developed a system to determine eligibility using data that the government already collects. This comprehensive analysis of the families' situation takes into account not only yearly or monthly income, but also stability or seasonality of income and level of education of the parents. This data is analyzed according to the National System of Allocation to Equity (SINA) using data from the Ministry of Planning (MIDEPLAN).

Public-Private Partnerships

At its inception, the school feeding programs in Chile were operated entirely by government agencies—JUNAEB and JUNJI—from administration, to the hiring and training of cooks, to the serving of meals. As the programs and institutions grew, a decision was made to begin to contract with private companies to provide school food service, with JUNAEB as the administering agency. In 1976, JUNAEB began a pilot program outsourcing some of its schools to private contractors. JUNAEB determined that these pilots were successful, and by 1980 all of the schools food service had been turned over to private companies. Most of the JUNAEB food preparation staff were hired by the private companies as they took over a school's food service. Both the private sector implementing companies and JUNAEB maintain that since that time the government of Chile has maintained good public-private partnerships.[106, 107]

On the public side of the partnership, JUNAEB and JUNJI set and control nutrition standards for their programs, including number of calories per meal, quantity of protein, quantity of fruits and vegetables, and requirements for variety. Based on these sets of criteria, private contractors submit proposals to service the school food for one of approximately ninety "Territorial Areas" or TUs. Each year JUNAEB accepts proposals to provide meals for 1/3 of the contracts in the country, so contracts are renewed or reallocated on a three year cycle. While JUNAEB and JUNJI are separate agencies, JUNAEB evaluates the bids for contracts for JUNJI to streamline the system. For each

[105] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[106] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[107] Pablo Maturana. Co-owner of Santa Cecilia school food service company. Personal Interview. April 15, 2009.

cycle, JUNAEB receives over 100,000 proposals (a single company will often write multiple proposals to service different areas).[108]

Proposals are assessed based on a variety of factors in two major categories—quality and price. In the quality category, firms declare how they will satisfy JUNAEB's requirements, including:

- Nutritional requirements for the different meals;
- Food structure for the various meals (breakfast, lunch, tea, and supper) and the frequency (or minimum and maximum presence) of certain foods, and the minimum variety required in the meals provided;
- Minimum quality characteristics of the inputs;
- Operating conditions, such as hygienic standards, supplies, food-handling practices, and supervision; and,
- Infrastructure, such as furniture, equipment, and cookery.[109]

Each proposal includes a plan for quality assurance, including how they will control the everyday personnel and management quality. Firms that meet these quality criteria then enter the second round of assessment based on a series of prices vendors must supply for a variety of meals, such as 350 calorie breakfasts for primary school students and 1000 calorie lunches for secondary school students. Because JUNAEB manages the proposals for all three programs—JUNAEB, JUNJI, and INTEGRA—and because nutrition requirements of the children vary with age and special needs, vendors must submit bits for 30 meal types.

In addition to variety of meal types, vendors are asked to submit bids for varying numbers of meals (80-100% of estimated meals in bid, 60-80%, and less than 60%) since the number of students participating may change. If the number of meals is far under the estimated proposed, the price per meal may increase slightly. Conversely, if the number of meals is more than 100% of anticipated, a company may receive slightly less per meal. It is from these numbers that companies that meet all quality standards can be selected to win a bid. While JUNAEB seeks to provide the maximum number of high quality meals at the lowest cost, they set a minimum price per meal each year to eliminate unrealistically low bids that may have underestimated costs and could result in either poor quality food or the company going bankrupt.

Once winning companies have been selected and begin to serve meals, they receive an agreed upon price *per meal* served. The government does not set prices for how much companies pay for food, nor do they set the price companies are paid per meal. Thus, the amount companies are paid per meal may vary from company to company and bid to bid. At the time of this study, April 2009, JUNAEB paid approximately $1.13 per student per day for breakfast and lunch, with some variation by region and method of preparation. Since they are paid per meal served to an eligible student, school food service providers

[108] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[109] Epstein, Rafael et al. "A Combinational Auction Improves School Meals in Chile." *Interfaces*. November 1, 2002.

are responsible for providing JUNAEB with documentation of the number of meals served. In each school both a staff member from the private contractor and a designated teacher from the school record daily meal participation and ensure that the correct students receive meals. At the end of each month, JUNAEB pays the private contractors for the number of meals served in the previous month.

Combinational Auction: Computerized System for Proposal Evaluation

To ensure that the bid selection process is fair and cost effective, in 1997, then head of JUNAEB Lysette Henriquez requested that researchers at the Industrial Engineering Department of the University of Chile develop a system to improve the auction process. This team of researchers develop a combinational auction computerized system to evaluate school feeding proposals, a system JUNAEB began using in 1999. Whereas in a non-combinational auction, bidders bid on one item or one group of items with a single value, in a combinatorial auction, bidders can place bids on combinations of possibilities. In the case of JUNAEB's combinational auction, bidders are first filtered through based on meeting minimal quality criteria, and then their bids are assessed using the combinational auction system, which evaluates the bids on various food packages and quantities of food packages.

The JUNAEB combinatorial auction system is internationally renowned and was the recipient of the 2002 International Federation of Operational Research Societies Prize for Operational Research in Development, awarded to the best application of Operational Research in a developing country.[110] The combinational auction process is cited as being more transparent and less subject to bidders "exert[ing] inappropriate pressures on the officials administering the process."[111] In addition to being more transparent, the combinatorial auction system contributes to direct cost savings by more effectively analyzing costs of a complex set of bids. It is estimated that the computerized system of proposal assessment saves the government child nutrition programs in Chile US$40 million yearly—equal to the cost of feeding 300,000 children for the year.[112]

The call for bids is open to any company regardless of country of origin and all companies compete in the same way (there is no preference given to Chilean companies). According to Ramón Solís Cácares, Chief of the School Feeding Department, JUNAEB currently works with 37 private contractors that provide school food. While most of these are Chilean owned, two are international—Sodexho and the Compass Group—and two others are under Brazilian ownership.[113] To ensure that prices remain competitive

[110] Catalán, Jaime et al. "No Such Thing As A Free Lunch? Think again. Combinatorial auctions help feed two million public school children from low-income families in Chile." *OR/MS Today*. The Institute for Operations Research and the Management Sciences. April 2009. 32-35.
[111] Epstein, Rafael et al. "A Combinational Auction Improves School Meals in Chile." *Interfaces*. November 1, 2002.
[112] Epstein, Rafael et al. "A Combinational Auction Improves School Meals in Chile." *Interfaces*. November 1, 2002.
[113] For a list of JUNAEB school food service providers, please visit http://www.junaeb.cl/home/certificados.htm#.

and stable in case one company is not able to meet its contracts, a single company cannot have contracts for more than 16% of JUNAEB's total capacity.[114]

Cook & Chill: Innovative Technology of Centralized Kitchens

In 2006, President Michelle Bachelet Jeria, asked that the number of school meals increase from 1.6 million meals served a day to 6.6 million and that more child care facilities be opened. In order to increase the number of meals served dramatically in a short period of time, JUNAEB researchers assessed multiple options. After researching potential alternatives, JUNAEB decided to prepare food in central "Cook & Chill" kitchen facilities and have it delivered to the schools. "Cook & Chill" is a specially designed process for large scale preparation of meals in a central kitchen. Using rapid cooling technology, meals are sealed in plastic bags and shipped cold to schools in ready to heat bags. On site, the meals are reheated (mostly through boiling the bags) and served. At the time of this study, 400,000 meals were being prepared daily by the Cook & Chill process (as compared to 2 million meals that were prepared onsite by conventional methods). Cook & Chill is used mostly in schools with a large number of students and in an area of high population density. Because the cost for the start up equipment for these plants was large, JUNAEB agreed to pay a slightly higher rate for Cook & Chill meals than for on-site preparation. JUNAEB estimates that in 5 years companies will have earned back the money from their initial investment.[115]

