#### **CHAPTER 3**

## Food Basket and Food Sources

A diverse menu, containing food items with essential micro- and macronutrients, is an important component of any school feeding program. The content of food baskets is presented in Figure 10. Some items, including grains/cereals, oil, salt, and legumes/ nuts were found in almost all programs, while others (such as eggs, meat, and poultry) were found in 40-50% of the programs. School menus were often designed with input from nutritionists. In Honduras, the menu varies by geography; in some parts of the country, children received only dry rations, while elsewhere they also received perishable products (dairy and fresh fruits and vegetables). School menus in Brazil and Colombia also accounted for some regional dietary differences.

The typical school meal menu varied across programs in low income and high income settings (Figure 11). While programs in all countries tended to serve grains/cereals, there was considerable dispersion across income groups when it came to the share of programs that served green vegetables (with a difference of 44 percentage points between high and low income countries) or meat (with a difference of 64 percentage points). While 100% of programs in high income settings served dairy products, this value was 78%, 39%, and 20% in upper middle, lower middle, and lower income settings, respectively.



## Food basket diversity increased with rising wealth.

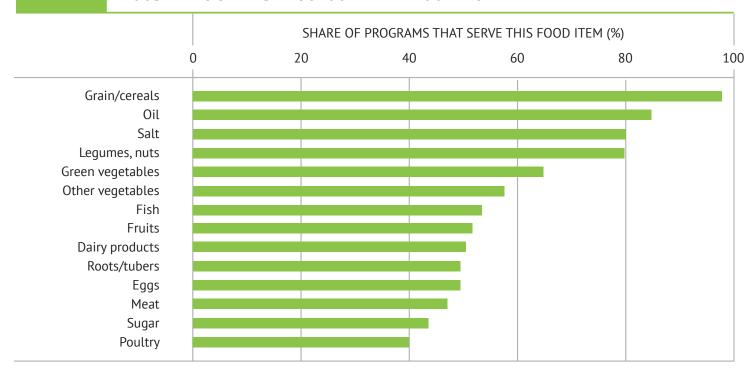
Out of 14 broad food categories (eggs, dairy, fruit, etc.), the food baskets of school meal programs contained an average of seven categories (Figure 12). As expected, this diversity measure increased with rising wealth and also varied across different regions. The highest average value of 10 categories was found in Latin America & the Caribbean region. The National School Feeding Program of Brazil (Programa Nacional de Alimentação Escolar (PNAE) specifically served "unconventional crops." Programs in the South Asia, East Asia & Pacific region served an average of eight food categories, while those in Sub-Saharan Africa served an average of six. The lowest diversity tended to be found in the Middle East & North Africa, with an average of four food categories in the food basket. Several of these countries, including Egypt and Libya, served date-filled bars/ pastries as an in-school snack. This has implications for menu planning if school meal programs in the Middle East also have nutrition goals.

The contents of a school meal program's food basket tended to vary by the modality through which children received food. In 95% of programs that served in-school meals, the meal included grains (Table 4). The least common components of school meals were meat and poultry. In-school snacks—which take the form of school milk programs in Fiji, Portugal, Rwanda, Sri Lanka, and Thailand—included dairy on 53% of the snack menus. The most common components of take-home rations were grains or oil.

<sup>16</sup> A parallel analysis of the school feeding menu at the country level, inclusive of 20 additional desk review countries, is provided in Figure A1 in the Annex A.

