State of School Feeding in Latin America and the Caribbean







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Foreword

School feeding programs, along with other social protection initiatives, provide access to better diets for school children, support children's long-term well-being, and help them to learn and thrive. They play a critical role in encouraging children to go to school. Once in the classroom, school meals ensure children are well nourished and ready to learn.

However, the COVID-19 pandemic interrupted the education of 165 million students in Latin America and the Caribbean (LAC). Prolonged school closures significantly affected human capital in the region, disrupting learning and academic performance, and removing children from school meals and health and nutrition interventions, causing an educational crisis that now continues against a backdrop of compounding challenges in the region, including the pandemic's long-tail economic and social effects.

Now that schools have reopened across the region, integrated approaches to support children's health, nutrition and wellbeing are needed to safeguard their development and put them back on track in their schooling.



It only takes a couple of hours for children to start to feel hungry. Teachers know what hunger looks like in the classroom: fidgeting, attention spans shortening, stomachs growling – both teaching and learning get more difficult. For kids who came to school hungry, it's even harder for them to concentrate and to learn.

This publication, the State of School Feeding in LAC, looks at the state of school meals in the region today. It assesses, for the first time, the impact that COVID-19 and a multi-layered crisis have had on schoolchildren and on schoolbased food and nutrition programs in the region. National school meals programs in LAC have arguably made the most progress globally (while recognizing the progress of individual countries

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elsewhere), and so the insights gained in LAC have implications for programs worldwide. The report highlights what has been done to overcome the unprecedented challenges in the region and – critically – identifies the key principles that underpin successful school feeding programs as governments bolster their education systems for the future.

The report showcases governments' achievements and the work of partnerships including the global School Meals Coalition to overcome the negative effects of the pandemic and ensure children across the region realize their full potential. The World Food Programme and the Inter-American Development Bank are fully committed to supporting these critical efforts. Together, we will succeed in giving every child, the opportunity to enjoy a nutritious school meal and the chance to learn, grow and thrive.



Lola Castro Regional Director for Latin America and the Caribbean World Food Programme

Mercedes Mateo-Berganza Division Chief of Education Inter-American Development Bank

Key Messages



School meals programmes in Latin America and the Caribbean (LAC) continued during the COVID-19 pandemic, adapting to school closures and new safety measures, mainly changing to take home rations. Today, school meals programmes are back in schools across the region.

- The COVID-19 pandemic left 165 million students in Latin America and the Caribbean out of school. The repercussions of this silent crisis may affect an entire generation but also provides an opportunity to act now to get kids back on track.
- The success of countries in adapting and scaling up their national school feeding programmes during the pandemic – even using them to reach additional vulnerable people – has proven again how crucial they are as part of national education and social protection systems.
- Despite the effects of the COVID-19 pandemic and the global cost of living crisis, national school feeding programmes are among the largest social protection programmes in the region. They keep children well-nourished and healthy, enabling them to learn better and thrive, and contributing to the development of the human capital the region requires.
- About 80.3 million children at the pre-primary, primary and secondary school levels were reached by school meals programmes in 31 countries in Latin America and the Caribbean in 2022. Most of these children live in South America (63.2 million), followed by Central America (13.3 million), and the Caribbean (3.8 million). These figures confirm that Latin America and the Caribbean have the second highest number of children receiving school meals worldwide.

Political commitment and investments in national school meals programmes remain high, despite the crisis.

- Governments fund about 99 percent of school meals programmes in the region, with an estimated regional investment of between US\$3.6 (reported) and US\$7.6 billion (estimated).
- Institutional frameworks for school meals are strong in the region under the leadership of various ministries. Some countries coordinate them through multi-sectoral platforms. School meals are commonly embedded in national development plans, as well as education and food security policies. To a lesser extent, they are part of coherent policy frameworks that include the education, social protection, health and agriculture sectors.
- At least 19 countries in the region have either a specific school feeding or school nutrition policy or law. Many others are developing new frameworks. Most laws and policies developed over the past decade have proven to be more sensitive to school health and nutrition and to local food systems, increasingly incorporating other school-based health and nutrition interventions and sourcing from smallholder farmers.
- Governments in the region continue to build on a long history of regional and international cooperation. South-South and triangular cooperation and regional networks and initiatives continue to fuel exchanges, sharing lessons learned and best practices across the region. In less than two years, 17 countries have joined the School Meals Coalition, showing political will to ensure progress on their national plans and commitments.



However, inequalities remain between countries with more and fewer resources, and within countries in terms of the reach, relevance, and quality of the programmes.

- In low-income countries, the cost of school feeding is as low as US\$10 per year per child, whereas in high-income countries, it is estimated at US\$293.
- Most programmes in the region are universal by design, but do not yet meet full coverage. Coverage ranges from 30 to 100 percent of primary school children.
- There is an urgent need to ensure integrated packages that meet all the health and nutrition needs of children so that they can learn and thrive. Though most programmes in the region have objectives that seek to improve health and nutrition, only four report delivering a fully integrated package of at least six health or nutrition interventions in conjunction with school meals.
- Local purchase is of interest to many countries and donors in the region and has been on an upward trend over the past decade. At least 15 countries of the 31 surveyed have either decentralized school food supply chains or at least a percentage of local purchases embedded in the programme. However, few countries manage to consistently include smallholder producers and family farmers to the full scale of the national programme.
- Few school meals programmes in the region actively aim to support Indigenous Peoples' food systems, by including cultural practices, culinary traditions, and preservation of Indigenous knowledge, purchasing foods locally, and ensuring Indigenous authorities' leadership and communities' participation. Though select programmes are innovating to embrace the benefits of an intercultural approach, most programmes in the region have yet to reflect the diverse needs and aspirations of Indigenous Peoples.

The challenge now is for governments to reach the most vulnerable kids with quality, integrated programmes that are resilient to shocks, and that will help kids get back on track after the pandemic.

- Throughout LAC, up to 12 million children, adolescents, and youth of primary, lower secondary and upper secondary age are already out of school. Millions remain at risk of dropping out. The educational journey of over 118 million boys and girls between the ages of four and 17 is in jeopardy.
- Recent skyrocketing food and fuel prices are affecting the overall quality and reach of national school meals programmes. There are early signs that some governments are increasing budgets, but others may be leaving programmes to absorb higher costs, for example by reducing the number of feeding days or by offering less nutritious, more affordable food.
- Especially with a high regional cost of diet and rising food insecurity, programmes need to address malnutrition in all its forms, including preventing overweight and obesity and promoting better diets with diverse, fresh, local foods within and beyond schools; and improving school food environments and dietary guides.
- All programmes in the region can increase women farmers, youth and Indigenous Peoples' participation in the school value chain.
- To deliver on their potential, programmes should strengthen institutional and regulatory frameworks, address the gender gap, mobilize resources, and ensure multisectoral approaches, as well as innovate and digitalize to make management systems and monitoring, reporting and evaluation more agile and accountable.
- School meals programmes need to invest in their institutional resilience and their preparedness to respond to crises, embedding it into their frameworks and operating procedures, as well as national institutional frameworks.



Executive Summary

Executive Summary

Introduction

This joint publication by the Inter-American Development Bank (IDB) and the World Food Programme (WFP) is the first regional *State of School Meals in Latin America and the Caribbean*. Its release comes at a crucial time for the region.

The COVID-19 pandemic interrupted the education of 165 million students in Latin America and the Caribbean (LAC). Many countries in the region successfully adapted and scaled up their national school feeding programmes during the pandemic – even using them to reach additional vulnerable people – again proving how crucial these programmes are as part of national education and social protection systems. But the longtail effects of the COVID-19 pandemic, especially the prolonged closure of schools, still damaged multiple aspects of children's well-being (Abizanda et al., 2022; Schady et al., 2023). Most fundamentally, closures disrupted learning and academic performance causing an educational crisis, which is now continuing against a backdrop of compounding crises in the region. Food and agricultural input prices are rising as is food insecurity and nutritional indicators are in decline across the region (ECLAC, FAO and WFP, 2022; FAO et al., 2023c). Longstanding structural challenges continue: a changing climate alongside intensified droughts and wildfires and more frequent and violent hurricanes, rising trends in overweight and obesity along with their associated comorbidities, and complicated and largescale migratory movements, all of which threaten children's wellbeing, access to school, and ability to thrive.

These compounding challenges create the conditions for millions of children in the region to be at risk of dropping out of school. This publication presents data that up to 12 million children, adolescents, and youth of primary, lower-secondary, and upper-secondary age are already out of school in LAC. The educational journey of over 118 million boys and girls between the ages of four and 17 is estimated to be in jeopardy (IDB, 2023). Their access to quality education is uncertain, and this poses a significant threat to their academic progress and future opportunities.

In this context, school meals programmes – especially those that are provided alongside health and nutrition investments – stand out as a fundamental tool to improve the general well-being of school-age children, and to promote education and sustainable development in the region. In addition to contributing to students' daily nutrition, school meals can contribute to reducing social and economic inequality gaps, promoting equitable access to quality education and healthy diets. However, school feeding programmes in the region face significant challenges in their implementation due to problems in management, funding, and coordination.

This publication aims to use the best available data sources to describe the state of school feeding the region, the scale and coverage of programmes, their key programmatic components, and their impact on schoolchildren and their communities. It draws on the WFP State of School Feeding Worldwide publication series from 2013, 2020 and 2022 in methodology and approach as well as on the latest published evidence available on school meals in the region. This publication complements the global report, *The State of School Feeding 2022*, by focusing specifically on the needs, culture, and context of LAC. It reports on the specific survey results for Latin American and the Caribbean, and analyses them in the regional context, presenting five chapters on the state of school feeding in LAC in key areas. The publication aims to inform decision-making and the implementation of effective public policies to promote the well-being and development of future generations in Latin America and the Caribbean.