Nutritional Successes and Challenges: From Malnourishment to Obesity

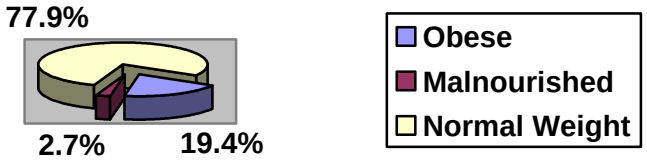
> *At the beginning, we were fighting malnutrition. Now that goal has been reached. Kids who could not go to school are now going to university. One of the major struggles in the world of school nutrition in Chile right now is combating childhood obesity. JUNAEB is being proactive to address these issues.*
>
> -Ramón Solís Cácares—Chief of the School Feeding Department, JUNAEB[116]

While the primary goal of school feeding programs in Chile—to ensure equity for the nation's children by ensuring that all students have the tools they need to succeed in school—has remained consistent throughout the forty plus years the program has been operating, the secondary goals related to child nutrition have been adapting in relation to changing nutritional needs. At its inception, malnutrition was a serious issue facing the children of Chile, so school feeding focused on ensuring all Chilean children were properly nourished. Since that time, malnutrition has plummeted. Child nutrition programs have been overwhelmingly successful in this regard.

[114] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[115] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.
[116] Ramón Solís Cácares, Chief of the School Feeding Department (Jefe Departmento Alimentación Escolar Dirección Nacional) of JUNAEB. Personal Interview. April 20, 2009.

As malnutrition rates have fallen, rates of obesity have skyrocketed. As Juliana Kain, MPH et al wrote in their 1998 paper "Child Nutrition in Chile: From Deficit to Excess," "Chile has undergone an epidemiological and nutritional transition. In children, there has been an important decline in the rates of nutritional deficit…with a corresponding increase in the prevalence of overweight and obesity.[117]" In 1987, rates of obesity were 6.5% for boys and 7.8% for girls. By 2000, these numbers had increased to *17%* for boys and *18.6%* for girls, an increase of 161.5% and 138.5% respectively. In 2006, 19.4% of students in the country were obese, as compared to only 2.7% who were malnourished.[118]

Rates of Obesity and Malnourishment among Chilean School Children: 2006



To address the rising wave of obesity, JUNAEB and JUNJI have established a high standard for nutritional requirements to ensure that companies provide an appropriate number of calories for children of that age, as well as a minimum quantity of fruits and vegetables each week. JUNJI offers nutrition interventions for children and their families when they enter the program, much of which is focused on healthy eating and preventing obesity.

While JUNAEB and JUNJI meals must meet a high standard of nutritional requirements, one of the major challenges facing school food service in Chile today is unhealthy competitive foods. Kiosks selling candy, cookies, chips, soda, ice cream, and hot dogs litter school yards both inside the school compound and lining the outside gates. After throwing out half full plates of food or even after completing an entire school meal, some students buy these "supplemental items." This makes JUNAEB and JUNJI's work on nutrition education and nutrition interventions with families an uphill battle. As Inés Roco Vargas, Chief of the Nutrition and Health Program for JUNJI explained, "Something that increases the problem is people selling candies, cookies outside of the JUNJI centers. We have to keep changing the family and children food habits to eat fruits, vegetables, or eggs. But it seems that when mothers pick their children up from day care they feel guilty and try to reward them with an unhealthy snack. We see that all

[117] Kain, J et al. "Childhood nutrition in Chile: From Deficit to Excess." *Nutrition Research*. Nov 18, 1998: 1825-1837.
[118] JUNAEB Nutrition Map: Situación Nutricional de los Escolares Chilenos de primero Básico. www.junaeb.cl. Accessed on May 13, 2009.

the time."[119] Thus for every step forward the JUNAEB or JUNJI nutrition education programs attempt to achieve, their progress is severely hindered by the vendors of unhealthy food working against them.

Conclusion

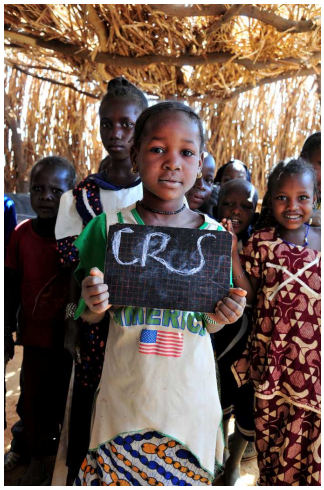
Chile's child nutrition programs, supported by consistent and robust political will, have been dramatically successful in reducing malnutrition and increasing school participation. Created as programs to ensure that all children have the opportunity to succeed in school, these government sponsored programs have developed strong public-private partnerships that are effective in serving meals to over two million infants and children each day. At the same time that malnutrition has declined, the obesity rate has increased dramatically. As Chile maintains its commitment to equal opportunities to succeed in the education system and assuring that all children are well nourished, its recent and growing challenges regarding obesity present a new role for JUNAEB and JUNJI.

[119] Inés Roco Vargas, Chief of the Nutrition and Health Program for JUNJI. Personal Interview. Santiago, Chile. April 21, 2009.

Appendix B – Mali Case Study

This case study was previously submitted in June 2009 by Mickey Leland International Fellow Rachel Winch for CHC.
Photography by Elizabeth Whelan for CHC.

School Feeding in Mali: A State of Transition



Introduction

School feeding in Mali is in a state of transition. The program has been operated as a partnership between the Government of Mali, which selects schools to participate, and international organizations, which fund and co-administer programs. In each region of the country, the regional offices of the Ministry of Education—called Centers of Educational Support (Centres d'Animation Pédagogique), or CAP—address issues related to food quantity and program integrity. The CAPs maintain school attendance records, track the number of girls eligible for take-home rations, and coordinate with community leaders. International organizations, namely the World Food Program and Catholic Relief Services, provide food and technical assistance that supports the work of community members, whose ingenuity, labor and material contributions are at the core of the programs. The Government of Mali is currently making efforts to support community-based school feeding programs through a National Policy on School Feeding that would support community-based efforts to begin programs.

During the 2007-2008 school year, the World Food Program's (WFP) School Feeding Campaign provided cereal, pulses, and oil to 712 schools, which used them to serve a hot noontime meal to 108,524 children. The WFP school meals consist of 150 grams of cereals, 30 grams of dried vegetables, and 10 grams of oil for a total of 729 kilocalories. Additionally, WFP distributes take-home rations to around 9000 girls in targeted schools who have maintained at least 80 percent school attendance. Take-home rations consist of 4 liters of oil every three months.[120] Along with Catholic Relief Services (CRS), these programs reached 7 percent of the nation's school aged children.[121] WFP selects regions of focus based on rates of food insecurity, and are currently focusing their efforts in the regions of Mopti, Timbuktu, Gao, and Kidal, as well as the northern regions of Kayes and Koulikoro. These programs have had considerable success in increasing school attendance. Even so, school feeding in Mali is insufficient compared to the need and address just one of the many challenges facing primary and secondary education in the nation.

