

School Meal Programs Around the World

Results from the 2024 Global Survey of School Meal Programs ©

Survey Highlights



SURVEY HIGHLIGHTS

School Meal Programs and Food Systems Transformation

School meal programs have potential to play an important role in food systems transformation. This follows from the aggregate scale of these programs, which reach at least 407.8 million children worldwide and are found in at least 148 countries. It also follows from the programs' multisectoral nature, with relevance for social protection, education, health and nutrition, agricultural and economic growth, and environmental sustainability. School meal programs touch on each of the key goals of food systems transformation.

1. Create Demand for Nutritious Foods

School meal programs aim to ensure access to healthy diets, addressing undernourishment in underprivileged populations, enhancing micronutrient sufficiency through provision of diverse foods, and shifting food preferences in a healthy direction to slow the global epidemic of child overweight/obesity.

2. Improve Food-Based Livelihoods

School meals have potential to support robust and equitable livelihoods across the food system. In particular, the use of locally produced foods can translate into income-generating opportunities for local farmers who benefit from having a reliable market for their produce. These programs also influence food system actors at other nodes of the food supply chain by giving business to wholesalers, transporters, and processors. And they directly employ a large labor force of school cooks/caterers, food handlers, and others.

3. Emphasize Climate-Smart Foods

As school meal programs procure food on a large aggregate scale and have scope to set their own procurement standards, they have immense potential to influence the environmental sustainability of food production. School meal programs can strategically select school menus to include products that are environmentally friendly; emphasize local sourcing to reduce the distance that food travels to reach the schools; and take steps to minimize food loss and waste.

Data

The Global Survey of School Meal Programs was launched in 2019 to gather information about school meal programs in every country in a standardized manner, and it has been repeated every 2-3 years. The survey spans a broad set of topics of relevance to school feeding, bringing them together under one umbrella to spotlight their linkages. The survey is designed to be completed by a "focal point" who is officially appointed by their government to liaise with the necessary entities to gather together the information for the survey.

The 2024 Global Survey of School Meal Programs received a response from 142 country governments, which represents 73% of the 194 countries that were invited to participate in the survey.

Among these, 125 countries reported that they had some large-scale school feeding activities, submitting detailed information on 207 individual school meal programs. For analysis of school feeding coverage and school feeding budgets, the set of countries for analysis has been expanded to 169, primarily by drawing on information submitted in earlier survey rounds.

73% of the world's countries participated in the 2024 Global Survey of School Meal Programs.

Data coverage for the 2024 Global Survey of School Meal Programs ©



Coverage

Across the 169 countries for which GCNF has recent data or estimates, a total of 407.8 million children received food through their schools in the 2022 school year. One quarter (25%) of all school-age children received some school food. This value varies with income level, extending from 13% in low-income countries to 24%, 26%, and 48% in lower middle-income, upper middle-income, and high-income countries, respectively.

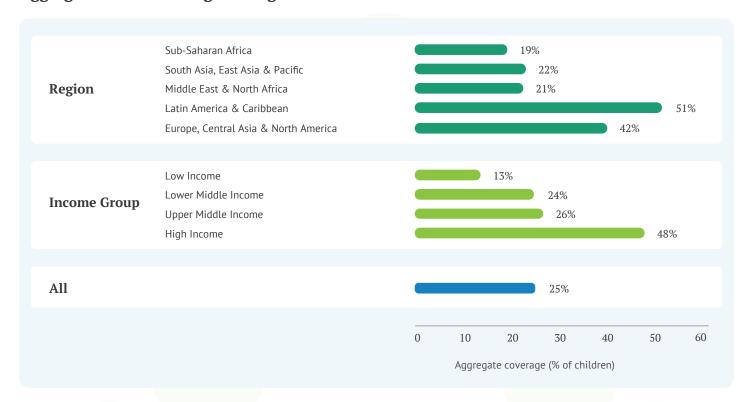
The share of enrolled primary school students reached with school meal programs has recently been proposed as a new Sustainable Development Goal (SDG) indicator. At the global level, this value was 39%, ranging from 25% in low-income countries to 62% in high-income countries.