Main findings

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School meals programmes in LAC continued during the COVID-19 pandemic, adapting to school closures and new safety measures, mainly changing to take-home rations. Today, school meals programmes are back in schools across the region.

This publication finds that 80.3 million children received school meals, such as breakfast, snacks, or lunch, across Latin America and the Caribbean in 2022. Most of these children live in South America (63.2 million), followed by Central America (13.3 million), and the Caribbean (3.8 million).

Political commitment and investments in school meals national programmes remain high, despite the crisis.

Most LAC countries have established legal and policy frameworks. At least 19 countries in the region have either a specific school feeding or school nutrition policy or law (Cruz 2020; WFP 2017c). School meals programmes are to a lesser extent framed in multisectoral policies that include the social protection, health, and agriculture sectors.

Most laws and policies developed over the past decade have proven to be more sensitive to school nutrition and to local food systems (FAO et al., 2023), but countries still need to further strengthen regulatory frameworks and implementation to purchase local food. LAC countries have been at the forefront of adopting policies to purchase food from local smallholder farmers. Brazil has been a pioneer in this field, linking family farmers with school feeding programmes and allocating a minimum of 30 percent of food procurement budgets to direct purchasing from small farmers. Other countries in the region, such as Guatemala and Haiti, are also increasing local purchases from small farmers and strengthening links between schools and local food systems. Available information suggests that local purchases benefit schoolchildren and farmers and communities at large. However, the lack of evidence on the effects of local purchases on children's diets, on farmers' socio-economic development and on women and Indigenous Peoples producers, limits our capacity to quantify these benefits. Nearly all countries require further scaling up to reach the full potential of local purchase.

National budgets are the major source of funding in all middle-income countries. The estimated regional investment in school meals in 2022 was between US\$3.6 (reported) and US\$7.6 billion (estimated). Based on data cross 21 countries, domestic budgets make up 99 percent of funds for school meals programmes in most countries. National budgets were the major source of funding for countries in all income levels; in lower middle-income countries, four percent of the budget comes from other national donors and private sector, and six percent come from international donors. Comparable data for low-income countries is not available.

Governments in the region continue to build on a long history of regional and international cooperation. South-South and triangular cooperation and regional networks such as the Red RAES network and regional initiatives continue to fuel exchanges across the region. Seventeen countries have joined the School Meal Coalition in less than two years, showing political will to ensure progress on national plans and commitments.

However, inequalities remain between countries with more and fewer resources, and within countries in terms of the programmes' reach, relevance, and quality.

In the region, most national school feeding programs are universal by design (WFP, 2017c), but in practice do not reach full coverage. Coverage was calculated for this publication for twenty countries by dividing the number of children reported to receive school meals in primary schools, by the number of children enrolled in primary schools as reported by the UNESCO Institute for Statistics (2021). Eight out of twenty countries (40 percent) in the region have one hundred percent coverage, compared to four (20 percent) with coverage between seventy and 99 percent, four (20 percent) with coverage between 50 and 69 percent, and four (20 percent) with coverage under 50 percent. Brazil, the largest programme in the region, has a coverage of 100 percent.

Coverage should also be understood in relationship to financial constraints, which can require trade-offs that affect programme quality. For example, some programmes reach more schools but with a less nutritious-food basket. Some programmes reach all schools but provide meals for fewer days than children are expected to attend school. Though most programmes in the region have objectives that seek to improve health and nutrition, only four report delivering a fully integrated package of at least six health or nutrition interventions in conjunction with school meals. Especially in times of increasing food prices and cost of living (ECLAC et al., 2022), universal coverage of quality programming is key to protecting and promoting the physical, emotional, and social development, health, and wellbeing of schoolchildren.

This publication finds that in low-income countries, the cost of school feeding is as low as US\$10 per year per child, whereas in high-income countries, the annual cost per child is estimated at US\$293. Programme quality is highly dependent on funding, which can affect, for example, the quantity, quality and diversity of the food provided, or whether health and nutrition components are integrated with school meals.

Adequate investment is needed also in local food systems, in all their diversity. Few school meals programmes in the region actively aim to support Indigenous Peoples' food systems, by including cultural practices, culinary traditions, and preservation of Indigenous knowledge in programming, purchasing foods from Indigenous farmers, and ensuring leadership of Indigenous authorities and participation of communities. Select programmes are innovating to embrace the benefits of an intercultural approach, such as Colombia's school feeding programme for Indigenous Peoples, which involves Indigenous and traditional authorities in decision-making and promotes local production and purchasing. Brazil's National School Feeding Programme implemented guidelines to meet the socio-economic vulnerabilities and cultural specificities of Indigenous Peoples, having a positive effect on local economies and reducing environmental costs. Yet, most programmes in the region have yet to reflect the diverse needs and aspirations of Indigenous communities and interculturalism.

Executive Summary

The challenge now is for governments to reach the most vulnerable kids with quality, integrated programs that are resilient to shocks, and that will help kids get back on track after the pandemic.

Quality, integrated programming is urgently needed. The prevalence and coexistence of undernutrition, overweight and obesity, micronutrient deficiencies, and food insecurity in the region requires adequate investment, evidence and programme learning on what works to support healthy nutrition for schoolchildren. A 2019 study in Peru found that breakfast provided through the Qali Warma School Feeding Programme had positive and significant short-term effects on cognitive test performance among children who did not eat breakfast at home, especially in areas belonging to the lowest economic quintiles (MIDIS, 2019). Multi-sectoral activities in schools, particularly health and nutrition interventions, help deepen the scope and impact of school meals (Bundy et al., 2018). Local purchases are another way to benefit children's nutrition by providing them with fresh and nutritious food, diversifying diets, and improving local food environments. Providing nutrition education and other curriculum-related interventions such as school gardens can further build kids' healthy relationships with food.

The investments made in school meals lead to returns for the economy and human capital in the region. Well-designed, intersectoral programmes that purchase locally could reach a return of up to US\$9.00 (WFP, 2022b; Verguet et al., 2020).

For school meals to deliver on their potential, countries will need to strengthen institutional and regulatory frameworks, address the gender gap, mobilize adequate resources, and ensure multisectoral approaches, at a minimum. Programmes can improve by changing over to more agile and accountable management systems, monitoring and evaluating to improve programme quality, and innovating and digitalizing.

School feeding programmes in the region have shown resilience and adaptability during crisis situations as well as during the COVID-19 pandemic. However, beyond the pandemic, school feeding has been sparingly used to provide support during different kinds of shocks, such as natural disasters, food price increases, inflationary shocks, and large migratory inflows. Nicaragua, Honduras, Saint Vincent and the Grenadines, and Haiti are examples of countries that have used school feeding programmes to provide additional assistance to school children – and sometimes their communities. However, school meals programmes need to invest in their preparedness to respond to crises, including climate crises, because they are one of the main social protection platforms with extensive capacity to support vulnerable populations in the region. Likewise, they need to invest in their own institutional resilience to ensure continuity of quality, school meals programmes to protect and promote the physical, emotional, and social development, health and well-being of students and the school community.



The way forward

Given these findings, the publication presents the way forward according to its chapter structure. First, we draw out the way forward for school feeding programmes in LAC: their scale, coverage, and key elements. Then, we consider partnerships in LAC and set out the opportunities available to the region. Third, we consider how to promote the integration of school meals programmes to accelerate nutrition, human, social and economic development in LAC. Fourth, we recommend how to better link local food systems and schools. Fifth, we draw on our findings on school meals in times of crisis to describe how programmes can be more resilient to shocks and support their students and communities when crises arise. Lastly, in our Special Report we draw out the way forward for intercultural approaches to school meals.

Chapter 1 School feeding programmes in LAC in 2022: Scale, coverage, and key elements

Inequalities between countries with more and fewer resources are stark, with the annual cost of school feeding per child is as low as US\$10 in low-income countries in the region, whereas in high-income countries in the region, the annual cost per child is estimated at US\$293. Coverage ranges from 30 to 100 percent across the countries in the region.

- Continued and increased investment in school meals programmes is needed to keep children in school during this precarious time, post-pandemic time, as learning losses continue to threaten retention in the near future.
- Full coverage of quality programming is key to protect and promote the physical, emotional, and social development, health, and wellbeing of schoolchildren, which cannot be allowed to be undercut in quality or reach by rising prices amidst rising needs.
- Integrated approaches to health and nutrition in schools are required, and nearly all countries in the region can improve the integrated package of interventions on offer to meet the needs of the learner.

Chapter 2 Partnerships in school feeding in LAC

Governments in the region can build on a long history of regional and international cooperation. They can take advantage of the expanding School Meals Coalition and its tools and initiatives in addition to longstanding regional networks, projects, and relationships to accelerate progress towards larger, better, and stronger school feeding programmes.