Community Commitment

> *If you see a lion and you yell, come on everyone, let's go kill the lion, you have to be the one to run out first and grab the head, and then everyone will come with their knives and kill it. But if you run out there and you grab the tail, no one else will grab the head. Face the problem head on and then people will come and help you, but if you just shout, it is not likely to happen.*
>
> -Malian Proverb, as told by community member in Sana, Mali

> *Everybody contributes, even if you don't have kids in school. Even if you don't have kids in school, your brothers have kids in school or your sisters have kids in school. It's one big family. Even for families who have children and do not send their kids to school, they still see it as a village problem and they still contribute.*
>
> -Jean Paul, Caritas. Mopti, Mali

While the Malian government and international partners play vital roles in coordinating and providing staples for food assisted education programs, the programs' success in Mali would not be possible without community commitment. It is community members who must offer their time and labor, preparing meals each day and providing such complimentary inputs as vegetables, edible leaves, spices, protein sources, water, and firewood to the schools' kitchens. In some villages, families contribute to the canteen based on the number of children they have in school; in others, everyone contributes, regardless of whether they have children in school. In many villages, the Parents of Students Association manages the donations, makes up for gaps in the food supply, and maintains the cooking facility. Some communities, such as the village of Sana in the Koro region of Mali, even began school feeding programs on their own and were then supported by international organizations.

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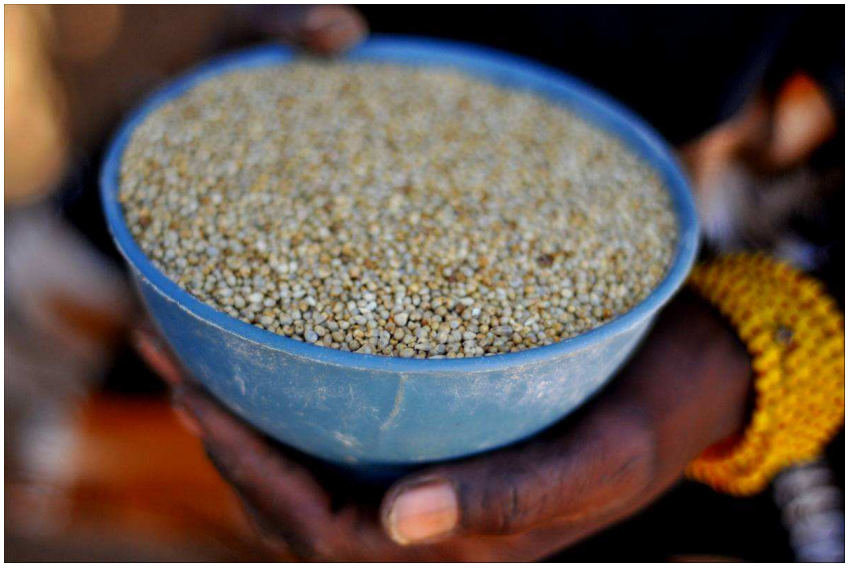
[120] World Food Programme. Draft Country Programme—Mali 10583.0 (2008-2012). 27 April 2007. Originally in French. English version.

[121] Lambers, William. "Interview: Abou Guindo of the UN World Food Programme in Mali." *Ending World Hunger*. Blogcritics Magazine. November 7, 2008. Accessed at http://blogcritics.org/archives/2008/11/07/082510.php on February 17, 2009.

For many years, the village of Sana had no school. As a result, virtually everyone above the age of 15 is illiterate. In 1997, the chief of the village started a school and went from house to house talking with families about the importance of sending their children to school. Just as community members recognized the need for education, they also realized that many students did not have the means to eat during the day. In 2004, after seeing a school feeding program in a neighboring village, a village leader suggested that the school start a canteen (a term used to describe school feeding programs in Mali; *cantine scolaire* in French) to provide free school meals. He worked with UNICEF to provide utensils, bowls, and cooking supplies and organized community members to provide millet to the canteen. Each family in the community—regardless of whether they had children in school—donated 3 bowls of millet to start the program (this has since increased to 5 bowls a harvest). Women in the community organized themselves to cook on a rotating basis. The cooks and school children collected water each day, and the youth of the village gathered the firewood. Through this community initiative and efforts, a meal of boiled millet was served to the children in the school three days a week.



Sana community member holds bowl of millet to donate to the school canteen.

McGovern-Dole Food For Education

Q: Have there been any changes in the school feeding program since the time that the McGovern-Dole Food for Education program started?

There is a big, big difference between the indigenous canteen and the canteen of Catholic Relief Services. In the previous canteen they just ate millet. There was no oil. Sometimes they made toh with sauce. Now they are able to eat rice, beans, oil. All these things that are good for you and have vitamins. We have been eating millet all our lives. Now we have the chance to eat something else.

- Harouna, Primary school teacher in Sana

If someone wants to climb a tree, you push him up; if he doesn't want to climb the tree, when you push him he will fall down. When you get some help up, you have to grab onto the branches and keep going up yourself.

-Malian Proverb, as told by Jean Baptiste Togo, Caritas Mali

Since 2008, the village of Sana has received support from the United States Department of Agriculture's McGovern-Dole Food For Education Program, which "provides for donations of U.S. agricultural products, as well as financial and technical assistance, for school feeding and maternal and child nutrition projects in low-income countries."[122] Because McGovern-Dole provides the staple grain, beans, and oil, the community now contributes sauce ingredients (salt, peanut paste, sometimes meat). And rather than eating three days a week at school, as they did before the McGovern-Dole program started, the children eat five days a week.

McGovern-Dole funding is being used in innovative ways in Mali to not only feed children in schools, but also to help increase family incomes. Catholic Relief Services in Mali has recently begun using McGovern-Dole Food For Education funding to facilitate the establishment of Savings and Internal Lending Communities (SILC), which serve as both banks and microcredit opportunities. Women within the group each contribute a certain amount each week. That money is recorded under their "account," like putting money in the bank. When a woman within the group has a need, she makes an appeal to the group, who decide if she will be granted a loan. When the women pay these low interest loans back, it makes more capital available for others to borrow and all the members gain a percentage of the interest paid.

These SILC groups enable rural women to save collectively and provide each other with opportunities to start small enterprises—often used for purchasing agricultural inputs. Since the interest and money paid by the borrowers goes back into the funds available for credit, their loan repayments benefit the entire group. SILC groups also provide women with an economic safety net of interest free loans in case of health or family emergencies.

In the village of Dandoli, Mali, women in the SILC program use small loans to buy onion seeds, which they plant, grow, and sell in the nearby city of Bandiagara. Not only does this enable them to increase their incomes, but, as one of the SILC members explained, since the interest goes back into the program the money they pay back on their loans benefits the community: **"**The SILC program has really helped us. Before the SILC program we had to go to Bandiagara to get credit. The interest was very high and that interest just went back to the bank. Now we pay the interest and it comes back to the community."

Studies show that an increase in resources controlled by women resulted in a greater proportion of household income spent on food, health and school-related expenses.[123, 124]

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[122] "McGovern Dole Food For Education." United States Department of Agriculture Foreign Agriculture Service website. Accessed on June 24, 2009 at http://www.fas.usda.gov/excredits/FoodAid/FFE/FFE.asp.

[123] Quisumbing, A.R and J.A. Maluccio. 2000. *Intrahousehold allocation and gender relations: New empirical evidence from four developing countries.* Food Consumption and Nutrition Division Discussion Paper. No. 84. Washington, DC: International Food Policy Research Institute.

By helping women to organize themselves to save, give out credit, and invest in micro-enterprise, the SILC program supports women and families in affording the costs associated with school, and provides them with the support system necessary to keep their children in school should they experience economic hardship.