Among the subset of countries that participated in the Global Survey of School Meal Programs three times so far, there has been an upward trend over time in school feeding coverage for enrolled primary school students, rising from 25% in 2017 to 26% and 29% in 2020 and 2022.

This coverage rate rose over time in all income groups except low-income countries where the school feeding coverage rate of primary school students dipped in 2020 and almost recovered in 2022. Within countries, variation over time in a country's school feeding coverage rate was positively (and statistically significantly) associated with variation in its enrollment rate, underscoring the potentially transformative impact of school feeding.

Globally, 25% of primary and secondary school-age children and 39% of enrolled primary school students received school food in the 2022 school year.

Aggregate school feeding coverage rates



Food Basket

In the 2024 survey round, the food categories probed in the questionnaire were mostly aligned with the Global Diet Quality Score. On average, school meal programs served foods from 6.8 different healthy food categories. Among healthy foods, both legumes and liquid oils were served more often in lower-income settings, whereas fruits and dairy were much more commonly found on the school menu in higher-income settings. Specifically, fruits and dairy were served in 19% and 13% of programs in low-income countries, while these values were 94% and 96%, respectively, for programs in high-income countries. A large majority (71%) of programs served refined/milled grains, and this was more common than the rate at which they served whole grains. In general, the provision of unhealthy foods (such as processed meat, juice, or deep-fried foods) was more common in higher-income settings.

Share (%) of programs serving each healthy food category, by income level

	Low Income	Lower Middle Income	Upper Middle Income	High Income
Legumes	83	82	79	59
Liquid Oils	89	80	70	52
Dark Green Leafy Vegetables	74	59	73	72
Fruits	19	52	91	94
Whole Grains	68	64	58	63
Dairy	13	51	91	96
Deep Orange Vegetables and Tubers	40	41	58	69
Fish and Shellfish	28	61	67	48
Eggs	17	52	70	52
Poultry and Game Meat	15	41	70	54
Red Meat	17	38	64	54
Cruciferous Vegetables	11	23	55	63
Nuts and Seeds	17	33	39	46

Funding

Across the 147 countries for which there is information on the school feeding budget, at least 67.2 billion USD was allocated to school meal programs in the 2022 school year. This number underscores the value that is widely placed on school meal programs, and further conveys the potential for school meal programs to shape food systems if they are strategically deployed

toward this goal. Across all countries, an average of 73% of their school feeding budget came from government sources (summing over national, regional, and local governments). Countries in Sub-Saharan Africa sourced the smallest share of government funding with an average of 48% coming from government sources.

Across all countries for which this information was available, the aggregate monetary amount allocated per child beneficiary was 137 USD. Not

Globally, at least 67.2 billion USD was allocated to school meal programs in the 2022 school year.

surprisingly, there were very strong associations with income level, and while the aggregate investment in high-income countries was 611 USD per child beneficiary, this was just 8 USD in lower middle-income countries. Just under three quarters (72%) of countries with large-scale school feeding activities reported having a line item for school feeding in the national budget.

An analysis of trends over time in school meal funding in low-income, lower middle-income, and upper middle-income countries (LMICs) surfaces several interesting findings. Funding per beneficiary child (in nominal terms) saw an upward trend over time—with the exception of lower middle-income countries which saw a sharp drop from 29.9 USD/child in 2020 to 22.06 USD/child in 2022. However, an examination of "real" monetary values that account for the rapid pace of inflation in recent years tells a very different story. When the budget per child is adjusted by the consumer price index in each country, it is clear that in real terms the budget per child has fallen sharply—especially in low-income countries and lower middle-income countries. Across all LMICs, the budget per child was 35.7 USD/child in 2017 (in 2020 dollars) and 28.04 USD/child in 2022 (again in 2020 dollars). In a time of high inflation, particularly of food and oil prices, attention should be given to real (not only nominal) budgetary outlays.

Health and Nutrition

In the 2024 Global Survey of School Meal Programs, most programs cited an objective to meet nutritional and/or health goals, and this priority was salient across all income levels and regions. A slight majority (55%) of school meal programs pursued their nutrition-related objectives by serving some fortified foods. This was most common at lower income levels. Biofortified foods, such as orange fleshed sweet potatoes (OFSP) or other crops that were bred to contain high amounts of particular micronutrients, were served in 22% of programs in low-income countries and 15% of programs in lower middle-income countries. Nutritionists were engaged in 69% of school meal programs, and this was most common in the Latin America/Caribbean region, where 89% of programs engaged some nutritionists in their design and management.