- Continued exchanges and projects within the region and globally are needed to continuously improve and innovate programmes.
- Strengthening regional networks can help exchange information, innovation, and evidence to
 increase coverage, improve school feeding programmes, and implement policies. Sharing evidence
 and experience can strengthen programmes around key issues: local purchase from smallholder
 farmers, Indigenous Peoples' food systems, healthy school environments, promoting healthy
 diets, climate change and school meals, food and nutrition education, social and community
 participation, infrastructure improvement, interinstitutional and intersectoral participation, and
 other technical areas.
- Continuing to expand School Meals Coalition membership in the region will allow the great experience of LAC school feeding programs to inform the global discussion while putting the Coalition's tools and initiatives at the service of member countries. Embedding it into the regional ecosystem of school feeding platforms and networks will strengthen not only opportunities for research and exchange in the region, but also for sharing the skills and practices from LAC in global fora and networks, including the School Meals Coalition, and especially its Research Consortium.
- Partners and governments should generate, promote, and participate in discussion spaces, such as global, regional, and sub-regional events and forums, which contribute to highlight this area and strengthening of national school feeding programmes in the region. Stakeholders should use regional and global platforms for partnerships, learning, advocacy, and visibility of regional efforts.
- Stakeholders need to generate better evidence, looking at under-researched areas and generating data and evidence to inform stronger policies and programmes and make better investments.
- Governments, professionals, experts, partners, academia, civil society, and international organizations can actively contribute to the strengthening and sustainability of school meals programmes that respond to their respective national objectives.

Chapter 3 Advancing the integration of school meals programmes to accelerate improved nutrition, human, social and economic development in LAC

Although most governments offer school meals together with some complementary health and nutrition interventions, there is an urgent need to ensure integrated packages that meet all the health and nutrition needs of children so that they can learn and thrive. Few countries invest adequately in integrated health and nutrition packages, with sufficient multisectoral investment, for example, in health interventions that have been shown to support children's well-being and academic achievement. This investment is even more necessary now, after the COVID-19 pandemic and the lack of health and nutrition services experienced by children.

- School feeding policies should highlight their contributions to educational objectives and should ensure that multisectoral packages are provided that support children to achieve academically.
- Most programmes still have great potential to maximize their benefits by becoming more sensitive to addressing malnutrition in all its forms. By establishing clear programmatic objectives and robust monitoring and evaluation systems, the region can better gauge the impact of interventions to make progress against malnutrition in Latin America and the Caribbean.
- The triple burden of malnutrition stunting, obesity and overweight, and micronutrient deficiencies – requires specific targets and evidence-based programmes of proven impact for its prevention.
- Investing in the future human capital of the region requires guaranteeing healthy school meals and school environments and using this platform as a springboard for comprehensive health in schools.
- Aware of the importance of healthy diets based on sustainable food systems, various countries have undertaken the task of developing specific dietary guidelines. As other countries in the region join this initiative, it is vital to promote adherence of school meals programmes to these guidelines.



Chapter 4 Home-grown school feeding in Latin America and the Caribbean: Linking food systems and schools

Available evidence suggests that home-grown school feeding (HGSF) programmes can benefit local food systems, smallholder farmers, and communities, while fostering better lifelong food habits among schoolchildren and their families. However, several challenges and opportunities are to be addressed for these initiatives to maximize their impact, scale up and be sustainable, efficient, and effective over time.

- Investing in evidence generation and advocacy efforts is needed. A lack of strong quantitative evidence is a still a barrier to measure the impact of HGSF on both local food systems and schoolchildren's health and nutrition. Quantifying these benefits is key to inform policy and programmatic improvements that are needed to achieve higher quality, greater nutritionsensitiveness, and cost-efficiency, and to support the advocacy efforts necessary to increase funding and achieve greater sustainability. Through the School Meal Coalition and its Research Consortium, LAC stakeholders can share their experiences to consolidate worldwide information gaps.
- Stronger monitoring, evaluation, and reporting systems are required comprising of indicators that are specific to HGSF and are integrated within national systems, and that can track local purchases, measure impacts, identify barriers, and inform decision-making processes.
- Multisectoral coordination should be fostered and HGSF approaches should be embedded within wither national food systems policies. Countries should continue to adapt their legal and institutional frameworks in favour of these interventions, setting up multisectoral coordination, and expanding approaches that have proven to be successful.
- Partners should continue to invest in building stronger regional communities of practice, promoting exchange on lessons learned and best practices on HGSF, including through regional and global platforms and community of practices, such as the School Meals Coalition, as well as through South-South and triangular exchanges.
- Local producers should be better supported and their access to institutional markets improved, to be able to provide a steady supply of food even in times of crisis and in areas that are vulnerable to different types of shocks. Support should be institutional, ensuring that legal frameworks and public procurement processes are inclusive and allow purchases from smallholder producers, and it should be technical, helping farmers to access the needed inputs, as well as credit, information, and technical and organizational skills.
- HGSF efforts should be complemented with interventions devoted to developing healthier school food environments and fostering behaviour change. To impact the health and nutrition of schoolchildren and their families, and to generate better and more nutritious lifelong food habits, HGSF models need to be complemented with interventions that foster capacity strengthening and behaviour change in a sustainable way. Providing nutritious meals, including through the implementation of national food based dietary guidelines, investing in complementary schoolbased health and nutrition interventions, such as social and behaviour change communication (SBCC), campaigns and education initiatives can multiply the effects of HGSF initiatives on schoolchildren and their families.
- HGSF efforts should maximize benefits for women, youth, Indigenous Peoples, and Afrodescendants. School meals programmes offer a number of opportunities to increase and consolidate the participation of women farmers as well as youth and Indigenous producers in the school value chain. While evidence is scarce and more analysis is needed to shed light on this area, lessons learned so far show that opportunities for women and Indigenous producers to become suppliers of national school feeding programmes are largely untapped.

Chapter 5 School feeding programmes in times of crisis

Although each programme should design its preparedness and response strategies according to its own objectives, capacities, and risk scenarios, some generic proposals are presented here. These proposals arise from the experiences shared in the chapter, as well as in the global literature on shock-responsive social protection. They require appropriate budget lines, as well as contingent financing mechanisms for times of crisis.

- Preparation is required to both guarantee operational continuity and to respond to new needs in times of crisis. Programmes should develop contingency plans and alternative mechanisms for contracting, delivering and preparing food in crises situations. These should include protective strategies and protocols for local purchase, to avoid shortages, price increases, and negative effects on local producers.
- To guarantee the operational continuity of the programmes, contingency protocols, alternative modalities and even adequate contractual clauses with providers and operators and budget adjustment mechanisms are needed, among others.
- Consider school meals for their capacity to provide additional assistance to schoolchildren (vertical expansion) during crisis. Additional response may mean providing snacks, food, or complementary services that meet food, nutritional, and other needs that arise because of the emergency.
- Assisting the non-school population (horizontal expansion), is a priori more difficult than vertical expansion, but the region already has successful experiences. The response to the non-school population may consist of rations to take home, meals in the schools themselves, or assistance through other programmes, for example, by temporarily transferring food stocks to humanitarian responses that assist the non-school population. Horizontal expansions also entail the need to develop a targeting mechanism to ensure that assistance reaches those most affected by the crisis.
- The school feeding response should be designed as part of a comprehensive strategy that includes other social protection programmes and the civil protection/disaster response system, among others, depending on the nature of the crisis. This alignment can range from the complementarity of the interventions (for example, division of geographic areas, population groups, types of assistance, among the different responses), to sharing information, human resources, etc.
- Emergency responses should be used to promote a transition to regular social protection.
 Sometimes crises make it possible to identify and reach people who are eligible for different social protection programmes including school meals but who are excluded. The emergency can be used as an opportunity to expand the coverage of regular programmes and reduce exclusion errors.
- Across the region, mechanisms to monitor food prices, access to healthy diets, and food and nutritional insecurity should be strengthened. The lack of integration with sectors that have such information is a huge barrier to making school feeding programmes effective.

Special Report Towards an intercultural approach to school meals in the region

Although there are several challenges, and positive experiences remain limited, the region is taking steps towards an intercultural approach to school meals. School-based programmes can serve as platforms and entry points to address broader issues regarding the right to self-development, food, and identity. A differentiated approach is the path to achieve intercultural school meals, yet more sensitization is needed across the region from the policy level to the design and implementation of the programmes with the active engagement of Indigenous Peoples and communities.

- Menus that incorporate Indigenous Peoples' foods and food traditions have a place in school meals.
- Diverse menus should be accompanied by dialogue and the participation of Indigenous Peoples, including the purchase of local products from communities.
- Providing conditions for intercultural approaches in multicultural settings is key, seeking
 opportunities to revitalize Indigenous Peoples' foods and cultures also in peri-urban and urban
 schools.
- Enabling processes are needed that contribute to intercultural societies that a) abide by the principles of providing healthy, nutritious food produced locally (all or in part), b) encourage sustainable food systems for the local economy, and c) promote participation in decision making.
- Stakeholders should influence more inclusive and intercultural policies through global and regional processes that raise awareness and work in partnership with governments, Indigenous Peoples' organisations, and various partners and stakeholders to promote and support Indigenoussensitive programming.





Introduction

Introduction

This joint publication by the Inter-American Development Bank (IDB) and the World Food Programme (WFP) is the first regional *State of School Meals in Latin America and the Caribbean*.

The report's landmark release comes at a crucial time for the region. The longtail effects of the COVID-19 pandemic and especially the prolonged closure of schools, have damaged multiple aspects of children's well-being.

Most fundamentally, closures have disrupted learning and academic performance causing an educational crisis. School closures and ineffective remote learning caused students to miss out on learning and to also forget what they had previously learned: on average, for every thirty days of school closures, students lost about 32 days of learning (Schady et al., 2023). Students of lower socioeconomic status are set to suffer even greater learning gaps – 2.5 years compared to the school performance of their peers in the highest economic quintile; an estimated 3.5 million students dropped out of school throughout the region (Abizanda et al., 2022). It is estimated that today's students in low- and middle-income countries could lose up to ten percent of their future average annual earnings due to COVID-19 related education shocks (Schady et al., 2023).