Educational and Economic Opportunity

> *Q: Did more children start to come to school after the school meal program started?*
>
> *The school meal program has changed the school dramatically. Before, there were some students who would come for the morning, but leave for lunch and not come back. Some students just would not come at all because they could not eat. The number of students has definitely increased. They used to leave at recess, at the 10 am break, so they were only staying for a few hours.*
>
> - Harouna, Primary school teacher in Sana, Mali
>
> *Q: Why do you send your children to school?*
>
> *If you want to sit in the shade of a tree tomorrow, you have to water it today*
>
> -Malian proverb, as told by a mother in Sana, Mali

Both anecdotal evidence and school attendance data indicate that rates of enrollment and attendance in Mali have grown more significantly in schools with canteens than those without. While enrollment in public and community schools rose 5.9 percent between 2006 and 2007, enrollment in WFP-assisted schools rose 20 percent during the same period, with enrollment for girls increasing 23 percent. Of the children enrolled in school, attendance rates for 2007 were above 90 percent for both boys and girls in schools with canteens.[125] Getting students to come to school and be able to stay for the duration of the school day is an important step toward improving educational opportunity for Mali's children.

Not only do school feeding programs provide opportunities for students, but they also have the potential to provide farmers and the local industry with a reliable market. The World Food Program in Mali has been selected as one of the pilot countries in Africa to receive Purchase for Progress (P4P) funding. P4P is a local procurement program of the World Food Program made possible by funding from the Bill and Melinda Gates Foundation and the Howard G. Buffett Foundation[126]. P4P provides farmers with a reliable market and fair price for their crops while providing locally produced, culturally

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[124] Hallman, K. 2000. *Mother–father resource control, marriage payments, and girl–boy health in rural Bangladesh*. Food Consumption and Nutrition Division Discussion Paper 93. Washington, D.C.: International Food Policy Research Institute.

[125] National Policy for School Feeding in Mali. Ministry of Basic Education, Republic of Mali. May 4, 2008. Page 8.

[126] Purchase for Progress is made possible, *in part*, by funding by the Bill and Melinda Gates Foundation. WFP in Mali is working with farmers' groups *and other partners* to encourage small scale farmers to be involved in the program *and to ensure that farmers receive the agricultural assistance needed to improve their practices*.

appropriate food to those in need. WFP in Mali is working with farmers' cooperatives to encourage small scale farmers to be involved in the program and offers agricultural development assistance to help farmers improve their practices.

Political Will

The Ministry of Education of Mali, has made a commitment to ensure that "hunger is no longer a barrier to the education of a child in Mali."[127] Following their participation in the 2007 Global Child Nutrition Forum and with support from the World Bank, representatives from the Malian Ministry of Education and WFP hosted a National Forum on School Feeding in Mali in January 2008. Working in collaboration with the Ministries of Agriculture, Health, Social Development, Promotion of Women, Children and Families, the Food Security Commission, WFP, and CRS, the Ministry of Education drafted a national policy for school feeding that is currently awaiting a final vote to be institutionalized as an official policy.

The proposed national policy includes a five year plan to launch 3000 government assisted school canteens. Under this plan, the Government of Mali will cover 90 percent of the associated costs for school canteen during the first year, with this percentage decreasing each year as schools and communities become increasingly able to maintain and operate programs.[128] The Government of Mali has committed four billion CFA franc (approximately US$8 million) for school canteens in 2009 using a combination of funds from the National Budget and funds from donor countries.[129] The plan includes provisions that support local purchase of commodities in order to augment the incomes of smallholder farmers. While still in its infancy, the Government of Mali's plan demonstrates the political will to enhance the valuable work already undertaken by its international partners.

The National Policy for School Feeding in Mali supports the larger goal of the Ministry of Education to increase school enrollment and attendance among the school aged children still not in school. As Mr. Adama Moussa Traore, the Associated National Director of Basic Education explained, school meals will help to draw students to school who are most difficult to enroll: "This last percentage is the most difficult because they come from families and backgrounds that are reluctant to send children to school, or children have to work, or they are from nomadic families. Those last children who are currently not attending school surely won't go to school if they don't get a meal there."[130] WFP is working to support the transition to a government run program as part of WFP's eventual withdrawal.

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[127] National Policy for School Feeding in Mali. Ministry of Basic Education, Republic of Mali. May 4, 2008. Page 13.

[128] Experimental Program of Integrated Canteens. Ministry of Basic Education, Republic of Mali. May 12, 2008.

[129] Adama Moussa Traore, Associated National Director of Basic Education and Dr. Bonaventure Maiga, the Technical Advisor for the Ministry of National Education. Personal Interview. December 10, 2008.

[130] Adama Moussa Traore, Associated National Director of Basic Education and Dr. Bonaventure Maiga, the Technical Advisor for the Ministry of National Education. Personal Interview. December 10, 2008.

Challenges

> *Malian children are among the poorest in the world. In 2001, 239 children per 1,000 died before reaching age five; 83% of children had anemia. Those children who make it to school are confronted with a system ill suited to their needs. There are not enough chairs, books, pencils or teachers, let alone more modern teaching materials. For most children, instruction is given in a language they scarcely understand. Not surprisingly, a very high percentage of children in the Malian school system fail. Repetition rates averaged 19% per year in 2002. The pass rate for the sixth grade primary school exam is about 50%; sixth grade students are frequently incapable of decoding even a single sentence in their textbooks.*[131]
>
> -World Bank, 2007

Q: What other things does the school need?

> *We have need for water. We don't have water. That's the number one problem in the school. We also need school materials and books that the kids can read. Also, a pharmacy or first aid kit at the school is very important. Often kids have a headache and are just a little bit sick. If we could give them Tylenol or some other forms of first aid to make them feel a little bit better, they could stay at school which would be better than having them go home sick.*
>
> - Harouna, Primary school teacher in Sana, Mali

Despite school feeding's success in increasing school enrollment and attendance in Mali, the country's education system continues to face major challenges. First, it must be noted that the vast majority of school-aged children—93 percent—are currently not receiving school meals, and thus the benefits of school feeding are limited to a small portion of Malian children. Furthermore, as evidenced by the accounts above, schools in Mali face enormous challenges beyond school meals. Many schools lack access to water, which is a barrier not only to starting a school feeding program, but also to basic sanitation and hydration in the often extreme heat. Many schools lack latrines or even adequate classroom space. A vast majority of schools are in need of school materials—books, pencils, chalk, desks. Mali is experiencing a severe teacher shortage, and teachers who leave mid-year are sometimes not replaced, leaving classrooms without teachers for months. The lack of teachers was actually fueled by World Bank interventions in the 1980s and 1990s. As Penelope Bender et al wrote in a 2007 World Bank evaluation of its assistance to primary education in Mali, World Bank programs that placed additional requirements on teachers had a devastating impact on the number of teachers in the country, an impact which is still felt today:

> The conditionalities these [World Bank] programs contained still affect the education sector and are still negatively perceived by Malians. One of the most disliked measures was the voluntary departure program, through which about 1,000 teachers left the sector, representing about 12.5% of the teaching force…In the early 1990s, the Bank pressed the Government of Mali to limit access to teacher education to high school graduates, but the reluctance of graduates to enter teaching resulted in the near closure of the teacher education program. The GoM recruited contract teachers with little pre-service teacher education and struggled without Bank support to provide

[131] Bender, Penelope et al. "Evaluation of the World Bank Assistance to Primary Education in Mali." The World Bank. Washington, DC: 2007.

them with short-term training. This decreased salary expenditures, but had a major negative impact on educational quality.[132]

While access to primary education has increased considerably over the past decade, many students still do not have access to school. A large number of villages do not have even a primary school within walking distance, and even fewer have a secondary school, requiring students to board in areas outside their home, which is often prohibitively expensive. These conditions have contributed to Mali's low school completion rate that, while more than double the 1997 rate, was just 53.2 percent nationwide for the 2006-2007 school year, and only 35.6 percent among rural populations.[133] These rates are even lower among girls and among children in rural areas. Similar gaps in school attendance growth exist among regions of the country. For example, the gross enrollment rate increased 127.3 percent in the Bamako region, while only 41.9 percent in Kidal. The significant increases in school attendance in the Bamako region mask the much slower increases in the more rural Kidal region when looking at nationwide school attendance statistics. Enrollment rates remain lowest in the most food-insecure regions, where the dropout rate is also highest.[134]

Conclusion

School feeding programs have made a dramatic impact on the communities in Mali they have touched. However, the programs are far from reaching all students in need and are only addressing one of many challenges facing education in the country. The Government of Mali is making a concerted effort not only to expand school feeding programs, but also to address other challenges facing the education system. While still in its infancy, the political commitment made by the Government of Mali is encouraging. If the work goes according to plans, school feeding will expand exponentially through the government initiative, enabling more children to attend school regularly and have access to increased opportunities that come with literacy and math skills. As a mother and the head cook of the school canteen in Sana explained, "We did not go to school and we see that the world is changing. This new world is a world of knowledge, and if you have knowledge the doors of opportunity will be opened to you."