School meal programs can play a role in modeling healthy eating and cultivating healthy food preferences that can stay with children into their later years. Nevertheless, just 37% of school meal programs cited an objective to prevent or mitigate overweight/obesity. This was most common

School meal programs
have potential to cultivate
healthy food preferences
that can stay with children
into their later years.

Nevertheless, just 37% of school meal programs cited an objective to prevent or mitigate overweight/ obesity.

in Europe/Central Asia/North America (at 57%) and Latin America/Caribbean (at 53%). Even though programs were hesitant to identify obesity prevention as an overall objective, many programs took at least some steps to prevent or mitigate overweight/obesity. For example, 73% of programs coupled the provision of food with nutrition education oriented toward teaching healthy eating, and 52% were paired with physical education to encourage exercise. School meal programs were very often paired with at least some complementary services or education programs to enhance the program's effectiveness and/or leverage on the program to extend its benefit beyond the provision of food. School gardens were particularly common—especially in low- and lower middle-income countries, where 84% of programs were paired with school gardens.

Environment and Climate

Sustainability is increasingly prioritized in school meal programs, with countries implementing a variety of initiatives to both limit their environmental vulnerability and reduce their environmental impact. The Global Survey of School Meal Programs captured various indicators of environmental sustainability in school meal programs. A large majority (81%) of school meal programs took some steps to limit food waste. This was generally more common in lower-income settings, where food tends to be less plentiful.

A large majority of school meal programs took some steps to reduce the distance traveled by food from the site of production to the schools.

A majority (67%) of school meal programs also took some steps to limit package waste. Most commonly, these included the re-use of bags/containers (followed by 57% of programs that took some step to limit package waste) and the recycling of packaging materials.

Approximately 58% of school meal programs relied on wood stoves or charcoal stoves for food preparation, and among these, 78.5% took some steps to reduce the use of firewood/charcoal as fuel. Toward this end, the most common step taken was the use of fuel efficient (energy efficient) stoves.

As part of the food system, school meal programs are both affected by, and a driver of, climate change. Nevertheless, just 38% of programs targeted foods that were considered to be "climate friendly". On the other hand, a large majority (79%) of programs took some steps to reduce the distance traveled by food from the site of production to consumption (i.e., the food miles/kilometers). Across regions, this emphasis on local procurement was most common in Sub-Saharan Africa, where 89% of programs aimed to reduce the distance traveled by food.

Home-Grown School Feeding

The home-grown school feeding (HGSF) label alludes to several characteristics of school meal programs. HGSF programs source at least some of their food from smallholder farmers, often in the vicinity of schools, and furthermore extend support to facilitate smallholders' engagement with the school meal market. Though there is not a universally agreed-upon definition of HGSF, programs can be understood to possess a range of characteristics that are in the spirit of HGSF, and the Global Survey of School Meal Programs captured various relevant indicators. Over half (57%) of the programs reported that they had an explicit objective to enable small-scale (smallholder) farmers to gain access to a predictable and stable market and to maximize the benefits they derive from such access. This value was 80% among programs in low-income countries and 74% in lower middle-income countries. Beyond sourcing from smallholders, HGSF connotes some additional support extended to these farmers to strengthen their ability to serve as suppliers. In total, 43% of programs offered additional support to small-scale farmers, such as agricultural extension or school feeding-specific training. This was most common in low-income countries (67%) and in Sub-Saharan Africa (60%). The relative lack of support extended to these farmers in South Asia/East Asia/Pacific (39%) and Latin America/Caribbean (42%) is surprising and may indicate an opportunity that has not been pursued.