This education crisis is occurring as nutrition indicators are declining. Between 2014 and 2021, the number of hungry people in LAC increased from 38 to 57 million; the number of moderately or severely food insecure increased from 172.4 to 243.8 million (FAO et al., 2022). Malnutrition in its various forms is evident throughout the region and highly correlated with poverty and vulnerability. At the regional level, 5.8 million children suffer from chronic malnutrition, and more than four million or 7.5 percent of children under five years of age are overweight (FAO et al., 2023b). An estimated three in ten children and adolescents between the ages of five and 19 years are overweight in the region (UNICEF, 2021). Globally, one in two children under five years of age and two in three women suffer from some micronutrient deficiency (Stevens et al., 2022).

Nearly 150 million people in LAC lack access to water, sanitation, and hygiene services, creating health problems particularly for children and low-income populations. Only 31 percent of LAC's total population has access to safely managed sanitation facilities, with significantly unequal access in rural and urban areas. Seventy per cent of the rural population use basic sanitation facilities and nine per cent still practice open defecation (Vázquez et al., 2021). In many cases this gap also affects access to education and work, further marginalising the already vulnerable. Diarrhoeal diseases are intrinsically linked to reduced nutrient absorption, malnutrition, and, ultimately, to increased susceptibility to new infections.

The cost of food in the region is high – and rising. At an average daily cost per person per day of 4.08 U.S. dollars, 22.7 percent of the population cannot access a healthy diet; in Haiti, the rate reaches up to 92.6 percent (FAO et al., 2023c).

In this context, school meals programmes – especially those that are provided alongside health and nutrition investments – stand out as a fundamental tool to improve the general well-being of school-age children, and to promote education and sustainable development in the region. In addition to contributing to students' daily nutrition, school meals can contribute to reducing social and economic inequality gaps, promoting equitable access to quality education and adequate nutrition. However, school feeding programmes face significant challenges in their implementation in the region due to problems in management, funding, and coordination.

This publication aims to use the best available data sources to describe the state of school feeding the region, the scale and coverage of programmes, their key programmatic components, and their impact on schoolchildren and their communities. It draws on the WFP State of School Feeding Worldwide publication series from 2013, 2020 and 2022 in methodology and approach as well as on the latest published evidence available on school meals in the region. This publication complements the global report, *The State of School Feeding Worldwide 2022*, by focusing specifically on the needs, culture, and context of LAC. It reports on the specific survey results for Latin American and the Caribbean, and analyses them in the regional context, presenting five chapters on the state of school feeding in LAC in key areas.

At this crucial moment in time for the region – one of education and food security crises – this publication seeks to identify the most recent advances in school meals programmes in the region, the challenges that programmes are facing, and the policies and strategies that are improving their quality, sustainability, and efficiency. The publication aims to inform decision-making and the implementation of effective public policies to promote the well-being and development of future generations in Latin America and the Caribbean.

The value of school meals in LAC

School feeding programmes are not limited to meeting students' food needs. In fact, they have enormous potential to address multiple cross-sectoral objectives such as health and nutrition, education, social protection, and the local agricultural economy (Verguet et al., 2020).

In terms of educational performance, school meals promote attendance, reduce dropouts, and contribute to higher graduation rates (UNESCO et al., 2019).

In health and nutrition, integrated programmes have reduced anaemia and diseases caused by intestinal worms (Bundy et al., 2020), in addition to reducing micronutrient deficiency and preventing obesity (Wang and Fawzi, 2020), by promoting healthy eating habits from an early age.

In terms of social protection, food programmes cover between 10 and 15 percent of household expenditure (WFP, 2013).

When it comes to local agriculture, linking with school feeding programmes benefits smallholder farmers and their communities, leading to long-term improvements in food systems (Swensson et al., 2021). Such impressive results are achieved through proper programme design, and the participation of diverse actors, the integration of health policies, agriculture, and local food production.

A brief history of school meals in LAC

In the Latin American and Caribbean (LAC) region, there is a long tradition of school meals programmes, with government-initiated programmes tracing back to the mid-twentieth century (Rutledge, 2016). Food programmes for school children in Bolivia, for example, were initiated in the 1930s with a free milk programme, and a first school breakfast programme was formally established in 1951. Brazil's National School Feeding Programme was established in the 1950s.

Over the following decades, school meal programmes expanded throughout the region. These programmes began to incorporate important objectives, such as improving the nutritional quality of school meals, promoting social inclusion, and reducing poverty. Coverage grew and today most school meals programmes in the region are universal in approach (WFP, 2017c).

Increasingly, governments in the region are going beyond providing sufficient calories, to also ensuring that meals are balanced, diverse and meet the dietary and cultural needs of students. Across the region, administrators are working to incorporate fresh, local, and culturally appropriate foods into school meals menus.

The COVID-19 pandemic presented significant challenges to school meals programmes in the region. Many schools were forced to close, disrupting access to meals. However, governments, in partnership with international organizations and civil society, implemented alternative solutions, such as take-home rations and vouchers or cash transfers, to ensure that students continued to receive proper nutrition during the crisis.

The challenge for governments in the region today is to maintain healthy meals for students, amidst rising food and administrative costs, as part of broader strategies to get children back on track after unprecedented learning losses during the COVID-19 pandemic.

Terminology

Terminology presents special challenges when writing about school-based programmes. All the programmes discussed in this publication are delivered through school systems and include interventions that promote health, nutrition, or both outcomes simultaneously. Historically, school-based programmes led by the health sector have been called "School Health and Nutrition Programmes", while programmes that provide food in schools, more typically led by sectors other than the health sector especially education, social protection, and social development, have been called "School Meals Programmes".

Today, in the region, "school health and nutrition programmes" typically include school meals components, and "school meals programmes" typically include nutrition and health interventions. In the regional sample of countries for this publication (see Chapter 1), 75 percent of national school meals programmes provided complementary health and nutrition interventions.

This publication preferentially uses the term school meals or school feeding because they are the most widely accepted terminology in this area. Its key findings demonstrate the importance of integrated health and nutrition interventions in schools, including school meals, to promote the physical, emotional, and social development, health and well-being of students and the school community.

Structure of the publication

This publication is comprised of five chapters and a Special Report:

Chapter 1

School feeding programmes in Latin America and the Caribbean 2022: Scale, coverage

and key elements, portrays a current picture of school feeding programmes and explores the coverage of students receiving school meals in the region. Programme funding is analysed, and policy frameworks and design are reviewed. In addition, the chapter introduces complementary interventions in health and nutrition.

Chapter 2

Partnerships in school feeding in Latin America and the Caribbean, presents the importance of partnerships in school feeding programmes. The critical role that government plays in the implementation and sustainability of effective school feeding programmes is emphasized. Chapter 2 highlights the role of governments, non-governmental organizations, and private sector actors.

Chapter 3

Advancing the integration of school feeding programmes to accelerate improved nutrition, human, social and economic development in Latin America and the Caribbean, further examines the benefits arising from school feeding programmes. The complementarity of school feeding programmes with other systems such as health, nutrition, and food systems, in addition to employment generation, is highlighted. An overview of programmes is presented, emphasizing the potential of positively generating additional benefits.

Chapter 4

Home-grown school feeding (HGSF) in Latin America and the Caribbean: Linking food systems and schools, addresses the benefits arising from linking school feeding programmes, food systems, and local economies. It describes the added values arising from feeding programmes with local products and mentions the region's best practices in terms of quality and sustainability from both an environmental and health perspective.

Chapter 5

School feeding programmes in times of crisis, demonstrates the capacity of school feeding programmes to adapt and respond to times of crisis. Examples of cases where schools have reacted effectively to the crisis caused by the COVID-19 pandemic are presented.

Special Report

Towards an intercultural approach to school meals in the region, provides a regional overview of intercultural approaches to school meals, identifies challenges, and builds on best practices in the region to lay out a way forward for intercultural approaches to take shape.

This publication contains case studies from the region and boxes on specific issues. The report was developed by technical experts with first-hand knowledge of the topics covered. They were informed by discussions from technical staff and policymakers working on school meals and integrated school health and nutrition programmes, which give insights beyond the data into the state of school feeding in the region today.



CHAPTER 1

School feeding programmes in Latin America and the Caribbean in 2022: Scale, coverage and key elements

1.1 Introduction

Current evidence indicates that approximately **80.3 million children at the pre-primary, primary and secondary school levels are now reached by school meal programmes in 31 countries** in the Latin America and Caribbean region (LAC).

During the COVID-19 pandemic, when schools closed, school meals programmes in the region collapsed, before they were adapted to reach children out of school (Beazley et al., 2021). According to data from the Inter-American Development Bank, 165 million students in LAC were abruptly disconnected from education. By the end of 2021, schools had closed for an average of 237 days, more than in any other region of the world (Abizanda et al., 2022).

An entire generation of students experienced as much as two full academic years of discontinuity of studies or patchy remote access. This, in turn, has led to gaps in skills development, loss of learning opportunities and the risk of increased school dropout. It has also contributed to weakening the protection of other essential rights of children and adolescents, including through exposure to violence (ECLAC, 2022).

Data from the global monitoring of school meals demonstrates that school feeding has rebounded. The number of children reached by school meal programmes globally now exceeds pre-pandemic levels (WFP, 2022). However, the effects of the pandemic demand a much greater need for investment in education and health (Abizanda et al., 2022; Schady et al., 2023). Integrated school health and nutrition programmes, including nutritious school meals, are more important than ever.

This chapter, together with Annexes I and II at the end of the publication, provides an overview of the status of school meal programmes in Latin America and the Caribbean based on surveys of 31 countries and states (see Box 1:1).