[132] Bender, Penelope et al. "Evaluation of the World Bank Assistance to Primary Education in Mali." The World Bank. Washington, DC: 2007. Page 14.
[133] National Policy for School Feeding in Mali. Ministry of Basic Education, Republic of Mali. May 4, 2008. Page 7.
[134] "School Feeding in Mali." Country Presentation from the Global Child Nutrition Foundation Forum. July 14, 2007. Chicago, Illinois.

Appendix C – Acronyms and Glossary of Terms

AU – African Union

CHC – Congressional Hunger Center

CRF – Consolidated Revenue Fund

CRS – Catholic Relief Services

FAO – Food and Agriculture Organization

FFE – Food-For-Education

GCNF – Global Child Nutrition Foundation

GFN – Global FoodBanking Network

HGSF – Home Grown School Feeding

HGSFHP – Home Grown School Feeding and Health Programme

JAAH – Jordanian Alliance Against Hunger

MDGs – Millennium Development Goals

NSNP – National School Nutrition Programme

PTAs – Parent Teacher Associations

RDA – Recommended Dietary Allowance

RMT – Rancangan Makanan Tambahan

SBMC – School-Based Management Committee

SMP – School Milk Program

SSFP – School Supplementary Feeding Program

THRs –Take-Home Rations

UBE – Universal Basic Education

UBEC – Universal Basic Education Commission

WFP – World Food Programme

WHO – World Health Organization

Appendix D – Schedule of Contacts

EGYPT – Interviewed September 10, 2009

Name	Title	Division
Mr. Ahmed Abd El Hlim Salem	Director General, School Feeding Department	Ministry of Education
Ms. Mona Karraoui	Food for Development Manager	Tetra Pak Egypt Ltd.
Mr. Zeyad Mourad	Marketing Manger Dairy Category	Tetra Pak Egypt Ltd.

SOUTH AFRICA – Interviewed September 14, 2009

Name	Title	Division
Ms. Neo Rakwena	Director, National School Nutrition Program	Department of Education

JORDAN – Interviewed September 30, 2009

Name	Title	Division
Mr. Mohammed Jum'a Okour	Managing Director	Ministry of Education
Ms. Sawsan Al-Fayez	General Coordinator	Jordanian Alliance Against Hunger
Ms. Faten Al-Hindi	Officer in Charge	WFP Jordan

NIGERIA – Interviewed October 17, 2009

Name	Title	Division
Dr. Sunday Ekele Uhiene	Programme Coordinator	Universal Basic Education Commission/NEPAD
Dcn. Deborah Adepoju	Special Advisor to the Governor	HGSFHP, Government of Osun State

MALAYSIA – Interviewed October 21, 2009

Name	Title	Division
Mdm. Zailan Mohd Yusof	Deputy Director	Ministry of Education

Appendix E – Questionnaire for Country Interviews

I. Background

- Do all schools participate in the national school feeding program? If not, how are certain schools targeted?
- How many children participate in your country's school feeding program each school day?
- Please specify all feeding modalities used:
  - ___ Breakfast
  - ___ Snack
  - ___ Lunch
  - ___ Take-home ration (THR)
  - ___ Milk program
  - ___ Other

II. Transition to National Program

- How long have you operated a national school feeding program?
- What events influenced your transition to a national school feeding program?
- What other organization(s) operated school feeding programs in your country before the national school feeding program started? Please list the major organizations.
- What were the major steps in transitioning to a national school feeding program?
- Did you have any special funding to assist with the transition? If so, please state the amount and source of funding.
- Did you have special technical assistance to help with this transition? If so, who provided this assistance? Please describe the assistance given.

III. Institutional Framework

- Which Department or Ministry administers the program? If there is more than one, what are their respective roles and how do they coordinate?
- Does the administrative agency designate a person responsible for the overall administration of the national school feeding program?
- Does the national administrative agency have a monitoring and evaluation process for the national program?
- Who actually operates the program at the local level? What is the role of the provincial/state governments?
- Do other organizations in your country sponsor school feeding programs? For example, provinces/states, local communities, non-governmental organizations, others?

IV. Policy Framework

- Is there a legal basis for the national school feeding program? For example, is there a law, executive order or other written policy pronouncement?
- Briefly describe any major policies associated with the school feeding program.
- What are the objectives of the national policy? Have these objectives been clearly articulated in writing or communicated by government leaders?
- Do any of these objectives link school feeding to local farm production?

V. Program Design

- Does your national school feeding program reflect the legislative priorities?
- Is there a regulatory (or other written procedure) that establishes the program requirements?
- If yes, what kinds of requirements are included in the framework:
  - ___ Nutritional requirements for meals
  - ___ Food procurement requirements
  - ___ Student/school eligibility for meals
  - ___ Community involvement
  - ___ Other
- Are certain students targeted to participate in the national school feeding program? If so, how?
- Are meals planned to meet the recommended daily nutritional requirements?

VI. Procurement

- Are the food items used in the school meal programs linked to local farm production? If so, in what ways?
- Are there federal or provincial requirements for purchasing food from local farmers?
- If so, what is the source of these funds and how are they used?
- Are there provisions for purchasing food from a particular group of farmers?
- Can you estimate what percentage of food used in the school feeding program is grown in the country?
- What percentage is grown within 50 kilometers (30 miles) of the school?
- What is the source of foods procured from other than local farm production?
- Please list the foods most commonly used in school feeding.

