
School Meal Programs Around the World

Results from the 2021 Global Survey
of School Meal Programs ©

Executive Summary



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BACKGROUND

School meal programs—in which students receive meals, snacks, or take-home rations—reach children throughout the world. Numerous studies have documented their positive effects on children’s nutrition, physiological development, and academic performance. Yet despite their prevalence and evidence of impact, the data available on large-scale school meal programs have historically been fragmented and inconsistent. A lack of common vocabulary has made it difficult to discern trends over time or compare school meal activities across different settings. Advocates, policy makers, analysts, and practitioners have all confronted the same challenge: a scarcity of comprehensive and standardized information on school meal programs.

The Global Child Nutrition Foundation (GCNF)—supported by an array of international partners and partially funded by the U.S. Department of Agriculture—has sought to address this oversight through the Global Survey of School Meal Programs ©.

The goals of the survey are:

- To fill a critical knowledge gap by creating and maintaining an up-to-date global database of standardized information on school meal programs, covering a wide set of related sectors and activities.
- To track progress over time; to direct efforts to the areas of greatest need; to support investments based on deeper knowledge; and to enable stakeholders to better advocate for resources.
- To share and compare information across programs and countries; to make data available for school meal partners and donors; and to provide data for relevant research.

The survey solicits detailed information from national governments on all large-scale school meal programs within their country. Topics include (among others):

- School meal program coverage and the characteristics of beneficiaries
- Food items provided
- How food is procured and distributed
- Complementary health and sanitation interventions
- Sources and amounts of funding
- The role of government in program management and operations
- Links to local agriculture, engagement with the private sector, and job creation
- Impacts of the COVID-19 pandemic (added in 2021)

2019 Global Survey of School Meal Programs

The Global Survey of School Meal Programs was first launched in 2019 with participation from 105 countries. Results from the 2019 survey are detailed in “School Meal Programs Around the World: Report Based on the 2019 Global Survey of School Meal Programs,” accessible at www.gcnf.org.

In the 2019 survey round:

- An evolving school feeding vocabulary was made concrete in a glossary of definitions and used—in seven languages—in the survey questionnaire.
- A standardized process of global data collection was established and successfully implemented.
- A framework was established for an ongoing discussion of indicator construction for school feeding.
- A public database and survey report were made available, comprising thousands of data points related to school feeding and providing detailed country- and program-level data that are comparable in content, format, and timeframe.

2021 Global Survey of School Meal Programs

Data collection for the second survey wave took place from July 2021 to March 2022. The survey captured information for the school year that began in 2020—a year that was at least partly, if not wholly, affected by the COVID-19 pandemic. GCNF received a survey response from 134 national governments, along with three third party submissions. For two additional countries, there was enough publicly available data from government sources to enable their inclusion in the database. Thus, 139 countries—representing 81% of the world's population—are included in the database. Of these, 125 countries had at least one large-scale school meal program, together providing information on 183 programs.

In the 2021 survey round:

- The overall response rate from governments, predicted to be much lower due to the toll taken by the COVID-19 pandemic, was higher than in 2019.
- The terminology and data collection process were well accepted by survey respondents and implementing partners who had been involved in the first round.
- The results can be compared against the 2019 baseline. The 2021 survey and subsequent survey rounds will allow for tracking changes over time and assessing the impacts of shocks.

The survey has been used to create a set of short, colorful country reports that document, in a standard format, the status of school meal programs in each country in the database. These are available at www.survey.gcnf.org/country-reports/.

Results

Coverage of School Meal Programs & Characteristics of Beneficiaries

Across the 139 countries in the 2021 database, at least 330.3 million children received food through school meal programs in the school year that began in 2020. The aggregate coverage rate—or the share of all children of primary and secondary school age that received food through school meal programs—was 27%. While 8% of school age children in the Middle East/North Africa benefited from school meal programs, this value was 16% in Sub-Saharan Africa, 26% in South Asia/East Asia/Pacific, 47% in Europe/Central Asia/North America, and 55% in Latin America/Caribbean. The aggregate school feeding coverage rate also rose with higher levels of income. While 10% of school age children in low-income countries benefited from school meal programs, this value increased to 27%, 30%, and 47% in lower middle-income, upper middle-income, and high-income countries, respectively. These disparities underscore how school feeding coverage is lowest precisely where needs are likely to be greatest.

The coverage rate for primary school age children was considerably higher than for other ages, and it was particularly uncommon for children of pre-school or secondary school age in low-income countries to benefit from school meal programs. Given the importance of both early childhood development and adolescent nutrition, this points to a serious gap in coverage.

The survey also collected retrospective information on the number of children that received school meals three years earlier. Among the countries that could provide this historical information, 43% reported an increase in the number of children reached through school meal programs, while 27% reported a decrease and the remaining countries saw no change. These figures were especially striking in Sub-Saharan Africa, where 71% of countries reported a substantial increase in the number of children benefiting from school feeding activities.