This chapter seeks to give readers a current assessment of key regional metrics in school meals, including the proportion of students receiving school meals; the reach of national initiatives; and the scale of national (domestic) and international investment in LAC. It responds to one of the main goals of WFP's new ten-year school feeding strategy which calls for "a more rigorous monitoring and evaluation of school meals programmes to demonstrate results and measure success". The chapter also corresponds to the Inter-American Development Bank Institutional Strategy and, particularly, the pillar on social inclusivity. The data and insights build on the methodology and analysis used in the *State of School Feeding Worldwide 2022*. A more complete explanation of data collection and management processes is given in Annex I.

1.2 Number of children receiving school meals

It is estimated that 80.3 million children received school meals, such as breakfast, snacks, or lunch, across Latin America and the Caribbean in 2022. Most of these children live in South America (63.2 million), followed by Central America (13.3 million), and the Caribbean (3.8 million).

Map 1.1

Children receiving school meals in Latin America and the Caribbean



Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.

Of the 418 million children receiving school meals globally in 2022, LAC (80.3 million) ranks second after South Asia (125 million).

Eighty percent of all children in the region benefitting from school feeding are located in seven countries: and Brazil (40.2 million), Mexico (6.5 million), Colombia (5.4 million), Peru (4.2 million), Ecuador (2.9 million), Argentina (2.8 million), and Guatemala (2.5 million).

Box 1.1 Methodology and data sources

This regional report uses the methodology validated by the WFP State of School Feeding Worldwide publication series from 2013, 2020 and 2022.

73% of data presented were drawn from the Global Child Nutrition Foundation (GCNF) Global Survey of School Meal Programs (from both rounds of surveys in 2019 and 2021, funded in part by the United States Department of Agriculture or USDA).¹ This data was supplemented with publicly accessible, official sources including from IDB, UNESCO, the World Bank, and WFP. This publication draws on a combination of primary and secondary data sources, selected on four criteria:

- 1. Relevance: sources that contain standard indicators on school feeding.
- 2. Credibility: sources published by official or academic institutions.
- 3. Availability: sources in open and public access.
- 4. Timeliness: sources published recently.

When two or more data sources were available for the same country, only the most recent data source was used in this publication, provided that all the other criteria were met – including relevance and credibility. Under the credibility criteria, particular attention was paid to using only data that were either provided, validated, or cleared by relevant government authorities.

Overall, the 2022 analysis is based on a sample of 31 countries. Reported data were available from 22 countries, which represent at least 90 percent of children enrolled in primary schools across the region and 88 percent of children receiving school feeding in the region. As such, this dataset can be considered as highly representative of the status of school feeding in LAC.

For six countries, parameters were estimated using the available information and other sources from the World Bank State of Social Safety Nets 2018 (Costa Rica) and WFP *Smart School Meals 2017* (Bolivia, Cuba, Dominican Republic, Nicaragua, Paraguay). Estimates for three countries (Bermuda, Dominica, and Venezuela) were obtained from a comprehensive review of case studies, publications, and reports. A specific effort was made to obtain information from high-income countries through direct contact with government focal points. See Annex I for additional information on data sources and methodology. In this analysis we refrain from drawing out longitudinal trends due to data limitations.

Figure 1.1

Breakdown of countries by data sources for the 2022 data (n=31)



¹ GCNF Global Survey reports specify the school year that was reported. See Annex I for country information.
1.3 Coverage of school meals programmes

Coverage is defined in this report as the proportion of primary school-attending children who receive school meals. While the school meals data presented in Section 1.1 of this publication cover pre-primary, primary and secondary education, the analysis of coverage data is limited here to primary schoolchildren only, due to the more inconsistent availability of data for the other two age groups.

Coverage in each country was estimated using the number of primary schoolchildren reported to receive school meals in primary schools, divided by the number of children enrolled in primary schools as reported by the UNESCO Institute for Statistics (2021). Coverage was calculated for twenty countries in the region based on available data. More information on the calculations is provided in Annex I.

As shown in Figure 1.2, approximately 56 million children are enrolled in primary schools in LAC, of which three million are in lower middle-income countries (Plurinational State of Bolivia, El Salvador, and Honduras); fifty one million, in upper middle-income countries (Argentina, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Grenada, Guatemala, Jamaica, Mexico, Paraguay, Peru, and Saint Lucia); and two million, in high-income countries (Chile, Panama, and Uruguay). Approximately 28 percent, or 16 million of these primary school children live in Brazil.

Figure 1.2

Children enrolled in primary schools in LAC

Legend: 56 million children are enrolled in primary schools in LAC, of which three million are in lower middleincome countries; 51 million, in upper middle-income countries; and two million, in high-income countries.



Source: Own elaboration using data reported by the UNESCO Institute for Statistics 2021.

Overall, the enrollment rate in the region is considered high. According to UNESCO data in 2019, approximately 78 percent of primary and secondary school-aged children are enrolled. This result is attributed to various efforts such as promoting enrollment in primary school, improving infrastructure, and teacher training programmes. However, it is important to note that LAC still faces significant challenges in this area. Alarmingly, worldwide, around 258 million children, adolescents, and youth are out of the education system. Latin America and the Caribbean ranks as the fourth region with the highest percentage of children and youth out of school at the primary and secondary levels. This situation highlights the persistent deficiencies and inequalities in LAC education systems.

Figure 1.3

Out-of-school children (OOSC), adolescents, and youth of primary, lower and upper secondary age*



* This graph has been updated from a previous print of this publication.

Source: Own elaboration based on data from the UNESCO Institute of Statistics, 2019 Report, data of 2018 (more details in annexes). Regions are sorted by out of school rate (%).

In addition, millions of children are at risk of dropping out of school. In LAC, the educational journey of over 118 million boys and girls between the ages of four and 17 from 16 countries in the region is in jeopardy. Their access to quality education is uncertain, and this poses a significant threat to their academic progress and future opportunities.



Figure 1.4

Educational trajectories at risk in Latin America and the Caribbean

Source: Timely interventions to improve access and learning. IDB, 2023 based on data from household surveys, ERCE and PISA. The data represents an average for the years 2019 – 2022 for 16 countries in the region.

The implications of children being at risk of dropping out of school are significant and can have longlasting effects. When children are unable to access a quality education, their overall development and prospects are compromised. Such failures perpetuate cycles of poverty and inequality, as these children often lack the necessary skills and knowledge to improve their circumstances. Moreover, society suffers from the loss of their potential contributions to communities and economies. To address these challenges, it is crucial to prioritize interventions that address socio-economic barriers, inadequate school resources, and the lack of support systems. School meals play a vital role in ensuring equal educational opportunities, especially in marginalized areas, as they can help keep children in school and support their educational achievement. By prioritizing school meals, we can break the cycle of poverty, promote inclusive education, and provide equal opportunities for all children to thrive and reach their full potential.

In the region, most school feeding programmes are universal in approach, but do not reach full coverage. This could be due, for example, to inadequate funding, logistical barriers to reach remote areas or small schools, a lack of service provision in underprivileged areas, or an inability of the programme to provide continuous services due to man-made or natural hazards, among other reasons (see Figure 1.5).

Figure 1.5

Coverage of school meal programmes (n=20)

Legend: Eight out of twenty countries in the region have 100 percent coverage, compared to four with coverage between 70 and 99 percent, four with coverage between 50 and 69 percent, and four with coverage under 50 percent. Brazil, the largest programme in the region, has a coverage of 100 percent.



Source: State of School Feeding Worldwide, 2022, WFP, using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.

It is important to note that a high level of coverage does not guarantee the quality of programming, in terms of feeding days, nutritional quality, food quality and diversity, or integrated health and nutrition components. Financial constraints can require trade-offs, for example, to reach more schools but with a less nutritious-food basket. Some programmes reach all schools but provide meals for fewer days than children are expected to attend school. Few programmes specially cater to the nutritional needs of the most vulnerable; programmes in low and middle-income countries rarely target children individually with specific nutritional needs because of the complexity and resources required (Drake et al., 2016; FAO 2019). Especially in times of increasing food prices and cost of living (ECLAC et al., 2022), universal coverage of *quality* programming is key to protecting and promoting the physical, emotional, and social development, health, and wellbeing of schoolchildren.

1.4 Sources of funding and regional investments

Based on data across 21 countries in 2022, three types of funding sources were identified for school meal programmes in LAC, in declining order of scale: domestic funding from national budgets; national-level donors and the private sector; and external donor funds.

The estimated regional investment in school meals in 2022 is between US\$3.6 billion and US\$7.6 billion in 2022. The reported investment in school meals in the region was US\$3.6 billion; the estimation, 7.6 billion, was calculated as the number of beneficiaries as reported in the present publication multiplied by the average cost per child per income group, and these values were summed up across the full set of 21 countries.

Domestic budgets make up 99 percent of funds for school meal programmes in most countries. As shown in Figure 1.6, national budgets were the major source of funding in all income levels; in lower middle-income countries, 4 percent of the budget comes from other national donors and the private sector, and six percent come from international donors. Comparable data for low-income countries is not available.

Figure 1.6

Breakdown of aggregate expenditure by source of funding in 2022, by income level (n=21)



Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.

Domestic budgets are of crucial importance for school meals programmes in the region. For example, Ecuador funds school feeding as a permanent expenditure in the Organic Law on School Feeding; the National Education Authority provides the necessary resources, and the budgetary allocation may not be reduced during fiscal year to guarantee the right to food, health, and nutrition of school-age children. In Bolivia, municipalities mobilize and manage resources for school feeding, including from the direct tax on hydrocarbons, departmental resources, and outside funding (Cruz, 2020). Even as a low-income country, the Government of Haiti allocated over US\$8 million (Fond National de l'Education) during the 2020-21 school year to finance school feeding (GCNF, 2022).