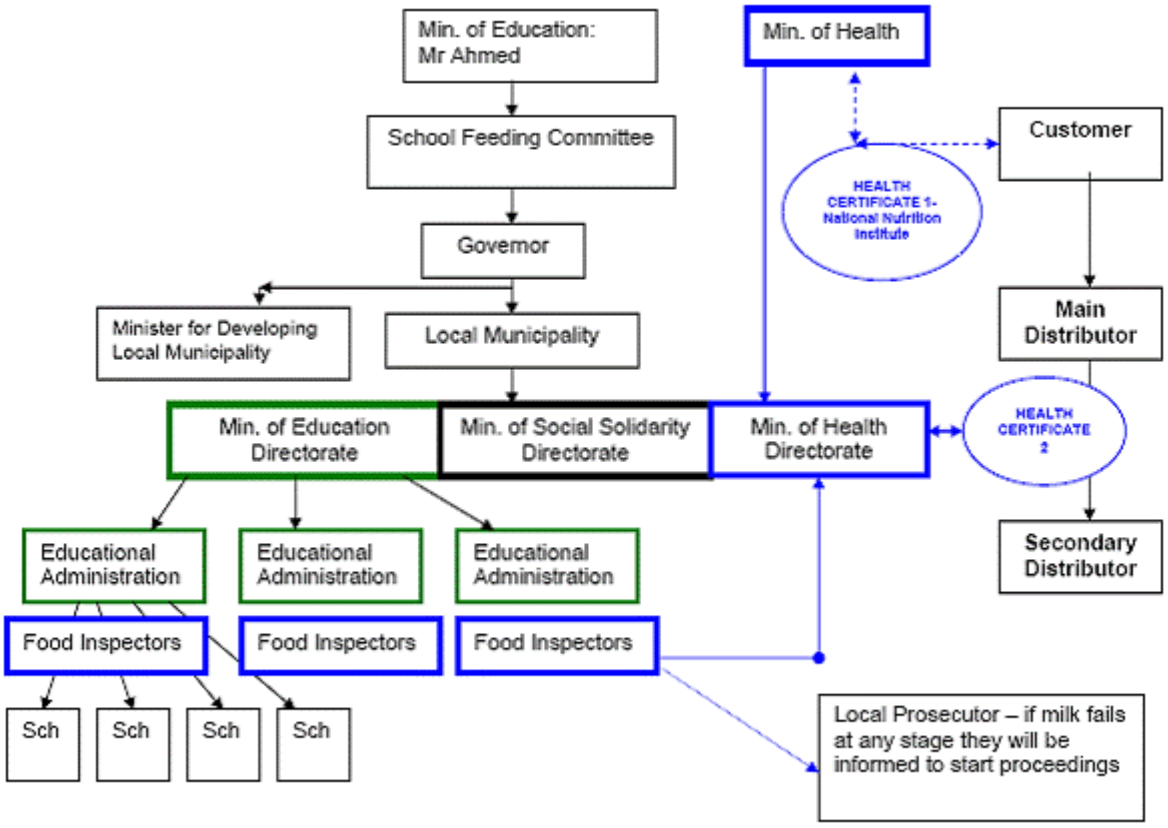
VII. Community Participation and Ownership

- In what ways do local communities contribute to the school feeding program (i.e., through labor, food or cash contributions?)
- Are parents and local stakeholders involved in planning and evaluating the program? In what ways?

VIII. Funding

- What is the current program budget? Has it changed over time? How?
- What is the funding source(s) for your program?
  - ____ Federal government
  - ____ Provincial government
  - ____ Local communities
  - ____ NGOs
  - ____ Private sector contributions
  - ____ Taxes
  - ____ Parental cash payments
  - ____ In-kind
  - ____ Other
- If from federal or provincial sources, where does their money come from?
  - ____ Tax on luxury items
  - ____ Cell phones
  - ____ Sales taxes
  - ____ Airport tax
  - ____ Other
- If from taxes, does the government provide incentives, such as tax breaks on other items or give other benefits?
- How are funds reflected in the national budget (line item or part of larger budget)?
- Does the federal government clearly identify funds to be used for school feeding?
- What department is responsible for the program's financial administration?
- Are federal funds passed on to Provinces and/or local program operators? If yes, how are they allocated or paid?
- Is there an audit process to track whether funds are being used for their intended purpose? If so, who is responsible for such monitoring?
- Have there been allegations of financial mismanagements or "leakages?" If so, has corrective action been taken?
- Do you have a procedure for measuring the cost of the program and/or projecting future costs? If yes, please describe.

Appendix F – Egypt School Feeding Organizational Flow Chart[135]



[135] Source: Egypt Ministry of Education.

Appendix G – Abu Sultan Sweet Pie Factory Press Release[136]

editor **Monitoring Service**

PR , Events & Communications

Country	**:**	Egypt	**Client**	**:**	Tetra Pak
Publication	**:**	Al-Ahram	**Page (s)**	**:**	09
Date	**:**	19/08/2009	**Size**	**:**	5cm. x 3col.
Ad Value	**:**		**PR Value**	**:**	
Classification	**:**				

بدء تشغيل مصنع «أبو سلطان» للتغذية المدرسية العام المقبل

كتب - محمد غانم:

يبدأ التشغيل الفعلى لمصنع التغذية المدرسية بأبو سلطان فى الإسماعيلية مع بداية العام الدراسى المقبل، بطاقة ٥٠٠ ألف وجبة يوميا تقدم طازجة لتلاميذ المدارس الابتدائية وذلك بعد أن انتهت وزارة الزراعة وإستصلاح الأراضى من إنشاء وتشغيل المصنع بتكلفة بلغت ١٣,٢ مليون جنيه. وأكد الدكتور أيمن أبو حديد رئيس مركز البحوث الزراعية والمشرف على المشروع القومى للتغذية المدرسية أنه تم التنسيق مع محافظة الإسماعيلية وجهاز الخدمة الوطنية لإنهاء المشكلات التى كانت تعوق تشغيل المشروع البالغ مساحته ٢٢٦٠ مترا مربعا، على مدى السنوات السابقة مشيرا إلى أن المركز تحمل بالكامل تكلفة الأعمال الإنشائية والبالغة ٤٧,٥ مليون جنيه إلى جانب تكلفة تجهيزه بخطوط الإنتاج والبالغة ٨,٥ مليون جنيه، وأنه تم تدريب العمالة والكوادر الفنية اللازمة للمشروع. وأكد أن طاقة المشروع القومى للتغذية المدرسية حاليا تبلغ ١,٢ مليون وجبة يوميا بإجمالى قدره ١١٢ مليونا خلال العام الدراسى، وينتجها ١٢ مصنعا وفرت نحو ٥ آلاف فرصة عمل للشباب فى ١٠ محافظات بعائد مجز.

- The school meal factory in Abu Sultan in Ismailia Governorate will begin operating in the next academic year with total capacity of 500 thousand meals that will be presented fresh to primary students.
- This came after the Ministry of Agriculture and Land Reclamation established the factory with total cost that reached EGP 13.2 million.
- Dr. Ayman Abu Hadid, the Chairman of the Agriculture Research Center and the Supervisor of the National Project for School Meals, said Ismailia Governorate and the National Service Authority coordinated their efforts to solve the problems that were hindering the operation of the project, whose total area is 2,260 square meters, over the previous years.

[136] Source: Tetra Pak Egypt Ltd.

- The center paid the total cost of the establishment of the project that reached EGP 47.5 million and that of equipping it with production lines that reached EGP 8.5 million, he added.
- Workers and technical personnel received training, he pointed out.
- The capacity of the National Project for School Meals is 1.2 million meals daily to make a total of 112 million meals in the academic year produced by 12 factories which provided 5,000 job opportunities in ten governorates with a good reward, he pointed out.

Appendix H – Egypt Milk Tender Agreement[137]

Egypt Tender Document: Central Department Ministry of Education Guidelines
Sent to all 27 governorates

Title: Tender specification for the flavoured school milk programme for UHT Long-life milk, for tender of school year 2007/2008

Target beneficiary group: pre-schoolers + kids at primary schools and preparatory schools in rural areas and the neediest areas in each directorate of education.

Nutritional value:

- fat, lactose, protein, energy, vitamins, minerals
- all according to Egyptian specifications 1641 (2005)

General Milk specification:

1. 100% natural cow milk
2. it must be served in 150 – 200 ml servings, depending on budget of each governorate
3. must be flavoured (chocolate, strawberry or banana)
4. Fat content 1.5%, non-soluble fat content 8.25%
5. All in accordance to 164. Must be UHT aseptically treated to keep its natural specification
6. Milk should be free from microbes, poisons and veterinary medicines (antibiotics), detergents, preservatives or colorants; under normal allowed ratios.
7. if there are any pesticide residues, it should be within Egyptian specifications and CODEX.
8. heavy metal particles must be within Egyptian specifications No. 2360
9. Acidity should not exceed 0.25% calculated as lactic acid
10. validity of milk should not exceed 6 months from production date (taken into consideration storage conditions)
11. natural sugar ratios in final product must not exceed 5% of weight (calculated as a transformed sugar).
12. the milk must be packed in suitable healthy packs that can preserve its content and does not allow light, gas penetration, and which does not affect it's quality or validity for human consumption. The producers name, date of production, type of product, validity, weight, "Specially for school feeding programme – not for sale", nutritional facts and it should be in Tetra Pak packages in accordance with Egyptians Standardisation authority.
13. packs should be in a tray or shrink which explains on it handling and storage guideline.
14. It must be produced in SMP approved dairies [Greenland, Enjoy, Juhayna, Adafco, Domiataya]
15. Delivery will not be valid before receipt of orginal (stamped) health certificate from closest health dept to dairy.