Characteristics of School Meal Programs

Almost all (93%) of the 183 school meal programs reported an objective to meet the nutritional and/or health needs of students. Meanwhile, just 35% of programs reported a goal to prevent or mitigate obesity, with programs in high-income countries (70%) far more likely to incorporate this focus than those in lower middle-income (16%) or low-income countries (5%). The potential for school meal programs to be employed as a strategy to combat obesity is evidently less recognized in lower-income settings where concerns of undernutrition remain salient, even as rates of obesity are rising. At the same time, programs in lower-income settings were more likely to report an objective to meet agricultural goals, likely reflecting the significant role of agriculture in less industrialized economies.

School meal programs exhibited a wide diversity of approaches to targeting beneficiaries. Some directed resources geographically towards areas with high levels of poverty, food insecurity, and malnutrition. Other programs targeted students based on their individual characteristics, such as household income or membership in a marginalized group. Still others opted for universal targeting, whereby all students in a given school or grade level were designated to receive school food.

In-school meals, served by 80% of programs, were again the most common modality for food delivery in 2021. However, the share of programs that provided take-home rations had risen sharply from 25% in 2019 to 39% in 2021. This shift likely reflected efforts to adapt to pandemic-related school closures. In-school snacks, served by 29% of programs, were the third most common modality.

Food Basket and Food Sources

The school menu—or the contents of the “food basket”—is a fundamental element of any school meal program. Grains/cereals was the most common food category (served in 87% of programs), followed by oil (78%) and legumes (75%). Fruits and vegetables (63-65%) were less common, and animal-source foods were served least often—though there was a high degree of variation across income groups. Poultry, for example, was served in 69% of programs in high-income settings but just 5% of programs in low-income settings. The gap was even larger for fruits, which were served in 97% and 22.5% of programs in high- and low-income settings, respectively—a difference of 74.5 percentage points. In high-income settings, children received an average of 8.3 different food categories, while this value dropped to 7.1, 6.5, and 5.2 in upper middle-income, lower middle-income, and low-income settings, respectively. Across regions, this value was greatest in South Asia/East Asia/Pacific and least in Sub-Saharan Africa.

Reflecting their emphasis on nutrition-related goals, 80% of programs in low-income settings served fortified food products, such as grains/cereals, oil, and salt fortified with vitamin A, iron, and iodine (among other fortificants). The share of programs serving such foods dropped to 72%, 42%, and 21% in lower middle-income, upper middle-income, and high-income countries, respectively. A similar pattern was seen for biofortified foods and micronutrient supplementation, features that were predominantly or exclusively present in lower-income settings.

Given the many linkages between nutrition and other aspects of health, the survey also gathered information on complementary programs and services offered in schools. A large share of programs (87%) incorporated food and nutrition education, and 68% were paired with school gardens that served as both a source of fresh food and an avenue to learn about agriculture. Respondents also cited the presence of several other complementary programs or services, including hygiene education, deworming treatment, and testing for anemia.

Across all regions and income groups, market purchases were the most common method through which school meal programs procured food. These purchases primarily occurred in domestic markets, though 38% of programs purchased at least some food from foreign countries. In-kind contributions from foreign and domestic settings were much less common at 23% and 21%, respectively, and were primarily reported by programs operating in low-income and lower-middle income countries.

In the 2019 survey, many countries had recounted an effort to shift toward local purchasing. In the 2021 survey, programs were considered to rely on domestic production if they drew at least 70% of the value of their food from domestic sources and if farmers (or farmer organizations) sold directly to the program or the schools. Such programs were more common in low-income or lower middle-income settings, with 29% of programs in Sub-Saharan Africa meeting this definition. Programs that relied on domestic production served, on average, a greater diversity of foods than programs that relied on in-kind donations from foreign sources. This provides suggestive evidence that domestic procurement—and engagement with farmers—is associated with more diverse and healthier food baskets.

Funding and Costs

Detailed budget information was provided for 87% of the programs and 80% of the countries (with some countries presenting partial budget data for some, but not all, of their programs). Across the 139 countries in the survey database, the aggregate budget for school feeding in the reference year was at least USD 35.3 billion.

In all regions and income groups, governments contributed a sizable share of the funding for school meal programs. Across all countries, an average of 70% of funding came from the government, and in 53 countries, the government contributed 100% of the funding. On average, the share of funding contributed by governments was lowest in low-income countries (at 24%), though this value increased to 74% for lower middle-income countries. Regionally, governments in Latin America/Caribbean contributed the greatest share of funding, on average shouldering 98% of the costs.

Aggregating across all countries, the budget per year per child who received school food was USD 108. However, this figure varied considerably from USD 18–23 in lower-income and lower middle-income countries to USD 400 in high-income countries. (Note that these calculations do not account for differences in purchasing power parity.) Across regions, the average investment per child was lowest in Sub-Saharan Africa at USD 30, followed by USD 54.5 in South Asia/East Asia, USD 58 in Latin America/Caribbean, USD 109 in Middle East/North Africa, and USD 382 in Europe/Central Asia/North America.

Among the 125 countries with large-scale school feeding in the survey database, a dedicated line item for school feeding activities was present in 69% of the national budgets. In several regions, there was a positive association between this line item and the achieved coverage rate, and in most regions, countries with a dedicated line item spent more per beneficiary than those without. Across all programs, 64% regarded their funding as adequate. This value was 44% in low-income countries and increased to 51%, 68%, and 90% in lower middle-income, upper middle-income, and high-income countries.