FIGURE 10

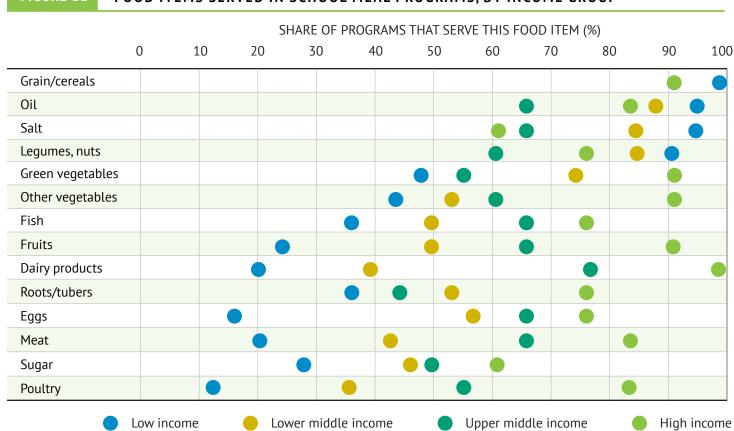
#### FOOD ITEMS SERVED IN SCHOOL MEAL PROGRAMS

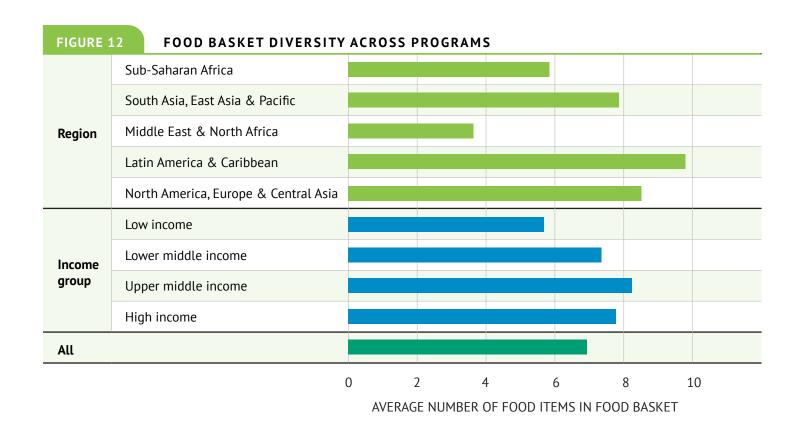


Note: Because sugar is commonly included in many food items, such as baked goods, fruit "juices", and sauces, it is likely that the inclusion of sugar on school meal menus is underreported.

FIGURE 11

#### FOOD ITEMS SERVED IN SCHOOL MEAL PROGRAMS, BY INCOME GROUP





### TABLE 4 FOOD BASKET CONTENTS AND MODALITY OF FOOD DELIVERY

	% OF PROGRAMS (BY MODALITY) CONTAINING FOOD ITEMS					
Food Item	In-school meals	In-school snacks	Take-home rations			
Grain/cereals	95	71	85			
Oil	89	29	60			
Legumes, nuts	80	35	35			
Salt	72	18	25			
Dairy products	35	53	10			
Green vegetables	47	24	20			
Other vegetables	46	24	15			
Other	30	35	15			
Roots/tubers	46	18	15			
Fish	41	18	15			
Eggs	38	24	10			
Fruits	34	24	10			
Sugar	36	18	10			
Meat	39	18	5			
Poultry	32	12	5			

Observations: In-school meals (113), in-school snacks (17), take-home rations (20)

The most common avenue through which school meal programs procured food was through domestic purchase, with 82% of programs accessing some food through this avenue (Figure 13). (Note that this value does not capture the amount of food procured through these channels but is rather a count of whether these channels are used at all). The next most common avenue was the receipt of in-kind donations from within the country (in 42% of programs), followed by in-kind donations from other countries (in 38% of programs). Foreign purchases were the least common procurement choice (in 28% of programs). It was rare for programs in higher income settings to receive in-kind donations, particularly from foreign sources. In contrast, 48-50% of programs in low income and lower middle income settings did. Across regions, the Middle East & North Africa were most likely, at 57% of programs, to have secured some food through in-kind foreign donations.