1.5 Cost per child

The data sample for this indicator is comprised of 21 countries in LAC, including one low-income country, two lower middle-income countries, ten upper middle-income countries and eight high-income countries. This sample is based on the same data sources reporting beneficiary data analysed in the previous sections.

The cost per child is calculated based on total expenditures for school feeding, divided by the number of children receiving school meals per year. It therefore encompasses commodity, supply chain, and administrative costs but does not include capital expenses. Due to school calendar variations between countries leading to a different number of feeding days in each country, this metric is standardized to normalize feeding day variations. This methodological approach was developed by the World Food Programme for a 2013 global cost benchmark (WFP, 2013) and has become the standard approach to calculate the cost per child in school feeding.

Due to a high variance between countries, the median cost per child is the most representative statistical instrument to serve as a benchmark. The median cost per child is derived by ranking the cost per child values and finding the middle cost. Figure 1.7 illustrates the median cost per child of school feeding by income level, as well as across LAC.



Figure 1.7

Annual median cost per child of school feeding by income level (n=21)

Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.



The data show significant variation between income levels, with a cost per child of US\$102 across all countries. In low-income countries, the cost of school feeding is around US\$10 per child per year albeit with just one data point, while lower middle-income countries report a cost per child of US\$23, upper middle-income countries, a cost per child of US\$86 and high-income countries, an annual cost per child of US\$293.

By sub-region, the median cost per child is lowest in Central America (US\$41) and highest in the Caribbean (US\$213), where the cost of living is also highest (FAO et al., 2022) (see Figure 1.8).

Figure 1.8

Median cost per child of school feeding by region (n=21)



Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.

1.6 National institutions: policy frameworks and programme design

Most LAC countries have established solid legal and policy frameworks, with policies and norms regulating school meals programmes from different sectors (Cruz, 2020; WFP, 2017c). In some countries, school meals are even embedded in the Constitution, through the right to food, as is the case for example in Bolivia, Brazil Cuba, Ecuador, and Panama (WFP, 2017c). However, the regulatory framework for school meals is often more fragmented.

Most countries have school meals embedded in their national development plans, as well as education and food security policies (WFP, 2017c). To a lesser extent, policy frameworks comprehensively include the social protection, health, and agriculture sectors.

At least 19 countries in the region have either a specific school feeding or school nutrition policy or law (Cruz, 2020; WFP, 2017c).² Furthermore, most laws and policies developed over the past decade have proven to be more sensitive to school nutrition and to local food systems, increasingly incorporating home-grown approaches (FAO et al., 2023a). In the cases of Brazil, Ecuador, Guatemala, and Honduras, for example, minimum thresholds for local purchases have been established (Brazil, 2009; Ecuador, 2020; Guatemala, 2017; Honduras, 2017). Other countries, primarily in the Caribbean, report to be in the process of developing new school feeding and school nutrition policies.

At least 27 countries have published dietary guidelines, which are a fundamental piece of policy to contribute to nutrition gains, also via school meals (Cruz, 2020).



² Of the countries surveyed in the Global Child Nutrition Foundation (GCNF) Global Survey of School Meal Programs which, as noted in Box 1 on methodology, is the largest source of information for this report, only nine governments self-reported on their policies. By leveraging the School Meals Coalition's Data and Monitoring Initiative, governments can directly enhance the quality and accessibility of relevant and up-to-date data and information (such as funding sources). Simultaneously, they can strengthen their institutional capacity for providing evidence-based and costed policies and targeted nutrition interventions at scale, as well as for tracking and reporting (such as funding sources) on progress over time.

1.7 School meals and employment

It is estimated that school meals programmes led to the creation of nearly 300,000 direct jobs in 15 countries in the region, which equates to 538 jobs for every 100,000 children fed (Figure 1.9). There are many uncertainties in these estimates, but they suggest that countries have indeed reinstated their school meal infrastructure since the COVID-19 pandemic. These estimates also reaffirm that school meal programmes are an important contributor to job creation.

Most of these jobs are for cooks but there are opportunities in other sectors as well as shown below. The analysis is based on a sample of 15 countries (Antigua and Barbuda, Guyana, Brazil, Grenada, Jamaica, Chile, Ecuador, El Salvador, Guatemala, Honduras, Panama, Peru, Trinidad and Tobago, Saint Lucia, Saint Vincent and the Grenadines) from all income level groups, feeding approximately 55 million children. This represents almost 70 percent of all children receiving school meals in the LAC region. In these countries, school meals programmes directly created approximately 300,000 jobs. However, unpaid volunteer work continues to be expected and provided in various countries of the region in these same roles.



This data set covers direct jobs created by implementation of school meals programmes in 15 countries; it does not include indirect employment or business opportunities generated by the provision of school meals, such as when programmes purchase food from local farmers. Therefore, the results presented here may be considered a conservative estimate.

Figure 1.9

Jobs created for every 100,000 children receiving school meals (n=15) Legend: For every 100,000 children receiving school meals, 538 direct jobs are created by the school meals programme.



Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.

1.8 School feeding as a multisectoral platform

School meal programmes are rarely delivered as isolated interventions but provide the platforms through which important complementary education, nutrition and health activities are delivered. School health and nutrition programmes typically include an integrated package of interventions that together seek to meet the needs of the learner in the local context. Complementary activities that accompany school meals include handwashing with soap, height measurement, weight measurement, deworming treatment, eye testing and eyeglasses, hearing testing and treatment, dental cleaning and testing, menstrual hygiene, drinking water provision, and water purification.

Data is available on these ten complementary activities (Figure 1.10). Most countries in the region implement health and nutrition interventions alongside school feeding programmes (75 percent), which is essential to secure the health, nutrition and well-being of children and adolescents. Drawn from a sample of twenty countries in the LAC region, overall, five countries (25 percent) reported having no complementary programme in place. At the same time, 45 percent of countries had one to three complementary programmes and 25 percent reported more than four complementary activities together with school meals. The delivery of more than six complementary interventions was reported by Argentina, Brazil, Mexico, and Trinidad and Tobago.

The most common complementary programme was handwashing (N=16, 69.9%), followed by:

Table 1.1

Complementary programmes in health and nutrition

Complementary programme	Number of countries reporting to have the complementary programme	Percentage of countries that report having the complementary programme
Handwashing	16	69.9%
Height measurement	8	34.8%
Weight measurement	8	34.8%
Eye testing	6	26.1%
Hearing testing	5	21.7%
Dental cleaning	5	21.7%
Deworming treatment	4	17.4%
Menstrual higiene	4	17.4%
Anaemia testing	1	4.3%

Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation.

Figure 1.10

Number of complementary activities implemented in conjunction with school meals

Legend: Seventy five percent of governments implement school meals in conjunction with complementary health and nutrition interventions.



Source: Own elaboration using publicly accessible, official sources including from the 2019 and 2021 Global Survey of School Meal Programs of the Global Child Nutrition Foundation, IDB, UNESCO, the World Bank, and WFP.

Among key nutrition-sensitive interventions in the region, home-grown school meals are increasingly considered and tested by national governments. However, scalability and sustainability over time remain challenging. At least 15 countries of the 31 surveyed include at least a percentage of local purchases in their school food supply chain.

National school meals programmes in the region are increasingly used, adapted, or expanded to respond to diverse types of crises. For example, most countries in the region have adapted their programmes in response to the COVID-19 pandemic. Furthermore, at least ten of the 31 surveyed countries have had some experience using school meals to respond to other types of shocks, including natural disasters, migration crisis and economic slowdowns.

1.9 The way forward

The data suggest that most countries in the region have returned to pre-pandemic levels of school feeding coverage as children have returned to in-person schooling.

Almost all national school meals programmes are supported by domestic funds and operate based on established institutional frameworks, laws, and policies. Political commitment and investment in national school meals programmes remain high after – as it did during – the COVID-19 crisis when most governments adapted programmes to reach children out of school. National school meals programmes in Latin America and the Caribbean show the highest coverage rate globally, with most countries taking universal approaches.

However, inequalities remain between countries with more and fewer resources, with expenditure per child ranging from US\$10 in low-income countries to US\$293 in high-income countries. Within countries, programmes' reach, relevance, and quality is variable; coverage ranges from 30 to 100 per cent across the countries in the region.

Continued and increased investment in school meals programmes from governments and donors will be needed to keep children in school during this precarious post-pandemic time, as learning losses continue to threaten retention in the near future. Coverage of quality programming is key to protect and promote the physical, emotional, and social development, health, and wellbeing of schoolchildren, which cannot be allowed to be undercut by rising prices amidst rising needs.

Integrated approaches to health and nutrition in schools are required, and nearly all countries in the region can improve the integrated package of interventions on offer to meet the needs of the learner.



CHAPTER 2

Partnerships in school feeding in Latin America and the Caribbean

2.1 A strong history of regional partnerships and cooperation on school meals

Regional cooperation on school meals in the Latin America and Caribbean has been building for decades. The first regional network for school meals in the world, the Latin American Network for School Meals (LaRAE), was established in Latin America in 2005 by the Government of Chile with the support of the World Food Programme (WFP). LaRAE supported school meals programmes in the region through knowledge sharing, events and learning and promoting country exchanges. It also provided technical assistance, research, and national assessments, and promoted key partnerships. For more than ten years, regional school meals seminars organized jointly by LaRAE and WFP were hosted by various governments, including Mexico and Peru, providing a unique platform to share experiences, discuss successful stories and common challenges, and foster South–South and triangular cooperation for more sustainable and effective programmes. From 2005 onward, regional forums offered platforms for cooperation on school meals (Figure 2.1).