[137] Source: Tetra Pak Egypt Ltd.

16. all costs relating to sampling and testing by NNI will be borne by the dairy, and should not be part of delivered quantities.
17. eighteen18 samples maximum for each delivery can be taken for sampling
18. MOE should follow up the handling of the SMP inside the schools to serving to kids – to ensure food safety. This should happen on a weekly basis.
19. If there are any blown packages found as a result of handling, it should be immediately isolated and replaced by the supplier. These blown packages are not available for laboratory analysis.

Fines & Penalties (percentage refers to % from that delivery)

1. 10% fine if the plan is not followed by the supplier and if there is a delay of more than 1 week, the fine will be doubled. If no health certificate, unethical treatment of the supplier to employees, if not written on pack fat content, NSF, net weight, commercial logo, type of milk, storage conditions and handling, "specially for school feeding - not for sale".
2. If there is a deficit in weight – fine of 25% from price of meal
3. if fat content is not accurate (1.5%) or NSF (8.25%) there is a fine of 50% of the meal price
4. 100% fine if non-delivery

School milk programme will be stopped with 40% fine if:

1. if the milk is not according to Egyptian standards
2. if there are microbes, poisons, vet products, pesticides, antibiotics over recommended levels
3. if the milk has exceeded expiry date at delivery
4. if the milk has different nutritional value or is unfit for human consumption

If fines will be imposed, there will be legal proceedings imposed by the school feeding committee at the legal department of the governorate. The fine should be proved through a document stating its legal status and a letter should be sent to the supplier with the clear reasons of penalties and fines.

Names of Higher Committee

Minister Health
Ministery Education - Fawzi
Social Solidarity
Industry

Appendix I – Jordan Concept Paper[138]

Enhancing School Feeding Program of the Government of Jordan

1. Background

The economic growth in Jordan has been steadily moving forward at an average of 7 percent over the last five years. Jordan's eligibility indicators place the country among the better off counties were WFP is operational. Nevertheless, Jordan's fragile economy and weak resource base, put these achievements on the stake, and jeopardizes economic and social growth. The National Agenda sets out the developmental priorities for the country and identifies Poverty reduction, education and enhancing food security as cross cutting issues.

In 1999, the government launched a universal School Feeding Program (SFP) aiming at providing meals to all public school children at the age group 6-12 around the country.
The objectives of this program go beyond improving education and enrollment. The SF program is recognized as an integral component of the overarching safety net program. WFP's latest food security survey demonstrated this fact in figures and showed clearly that the level of food security is directly related to the educational level of households.

The government is currently providing meals for over 530,000 children, and is planning to reach 610,000 by the coming few years.[139] The program, which is implemented by the Ministry of Education (MoE), since WFP phased out in 1998, is considered a major buffer against potential drop outs attributed to hunger. In 2008, almost 4 percent of the families in the poverty packets had to withdraw their children from schools as a direct result of food price increase.[140] There is general recognition that school feeding has helped to increase enrollment and attendance, to improve children's capacity to concentrate and assimilate information by relieving short term hunger and to contribute to both the improvement of children's nutrition and possibly their academic performance. Recently, the Jordanian Alliance Against Hunger (JAAH) has proposed to provide school meals for 45,000 schoolchild with direct support from the Global Food Bank for three years.

The government has so far succeeded in fulfilling the targets in terms of number of children covered and quantities of food distributed. However, the

[138] Source: WFP Jordan.
[139] Meeting with the Ministry of Education, 2009.
[140] Food Security Survey in the Poverty Packets in Jordan, WFP, 2008

GoJ has requested WFP's assistance in enhancing and fine tuning its universal (SFP) in order to address the broader issues of food insecurity and the nutritional status of children who are at risk of dropping out due to poverty.

2. Literature Review

School feeding studies in Jordan still lack. After reviewing the literature, few relevant studies were found.

In 2002, a sample of 1,023 school children were randomly selected from seven disadvantaged areas around the country and tested for stunting, anemia and vitamin A deficiency as baseline for the study. The results came with 19.9% prevalence of stunting, 18.8% for anemia and 21.8% for subclinical vitamin A deficiency. The subject children received a daily snack meal over 9 months and one vitamin A capsule immediately before the final assessment. Dietary and capsule supplementation had a significant positive impact only on serum retinol levels and on the anemia indicators. The study revealed that vitamin A deficiency among schoolchildren is a public health problem, and that the situation is anticipated to be more profound among preschool children, who are usually at greater risk of becoming deficient.[141]
In 2006, Jordan Food and Drug Administration (JFDA) conducted a study to assess the impact of (SFP) on nutritional indicators of school children. The impact of the school meal was assessed through measuring the level of Hemoglobin, Serum Ferritin (used to estimate iron stores), Folic Acid, and Vitamin B12. Two random samples representing children receiving school meals and children not yet enrolled in the program. All results came within the normal range. Nevertheless, test results of school children receiving meals were significantly better except for the Hemoglobin level.[142]
A recent survey on food security in the poverty packets revealed that educational level had a direct relationship with food security. Families with higher educational levels enjoyed higher levels of food security than less educated families. Another finding demonstrated a rather worrying fact; that almost 4% of the families had to withdraw their children from school because of hunger.[143]

3. Findings of WFP mission on the (SFP)

The MoE has been running the program since 1999. Since that time, a lot of improvements were accomplished at all levels in terms of administration,

[141] Khatib IMD. High prevalence of subclinical vitamin A deficiency in Jordan: a forgotten risk. Food and Nutrition Bulletin, 2002, 23 (Suppl 3):228-236.
142 Jordan Food and Drug Administration, Study of the impact of school feeding program on the nutritional indicators of the public schools children, 2006
143 Food Security Survey in the Poverty Packets in Jordan, WFP, 2008

distribution, and many other areas. Nevertheless, during WFP field missions to schools, as per a request from the MoE, a number of areas were identified for potential improvement and support, namely:

- Food handling and warehousing conditions, in some locations, lacks and does not meet the minimum standards. It was also obvious to notice the lack of capacity to inspect the damaged food by school's staff. Appropriate management and monitoring practices should be adopted to ensure that all food items are safeguarded until distribution to children.
- The current monitoring is focusing only on quantity received and distributed, and number of children received the meals. The intention of a good monitoring system is to gather information that will help program administrators and participants to assess program operation. Such monitoring would ideally lead to the identification of bottlenecks in program operation and to suggestions of areas for improvements.
- Evaluation of the impact of the project lacks. The missing part of the evaluation entails looking at the impact of the program on children's lives, specially learning or school performance, in addition to nutritional status of the children. The purpose of evaluation an on-going program is to explore what the effects of the program have been, to review how things have changed since the program has been in operation and to determine if the program has made a difference.
- Advocacy was identified as another area that requires more attention. A recent survey on food security in the poverty packets revealed that only 30% of the families with children at schooling age reported on receiving school meals, while all schools in the subject areas are under the SFP. This is mainly attributed to lack of information dissemination and advocacy campaigns.

4. Objectives

The SFP was launched in 1999 with an objective that doesn't stop at improving education and enrollment only. The SFP goes beyond that, and is recognized as an integral component of the overarching safety net program. WFP's latest food security survey demonstrated this fact in figures and showed clearly that the level of food security is directly related to the educational level of households. The survey also revealed that almost 4 percent of the families in the poverty packets had to withdraw their children from schools as a direct result of food price increase.