In-kind donations from foreign countries tended to come from faraway countries (in 78% of programs) rather than nearby countries (which occurred in 25% of programs that received such donations)<sup>17</sup>. In-kind donations from domestic sources tended to come from within the local community (in 78% of cases), often taking the form of parents supplying ingredients to their children's schools. Thus, parents in Laos, Liberia, and Senegal (among other countries) contributed condiments for school meal preparation. In 23% of programs that received in-kind donations from within the country, this came from private businesses. For example, the National School Nutrition Program (NSNP) in South Africa was supplemented by private sector (in-kind) investments in school breakfasts.

FIGURE 1	SOURCES OF FOOD FOR SCH	OOL MEAI	PROGRAM	S		
Region	Sub-Saharan Africa					
	South Asia, East Asia & Pacific		00			
	Middle East & North Africa				•	
	Latin America & Caribbean				•	
	North America, Europe & Central Asia					
Income group	Low income			••		
	Lower middle income					
	Upper middle income	••			•	
	High income					
All				•		
				40 RE OF PROGF		80 10
In kind (domestic) In kind (foreign) Purchased (domestic) Purchased (foreign)						d (foreign)



# 76% of programs that purchased any food procured at least some food locally.

Among the school feeding programs that purchased any food, 76% procured at least some of the purchased food from within the local community.<sup>18</sup> Overall, across the 110 programs that could provide a numeric estimate of the share of food procured through various channels, an average of 36% of food seemed to be locally purchased. 19 In Egypt and Syria, in-country processors produced baked goods for school snacks. There was a strong emphasis on engaging with small-scale family farms in Brazil, with a requirement that 30% of the food for the National School Feeding Program be purchased from local sources. Similarly, in Guatemala and Honduras, 40-50% of food for the school meal programs must be purchased from family farmers. Local procurement was also highlighted in programs across Sub-Saharan Africa. In the National School Feeding Program of Mali, 95% of the food was purchased from local sources (generally within the community). In the Home-Grown School Feeding Program in Ethiopia and the National School Feeding Program in Burundi, food was procured from smallholders through competition among farmer cooperative unions. In the Mary's Meals Program in Malawi, maize and soy were procured from smallscale farmers, and the corn-soy blend included in the food basket was then processed in-country. Domestic purchase, primarily from local farmers, and the domestic origin of supplies were also highlighted in Namibia and Nigeria.

At the same time, challenges around local procurement were often raised by the survey respondents. The Home-Grown School Meals Program in Kenya reported local procurement of agricultural products to be particularly challenging in arid regions (where the program operates). Similarly, in Mauritania, the School Feeding Program operates in food insecure and vulnerable areas where there is little or no agricultural production, and this is precisely where purchasing from local farmers may not be an option. In Guatemala and Brazil, procurement from family farmers is limited by their productive capacity, and in Liberia, it was noted that there is limited production even at the national level to meet school feeding needs. In Malawi, the dependence on rain-fed agriculture, combined with a once-a-year growing cycle, presents a challenge to produce a consistent food supply for the school meal programs. In addition to domestic sources, purchases also came from nearby countries

<sup>&</sup>lt;sup>17</sup> In the glossary that accompanied the survey, a faraway country is defined as a country that is not readily accessible, and/or does not share a border with this country, and/or is not considered to be in the same economic community or "neighborhood." The glossary can be found in Annex C.

 $<sup>^{18}</sup>$  In some cases, as in Nepal, schools buy food in local markets, though it may not have been locally produced.

<sup>19 &</sup>quot;Local" here refers to an administrative level more narrowly focused and localized than regional (state/province), hence at the district, county, municipality/town, or community level