Figure 2.1

Timeline of regional cooperation on school meals in LAC



In 2009, the Brazilian Cooperation Agency (ABC) and the National Fund for the Development of Education (FNDE), with FAO support, established a *South-South and Triangular Cooperation Framework* to implement the *Consolidation of School Feeding Programmes in Latin America and the Caribbean* project. The project has promoted improvements in school feeding policies, recognizing them as means of social protection and a guarantee of the human right to adequate food.

Box 2.1 Cooperation spotlight: Exchange of experiences between Brazil's National School Feeding Programme (PNAE) and LAC countries



In 2011, within the framework of the Brazil-FAO international cooperation programme, the Sustainable Schools methodology was created to provide a reference experience for sustainable school feeding programmes. Sustainable Schools include: the involvement of the educational community (social participation); the adoption of adequate and healthy school menus; the implementation of pedagogical school gardens; food and nutrition education; improvement of infrastructure, and school meals products purchased directly from local family agriculture. The methodology has influenced school meals programmes and policies in 15 countries.

A 2014 seminar in Mexico and a 2015 seminar in Peru saw high-level participation from more than 18 countries and a wide number of global and regional partners and experts consolidating these regional forums as a key platform for school feeding discussion and information sharing in the region. In 2017, a high-level event hosted by Mexico City gathered more than 300 participants from over twenty countries in the region, as well as participants from other regions. For the first time, in 2017 the regional school feeding forum focused on how nutrition-sensitive national school meals programmes are key in the fight against all forms of malnutrition, including overweight, obesity and micronutrient deficiencies.

By 2017, 22 countries were participating in the *Consolidation of School Feeding Programmes in Latin America and the Caribbean* project. With project support, six countries have passed school feeding laws (Bolivia, Paraguay, Honduras, Guatemala, Ecuador, and Panama), and two countries have proposed legislation (Dominican Republic and El Salvador).

In 2018 the Brazilian government through ABC and FNDE, and with support from the FAO, created the Sustainable School Feeding Network (Red RAES, for its acronym in Spanish). This international cooperation platform has collectively, and broadly, shared good practices and lessons learned, developed policy actions, and implemented and improved school feeding programmes, securing the Right to Adequate Food. Since its inception, the Red RAES has made efforts to promote dialogue, develop capacities, and exchange experiences and information, with the aim of strengthening school feeding programmes. Currently, the Red RAES is made up of more than 20 countries in the region.

During the COVID-19 pandemic, stakeholders worked together in various forms across the region to ensure that school meals continued despite school closures. Stakeholders, from financing institutions to UN agencies, supported governments to adapt programmes. Governments shared information on best practices and lessons learned on how to adapt school feeding programmes in real time as the pandemic progressed. For example, the Red RAES supported the countries during the pandemic to continue with the school meals services through different mechanisms such as the delivery of food kits to families, recognizing the important role of the community in promoting and giving continuity to school feeding actions even during the unfavourable conditions of the pandemic. In Haiti, for example, IDB, World Bank, and WFP-financed projects supported the education sector to respond to the shock of the pandemic by pivoting from in-school feeding rations to take-home rations. By distributing food rations through schools despite closures, the programme was able to ensure that, in a context of high food insecurity, children and families who depend on school feeding were able to continue benefiting from the services. Across the region, programmes adapted to reach children out of school (WFP, 2021). Stakeholders likewise came together to plan for and then reopen schools safely, by providing specific financing, technical recommendations, and forums for governments to speak to and learn from each other. For example, UNESCO, UNICEF, the World Bank, WFP, and UNHCR supported ministries of education in the region by creating a *Framework for Reopening Schools* based on technical recommendations for preparing for, and then opening, schools safely (UNICEF, 2020). Linked to this global initiative, UNESCO, UNICEF, and WFP jointly developed and disseminated regional guidance in LAC to support back-to-school processes for ministries of education and school directors.

Box 2.2

Cooperation spotlight: Digital exchanges helped programmes adapt to COVID-19

In June 2020, the 16th webinar of the series "Social Protection Response to COVID-19" was dedicated to exploring adaptations and scale ups of national school feeding programmes during the pandemic. This webinar hosted the first exchange on the subject between high-level representatives of the governments of Colombia, Honduras, and Peru. The discussion was one of the first that shed light on how to cope with COVID-19 and its effects on the education sector, school meals, and supply chains.

- Colombia shared its challenges and strategies in setting up a differentiated approach to adapt the national programme, developing tailored approaches in different territories and populations.
- Peru presented its first lessons learned on biosafety measures, and how the programme was expanded to reach vulnerable populations beyond schools.
- Honduras shared insights on how the largest social programme in the country, school meals, was rapidly adapted to reach schoolchildren at home, and how communities took full ownership and responsibility for the programme, distributing local stocks to remote areas, and using schools as platforms to reach families and the community at large.

A joint effort of the International Policy Centre for Inclusive Growth, Socialprotection.org and WFP, this virtual exchange was one of the earliest opportunities for exchange on school feeding programmes in the context of COVID-19. Thanks to it, key strategic and programmatic insights were shared by countries and partners in the middle of an unprecedented crisis, building bridges, sharing best practices and lessons learned, and, most importantly, providing mutual inspiration in the face of crisis.

In 2021, Latin American countries participated prominently in launching a global network at the United Nations Food Systems Summit: The School Meals Coalition. The Coalition has become one of the main successes of the United Nations Food Systems Summit, mobilizing political commitment and action of countries in LAC and around the world. At the time of writing, the Coalition, which is led by Finland and France, has more than 82 member countries worldwide, including many governments in the Latin America and Caribbean region, and more than ninety partners including UN agencies, think tanks, and academic centres. Several LAC countries also made bold commitments in their Food Systems Summit pathways, putting forward documents to the Summit that outlined national plans to strengthen food systems. Some notable examples are the pathways put forward by Colombia, the Dominican Republic, Guatemala, Honduras, and Peru, which fed into and shaped the beginning of the Coalitions' work.

Box 2.3 Cooperation spotlight: Peru, China, Ecuador, and Honduras promote the participation of small and medium farmers in public procurement



In 2021, experts, decision-makers and technical officials from Peru, the People's Republic of China, Brazil, Ecuador, and Honduras came together to exchange knowledge, experiences and lessons learned regarding school feeding programmes, public procurement systems and family farming. The governments sought information from each other to strengthen the design and implementation of sectoral policies so that small and medium farmers can sustainably provide agricultural goods to the school feeding programme and other local markets. The experiences of the countries and the studies were valuable inputs to a policy note that included a detailed state of the art of family farming in Peru, an integrated analysis nourished by exchanges and experiences, and a road map to guide the effective implementation of the public procurement law in the country.

The exchange was facilitated within the South-South and triangular cooperation project "Promoting the participation of small and medium farmers in public procurement to improve the nutrition of school children in Peru", by WFP, with funds from the People's Republic of China and was implemented in coordination with FAO and the International Fund for Agricultural Development.

In 2022, 21 LAC countries participated in a regional school feeding forum hosted by the Government of Colombia, WFP, and partners, which focused on the importance of integrated school-based interventions to maximize impacts on education, health and nutrition, agriculture, and social protection. The forum declaration agreed to document and make visible the enormous achievements on school feeding in LAC at the international level in forums, summits, and global political processes and to position the region as a leader in school nutrition and health, taking advantage of the Global School Meals Coalition as a vehicle to catalyse larger and stronger school feeding programmes.

The 2022 summit declaration demonstrated governments' political and financial commitments to quality school meals programmes and healthy school food environments, declared the Global School Meals Coalition a vehicle to scale up and advance school feeding in the region, and promoted a Latin American school feeding network, continuing in the long tradition of South-South and triangular cooperation to exchange experiences within and outside the region (WFP, 2022).

2.2 A new catalyser: the School Meals Coalition

At the time of this publication, 82 governments have signed the Declaration of Commitment and more than ninety partners have signed the Declaration of Support for the Global School Meals Coalition.

The main goal of the School Meals Coalition is to ensure that, by 2030, every child can receive a healthy, nutritious daily meal in school. The Schools Meals Coalition aims to support governments and their partners to improve the quality and expand the scale of school meals programmes globally, in a manner that is tailored to local contexts, and which simultaneously transforms food, education, social protection, and health systems for the better. The aim of the Coalition is to "connect the dots" between different

sectors by supporting education goals while ensuring healthy food environments in schools, promoting nutritious and sustainably produced food as well as diverse and balanced diets, and linking to local and seasonal production where appropriate.

The School Meals Coalition has the following three objectives:

- 1. Restore what we had (by 2023): Ensure that all countries, regardless of income level, restore access to school meals programmes for the 370 million children who lost access during the COVID-19 pandemic.
- 2. Reach those we missed (by 2030): Reach the most vulnerable children, in low and lower middleincome countries, who were not being reached even before the pandemic. Increase the efficiency of programmes to enable low and lower-middle income countries to become more self-reliant.
- 3. Improve our approach (by 2030):
 - Promote access to locally and sustainably produced food, respecting national and subnational contexts and providing adequate support to smallholder farmers and businesses, where appropriate.
 - Ensure that countries implementing school meals programmes have defined context-specific national school meals quality and nutritional standards and policies for their programmes.
 - Ensure that programmes are implemented alongside an integrated health and nutrition package of interventions (these can include, for example, deworming, water and sanitation, micronutrient supplementation, school gardens, among others).
 - Develop standardized ways to measure dietary quality and track the growth and development of school-age boys and girls.

Members of the Coalition have defined the following principles, which helps further explain what the group is and how it works:

Government-led, **partner-supported**: The Coalition was formed by governments for governments, to advance a key policy priority. Representatives of countries that have signed the Declaration of Commitment are the members of the Coalition and are at the centre of this initiative. Organisations that have signed the Declaration of Support are considered partners of the Coalition.