Management and Implementation

Policies, laws, and standards around school feeding can form a supportive structure to steer school meal programs in a positive direction. A large majority (80%) of countries had a national school feeding policy, with no evident pattern across income levels. However, the existence of a nutrition, health, or food safety policy related to school feeding was positively associated with income. Meanwhile, the likelihood of an agriculture policy related to school feeding was highest in low-income settings, and a policy guiding private sector involvement in school meal programs was relatively rare across all income groups.

Agriculture, Employment, and Community Participation

To understand how school meal programs are integrated in their local economies, the survey asked about programs' engagement with farmers and the non-farm private sector. Across all programs, 59% reported direct engagement with farmers and 71% reported engagement with other private sector businesses. These patterns varied across regions, with farmer engagement considerably more common in Latin America/Caribbean and Sub-Saharan Africa than other regions. In lower-income settings, it was more common for programs to engage with small-scale farms, whereas at higher income levels, it was increasingly likely for programs to engage with farms of all sizes. Private sector engagement was highest in Europe/Central Asia/North America and the Middle East/North Africa. This engagement took various forms, such as the hiring of private companies for food transport and catering services.

Of the programs in the database, 62% were able to provide an estimate of the number of people employed, reporting a combined total of 3.7 million paid personnel across all activities. An overwhelming majority of these workers served as cooks/food preparers, with the remaining roles distributed across food handlers, transporters, off-site processors, and safety and quality inspectors. Additionally, 32% of programs reported a focus on creating jobs for women, while 20% reported a focus on youth employment. Both priorities were more common in low-income and lower middle-income settings.

COVID-19 and Other Emergencies

School meal programs were far from passive in their experience of the COVID-19 pandemic. They responded actively and often with great agility to a crisis in which their services were urgently needed, even as their work was extraordinarily disrupted. Due to the COVID-19 pandemic, over three quarters (78%) of countries indicated that “most” schools were either closed, operating remotely, or in some form of hybrid status for at least one month in the school year that began in 2020, and 38% indicated that schools were not open for in-person learning for at least six months. During this time, school meal programs were confronted with the immense challenge of reaching school children with food even when school was not in session. The breadth of programmatic modifications included adjustments to the number of beneficiaries, the targeting

of beneficiaries, the modalities of food delivery, and the composition of the food basket. Despite these and other efforts, 39% of programs reported that pandemic-related disruptions forced a temporary cessation of school feeding activities at some point during the reference year.

The survey surfaced some unexpectedly positive outcomes emerging from the COVID-19 pandemic. First, the disruption caused by the pandemic brought greater attention to, and appreciation for, the role of school meal programs. While these programs had always filled an important role—nourishing children in schools and facilitating learning—it was specifically when this service was interrupted that many people recognized its critical importance. Second, the public health crisis brought greater attention to school hygiene, with school systems providing additional handwashing stations, maintaining greater cleanliness on school property, and monitoring and enforcing food hygiene in school kitchens.

Successes and Challenges

Survey respondents were asked to comment on the recent successes and challenges associated with school feeding in their countries. As noted, school meal programs were able to pivot from their standard procedures to ensure that children continued to receive food even when schools were closed or when they reopened with new social distancing guidelines. The lessons learned from this experience can be applied in future emergencies, such as climatic and geophysical shocks, conflicts, and economic crises. School meal programs have also played a positive role in incentivizing children to return to school following other disruptions. Some respondents highlighted an increase in environmentally friendly practices or an expansion in menu offerings to include a greater diversity of foods.

Alongside these successes, almost every respondent was able to identify challenges faced by school meal programs, the most pressing among these being the stress of inadequate resources and unpredictable funding. A second area of concern related to the need for supervision and the mismanagement of resources. Though programs and countries continue to improve their oversight and data collection, limited resources necessarily constrain these efforts.

CONCLUSION

Overall, the 2019 and 2021 Global Surveys of School Meal Programs document the popularity of school feeding worldwide. At the same time, school feeding is highly varied in its form, highlighting a need to be thoughtful when extrapolating from one setting or program design to another. The surveys surface some questions that are beyond the scope of this report, and key research needs are highlighted. For example, research is needed on the tradeoffs associated with different program designs; the potential for local food procurement to support diverse food systems; and the role of school feeding in bringing children back to school after a prolonged absence. Thought is also needed on how best to collect data on decentralized school meal programs, and how to categorize Home-Grown School Feeding (HGSF) programs to sharpen our understanding of their impact. The surveys provide a starting point for practitioners and researchers to dig into these issues and contribute new and deeper levels of understanding. Ultimately, the value of this data resource will continue to grow as the survey is repeated in future years.

This publication is based on country-and program-specific information provided by government officials or their designees in response to the Global Survey of School Meal Programs © conducted by GCNF in 2021, supplemented in limited ways with publicly available data, primarily from the United Nations and the World Bank. The data and the analysis and presentation thereof are provided in good faith and for general information purposes only. GCNF makes no guarantee as to the completeness or accuracy of the information.

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