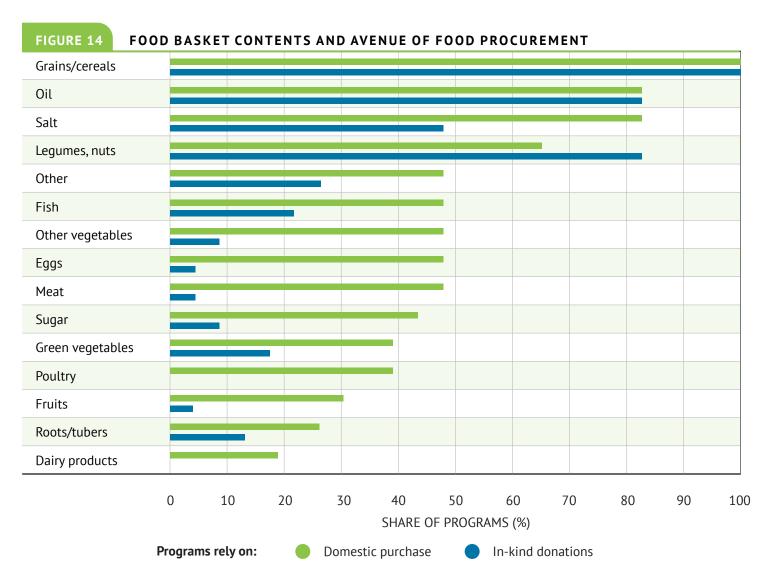
(in 15% of programs that purchased any food) or faraway countries (in 26% of cases).

Across programs that purchased food, 77% employed open-bid procedures in procurement, and among those that did, small farmers or companies were given preferential treatment in 34.5% of cases. This was most common in the Latin America & Caribbean region and the South Asia, East Asia & Pacific region (at 42-44% of cases). In Côte d'Ivoire, the Integrated Program for Sustainable School Canteens gave preferential treatment to smallholder farmers in the process of procurement, and much of the food for the program was sourced from women's groups. At the same time, in 16% of cases, small farmers or small companies seem to be effectively excluded from competing or being selected to provide for school meal programs. For example, in the National School Lunch Program of Laos, although this program uses a competitive tendering process for procuring food items, smaller companies have tended to be unsuccessful at competing for bids (according to the survey response).

The contents of a school meal program's food basket tended to be correlated with the avenue through which food was procured. Among the programs captured in this survey, 25 programs relied on domestic purchase as defined by drawing at least 70% of food through purchase and purchasing only from domestic sources (including from local communities but also from within the region or elsewhere in the country). Fifteen other programs obtained food through a very different mechanism, namely by relying on foreign in-kind donations. In this exercise, reliance on foreign donations is defined as drawing at least 70% of food through in-kind donations, at least some of which came from "faraway" countries.

The food basket contents across these two categories are presented in Figure 14. Menus tended to include a greater diversity of food items when food was procured through domestic purchase, rather than foreign in-kind donations. A majority of programs in both categories included grains and oil, and programs that relied on foreign in-kind food donations were more likely to include legumes (perhaps in the form of corn-soy blends). However, it was much more common for the menu in programs that relied on domestic purchase to include green vegetables (39%), fish (48%), meat (33%), poultry 39%), and eggs (48%), among other items. In contrast, the menus in programs that relied on foreign in-kind food donations tended to be more limited, with few programs including green vegetables (17%), fish (22%), meat (4%), poultry (0%), or eggs (4%). These two program categories are not exhaustive, and others that received some in-kind donations but did not rely on them tended to have menus similar to those that relied on domestic purchases. Nevertheless, it seems that reliance on foreign food donations is correlated with having a less diverse school meal menu.

A number of programs reported on recent, ongoing, or anticipated transitions toward a home-grown school feeding approach to food procurement. The Namibian School Feeding Program (NSFP) aims to broaden its food diversity through a new home-grown school feeding model, and the Traditional School Feeding Program in Cambodia is also in the process of transitioning toward local procurement from Cambodian farmers. The Home-Grown School Feeding Program in Cambodia procures 80% of commodities from within the commune (comprised of approximately 7-10 villages) and is managed at the school level by school staff and local authorities. In Guinea-Bissau, the school meal program began in 2000, and the purchase of local agricultural products for the canteens was introduced in 2014. Liberia also listed among its recent positive developments a shift in priorities in favor of home-grown school feeding by development partners and the government.



Observations: Programs that rely on domestic purchase (25) or foreign in-kind donations (15)