The number of HGSF traits exhibited by a program can indicate the "intensity" of HGSF values. Just under half (47%) of programs had at least four indicators, and there was a strong negative association with income level, whereby this value was 69% among programs in low-income countries and 56%, 32%, and 28% among programs in lower middle-, upper middle-, and high-income countries. Across regions, it was most common in Sub-Saharan Africa (66%) and South Asia/East Asia/Pacific (54%). The number of indicators of HGSF exhibited by a program is positively correlated with the diversity of both healthy and unhealthy foods, although the magnitude of this relationship is stronger for healthy foods.

Indicators of home-grown school feeding (% of programs)

		Purchase Sl domestically	norten transport distance	cmoll ccolo	Small-scale farmers sold to schools/program	Support provided to small-scale farmers	Preferential contracting for small-scale farms/businesses	Law/policy supports small-scale farmers linked to programs
	Sub-Saharan Africa	79	89	78	71	60	45	8
	South Asia, East Asia & Pacific	92	67	79	65	39	28	15
Region	Middle East & North Africa	85	67	33	25	17	13	8
	Latin America & Caribbean	74	68	61	53	42	14	25
	Europe, Central Asia & North Americ	a 71	76	29	45	23	10	7
	Low Income	80	87	80	70	67	53	6
Income Group	Lower Middle Income	80	88	75	59	44	29	11
	Upper Middle Income	81	60	46	55	38	14	18
	High Income	73	74	34	48	21	14	9
All		78	79	61	59	43	29	10

Emergencies

School meal programs were widely affected by emergencies in the 2022 school year. Specifically, 60% of programs reported being affected by at least one emergency during the reference period, and this was most common for programs operating in low-income countries, among whom 76% were affected by an emergency. By far, the most widely cited emergency of relevance to these programs was extreme food price inflation (at 37%), followed by closely associated supply chain disruptions (at 21%). For a large majority (72%) of programs that were affected by at least one emergency, the school feeding operations were not interrupted. This is a testament to the resilience and responsiveness of school meal programs, which often must find ways to reach children even under trying circumstances. An additional 18% of programs reported that school feeding ceased temporarily in some schools/regions, while 5% had to temporarily suspend feeding activities in all schools in which the program was active, and another 5% ceased activities up until the time of the survey in some (but not all) schools. Natural disasters, economic crises, and conflict were significantly associated with an interruption to school meal program operations.

In the 2022 school year, the most widely cited emergency of relevance to school meal programs was **extreme food price inflation**, followed by **supply chain disruptions**.

School meal programs employed a range of strategies to respond to emergencies and minimize their impact. One third of programs sought alternative food sources or suppliers, and 31% negotiated better prices with existing suppliers. A considerable share (28%) were able to expand the budget for the program in response to higher operating costs or a greater level of need, while it was less common (at 19%) for programs to source alternative foods to replace those that were newly expensive or scarce.

Conclusion

The value of this longitudinal survey increases the longer the survey is sustained. Since the first round of the Global Survey of School Meal Programs, we have seen improvement in the quality and quantity of data which countries are able to provide. Even if the tasks of collecting data, controlling for quality, and analyzing the results become significantly more challenging with each survey round, the data become richer, deeper, and more indicative of patterns as the survey is repeated and as the experience and knowledge of the Global Survey team broadens and deepens.

Government representatives, survey reviewers, researchers, donors, and other stakeholders around the world have shared resoundingly positive feedback on the Global Survey of School Meal Programs, confirming this as an extraordinarily unique and valuable resource whose value will continue to grow over time. We must, therefore, stay the course!



Cover photo credit Emilio Monzon for CRS Guatemala, submitted by Emily Drummer Page 8 photo submitted by Ademi Mukanbetova for Mercy Corps Kyrgyzstan



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 2024, 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.

The Global Survey of School Meal Programs © is the property of GCNF and is protected by copyright. Contact: info@gcnf.org. The full database can be accessed by completing the interest form at www.gcnf.org/survey-data

Citation: Global Child Nutrition Foundation (GCNF). 2024. Survey Highlights, School Meal Programs Around the World: Results from the 2024 Global Survey of School Meal Programs ©. Accessed at http://gcnf.org/qlobal-reports/

GCNF is a non-political, non-profit entity. The Global Survey of School Meal Programs © receives core support from the United States Department of Agriculture (USDA). The 2024 Global Survey round received supplemental support from The Rockefeller Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of The Rockefeller Foundation.