The overall objective of this project is improving the capacity of the MoE in managing the SFP in terms of monitoring, evaluation, food handling, storage, and advocacy.

5. Activities and timeframe

A number of activities were mutually agreed upon with the MoE. These activities are foreseen to improve the SFP in the areas that were identified by WFP. The activities are:

1. Detail a 7-10 days consultancy to review the existing M&E practices and help design/establish an upgraded M&E system for the newly instituted universal SFP at the MoE.
2. Support advocacy/public information campaigns to raise public awareness on child's nutrition and health.
3. Organize a study tour for 10 main staff members at MoE for 3 days to get familiarized with benefits from successful SF experiences in the region.
4. Support conducting 6 training of trainers (ToT) workshops (2 days each) for 80 SFP supervisors on SF logistics and management.
5. Detail a 7 day mid term evaluation consultancy to assess efficiency and overall progress of the SFP operations.

Proposed Timeframe*

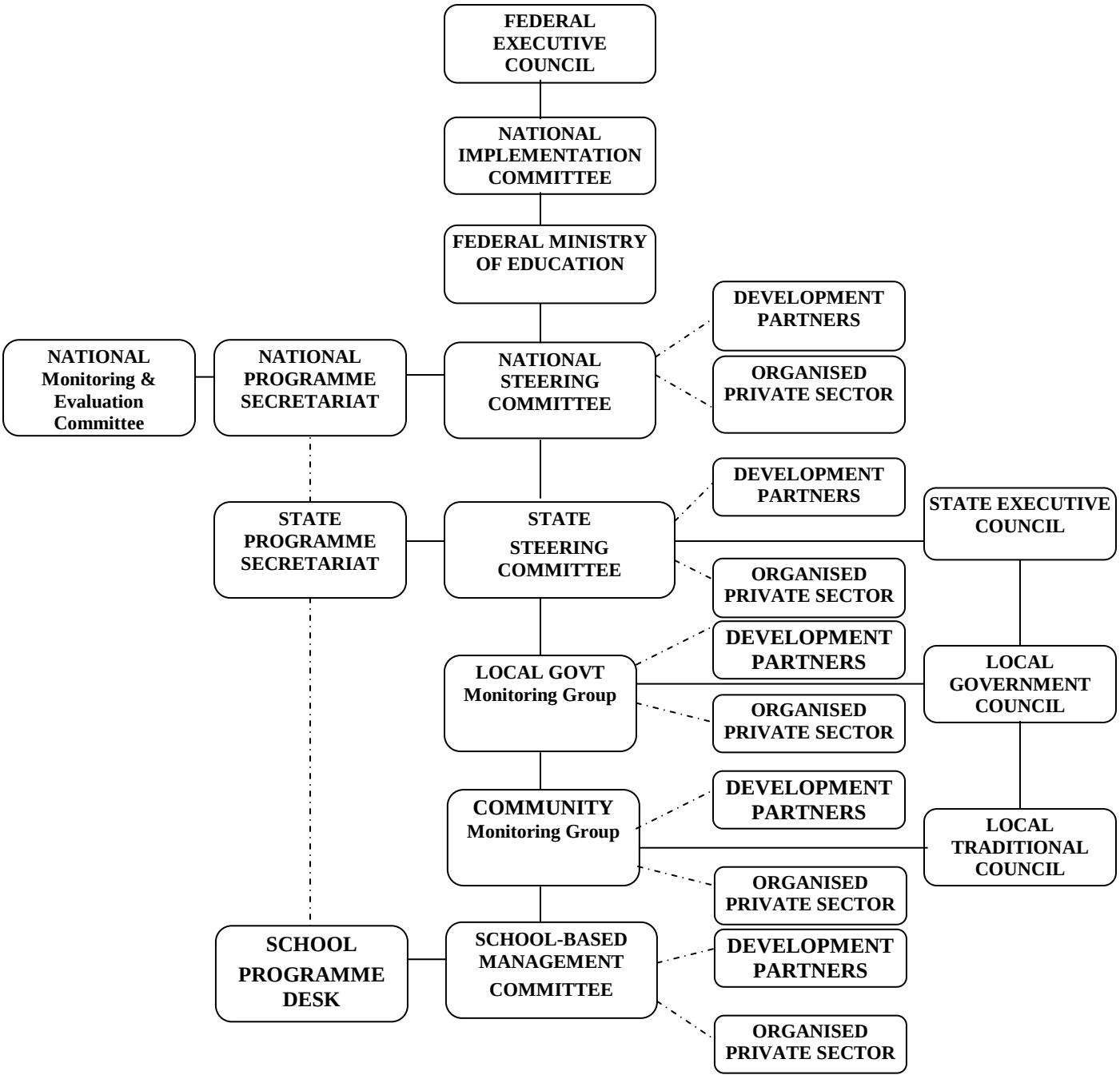
Month	**Jan 10**	**Feb 10**	**Mar 10**	**Apr 10**	**May 10**	**Jun 10**	**Jul 10**	**Aug 10**	**Sep 10**	**Oct 10**	**Nov 10**	**Dec 10**
School Calendar	Winter Holliday	2nd Semester					Summer holiday		1st semester			
Activity 1			7 -10 days as agreed									
Activity 2	Open (continuous media plan)											
Activity 3												
Activity 4												
Activity 5												

* Official holidays and Ramadan to be considered (this is a tentative timeframe)

Annex I: Project Log-frame

Expected Outcome(s)	**Performance Indicator(s) and Target(s)**
Improved MoE capacity in handling the (SFP) to address the broader issues of food insecurity and the nutritional status of children	A set of assistance modules is implemented through enabled staff and improved system.
Expected Output(s)	**Performance Indicator(s) and Target(s)**
The MoE is enabled to asses its performance by adapting an improved monitoring and evaluation system.	An improved School Feeding M&E system in place. Advanced reporting and tracking system in place.
SF supervisors at MoE and directorates of education, enabled to train SFP staff around the country on efficient running of the SFP.	Number of ToT conducted. Number of SF focal points trained on efficient running of the program.
Advocating for the SF program and enhancing public awareness on the importance of the school feeding and its value to the children.	Number of advocacy/public information campaigns.
MoE concerned staff are enabled to capitalize on "best practices" in (SFP)mes elsewhere.	Number of staff participating in external study tours.
MoE are enabled to better measure the efficiency of the new M&E system in monitoring, reporting and assessment of the results of the universal SFP after a number of years of start-up,	Timely mission to assess the overall progress of the SFP operations.

Appendix J – Nigeria HGSFHP Organizational Flow Chart[144]



- **National Implementation Committee:**
  SGF, HME, HMARD, HMH, HMWR, HMEnv, HMF, HMINO, HMD, HMI, HMWA, HMSPIGYD, Economic Adviser to the President, SSAs to the President on MDGs, NEPAD, SA to the President on Food Security, with **SGF** as Chair and PSE as Secretary. Co-opted members Chairman ETF, Executive Secretary UBEC, NC NAPEP, DG SMEDAN

[144] Source: Nigerian Universal Basic Education Commission.

- **National Steering Committee:**
  FME, Presidency, UBEC, ETF, FMARD, FMOH, FMEnv, FMWR, FMINO, FMI, FMWA, FMF, NPC, MoD, NYSC, SMEDAN, NAPEP, NAFDAC, NEPAD, Nutrition Society of Nigeria, Reps. of Development Partners, Organised Private Sector and Civil Society Organisations with **PSE** as chair and National Programme Officer as Secretary.

- **Donor Agencies/Development Partners**

- **Organised Private Sector**

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