Country-level focus: The Coalition is rooted in country-level action and is committed to providing lasting benefit in the lives of children and their families.

Child-focused, multisectoral action and partnerships: It takes several sectors working together to help children fulfil their potential. Key among these sectors are education, health/nutrition, social protection, and food systems. The Coalition will model what a true multisectoral approach could look like and will address the challenges and ambiguities that this entails with the intention of working together to develop actions, incentives and collaboration involving relevant sectors at the subnational, national, and global levels.

Evidence-based action: The Coalition is based on research and committed to using evidence to improve approaches to school meals.

2.3 How the School Meals Coalition works in Latin America and the Caribbean

Latin American countries have played an important role in establishing and designing the School Meals Coalition since its inception at the Food Systems Summit discussion in 2021. Honduras, Guatemala, and Brazil are members of the leadership group of the Coalition and help steer the strategic direction. To date, 17 countries have joined the coalition in the region, committing to improve the quality, cost-efficiency, and sustainability of their national programmes, and capitalizing on over two decades of efforts and improvements. Countries in the region have taken a lead role in setting the direction of its work.

Several countries are also engaging proactively with the School Meals Coalition, via its initiatives, to get support in progressing on, or issuing new, national commitments. For instance, the **Sustainable Financing Initiative** of the School Meals Coalition carried out financial landscape analyses³ in seven countries, including Bolivia and Guatemala. The **Research Consortium for School Health and Nutrition** has been active in the region, including in the 2022 regional forum on school feeding, and one of its main action pathways is to develop case studies of national programmes for all member countries in the region in partnership with existing academic networks, as are now underway in Colombia and Brazil.

Map 2.1

LAC countries that have joined the School Meals Coalition



³ The financial landscape analysis that was prepared for the sustainable Financing Initiative for School Health and Nutrition provide more information. Kevin Watkins (2022) School Meals Programmes and the Education Crisis: A Landscape Analysis. Sustainable Financing Initiative for School Health and Nutrition, School Meals Coalition. Available at https://educationcommission.org/wp-content/uploads/2022/10/School-Meals-Programmes-and-the-Education-Crisis-A-Financial-Landscape-Analysis.pdf.

2.4 How different countries are leading while also benefitting from the Coalition

Brazil

Brazil has one of the largest and most well-established school feeding programmes in the world, offering universal coverage to more than forty million students daily and in every region of the continental-sized country. The Brazilian National School Feeding Programme (PNAE) offers school feeding and educational activities on food and nutrition to students on all two hundred school days per year, providing meals to public school students at all stages of basic education. Brazil has been a pioneer in the region and in the world for home-grown school feeding, with the PNAE law stipulating since 2009 that 30 percent of the value transferred by the federal government must be invested in the direct purchase of smallholder farming products.

The Brazilian programme has been an international success story, inspiring many other countries with its advanced legislation, nutrition-sensitive components, monitoring, and social participation strategies and its multisectoral approach. Through an innovative partnership with the WFP, the Brazilian government supported the creation of the WFP Centre of Excellence Against Hunger in 2011, which has welcomed more than sixty delegations from countries in Asia, Africa, and Latin America and the Caribbean to learn more about the Brazilian experience on the ground and remotely. In collaboration with FAO since 2008, Brazil has also developed significant technical cooperation around school feeding with countries in LAC, including the development of the Sustainable School Feeding Network (Red RAES). To continue building on its extensive experience of international cooperation in school feeding, Brazil joined the School Meals Coalition in 2021 to further exchange learnings and challenges with countries around the world.

Dominican Republic

The Dominican Republic School Meals Programme, which benefits 1.7 million children in the country, was a pioneer member of the Global School Meals Coalition. The school meals programme's objectives are to improve children's nutrition and health conditions to boost attendance and retention in school, increasing students' learning ability. The programme has achieved universal coverage, serving students in pre-schools, primary, and secondary educational levels in geographically diverse (rural, urban, and peri-urban) areas.

The School Meals Programme of the Dominican Republic joined when the Coalition was established in 2021, leading by making specific policy commitments to improve the health and nutrition of children across the country. Commitments include increasing the number of students that receive 70% of daily macro and micronutrients through the programme, reducing sugars and fats, promoting healthy habits, improving results measurement through the School Food and Nutrition Surveillance System, and assigning gradual budgetary increases to finance the programme's objectives.

Chile

Since its inception, the Chilean School Food Program has identified the importance of food and nutrition as a vital tool to achieving educational objectives. Thanks to its public health and social protection policies, Chile has been a regional leader in child health and nutrition. Over a forty-year span, the prevalence of undernutrition fell from 37 to 2.9 percent for children under the age of six. Presently having one of the lowest child malnutrition rates in Latin America, the country has managed to practically eradicate child undernutrition.

Chile joined the School Meals Coalition in 2021. Their participation in the Coalition builds on a long history of ensuring equitable access to education for Chilean children, and facilitating international exchange and learning, especially with countries in the region. Chile is host to LaRAE, a not-for-profit organisation devoted to strengthening school meals platforms and has engaged in various South-South cooperation exchanges, sharing its school feeding model with countries such as Cape Verde (2015) and Panama (2013). Chile's leadership on child health and nutrition is a vital resource for the development of nutritional menus, nutrition regulations, the rescue of traditional food systems, and the inclusion of gastronomy in school meals, among other areas. After joining the Red RAES network in 2023 and as a member of the School Meals Coalition, Chile continues to offer experience and generate evidence on school meals in the region.

Guatemala

Guatemala is global leader on school meals. In 2022, over 2.5 million students – from preschool to basic level – in 28,000 educational settings across Guatemala benefitted from the universal national school meals programme.

Guatemala joined the global School Meals Coalition in 2021. As part of the Coalition's Taskforce, the country has demonstrated strong engagement and commitment to provide school meals based on the human right to food that is adequate, nutritious, safe, and adapted to the specific culture, ethnicity, and social preferences of children, contributing to their nutrition. Recently, the country expanded the budget allocated to school meals, its coverage also to higher grade levels, and the targets for purchasing food for the programme from local producers, in line with its commitments to the School Meals Coalition.

The remarkable 2017 school feeding law establishes that every child in Guatemala within public education centres will have access to adequate school meals, provided in a regular, permanent, punctual, and cost-free way, coinciding with students' cultural traditions.

2.5 How partners are engaging and supporting LAC Coalition countries and initiatives

The School Meals Coalition is, above all, a powerful mobilization mechanism which aims at enhancing partnerships between Governments and other stakeholders to move forward national school feeding goals. Partners, including national and international civil society, academia, the UN, multilateral organisations, development banks, and International Financial Institutions (IFIs), play a key role in supporting member States with expertise and advice.

Multistakeholder partnerships on home-grown school feeding

Partners and international organisations have been key to informing, advocating for and helping to develop institutional frameworks and homegrown school meals approaches. Partners include local civil society, donors, financial institutions, UN agencies (such as FAO and WFP), and local and international research organisations, such as the International Centre for Tropical Agriculture (CIAT), a member of the School Meals Coalition. Investing in regional and global platforms, networks, and exchanges has also been essential to build and disseminate evidence, lessons learned and good practices, and build a rich regional community of practice.

Development banks and International Financial Institutions

Development banks and International Financial Institutions are also key to support countries, particularly low and lower-middle income countries, and to fund their school feeding programmes while these States develop and implement sustainable financing strategies and plans. In this field, the LAC region has also been a pioneer, with the Inter-American Development Bank (IDB) as the first development bank to join the School Meals Coalition.

The UN System

Partners including the UN agencies are committed to the School Meals Coalition and its efforts. At the global level, five UN agencies – the Food and Agriculture Organisation of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), and the World Health Organisation (WHO) – signed a joint declaration expressing their strong support for the School Meals Coalition and for the importance of scaling up global school feeding and school health and nutrition programmes to support children's healthy development and education. These agencies have committed to working together in the region to help governments determine their priorities and commitments and to assist them in working towards their implementation and achievement. The agencies provide operational support; policy and technical guidance; support the collection and analysis of more and better data and evidence; and advocate for increased investment to enhance the quality and reach of school meals and school health and nutrition programmes.

2.6 The way forward for partnerships in school feeding in LAC

Continue expanding School Meals Coalition membership in the region to position the significant experience of LAC school feeding programmes in the global discussion while introducing the Coalition's tools and initiatives to place them at the service of member countries in support of national commitments.

Support countries in the region to articulate clear and ambitious national commitments in the framework of the School Meals Coalition, to accelerate progress towards larger, better, and stronger school feeding programmes.

Embed the Coalition as part of the regional ecosystem of school feeding platforms and networks.

Share the skills and practices from LAC in global fora and networks, including the School Meals Coalition, and especially its Research Consortium.

Continue exchanges and projects within the region and with other regions and countries (through South-South and triangular cooperation) as well as information sharing to continuously improve and innovate programmes.

Strengthen regional networks to increase coverage, improve school feeding programmes, and implement policies, especially around key issues including local purchase from smallholder farmers, Indigenous Peoples' food systems, healthy school environments, promoting healthy diets, climate change and school meals, food and nutrition education, social and community participation, improvement of infrastructure, interinstitutional and intersectoral participation, and other technical areas.

Generate, promote, and participate in discussion arenas, such as global, regional, and sub-regional events and forums, which contribute to strengthening national school feeding programmes in the region.

Use regional and global platforms for partnerships, learning, advocacy, and visibility of regional efforts.

Research areas of school meals that remain under-researched and generate data and evidence to inform stronger policies and programmes as well as better investments.

Promote the active participation and commitment of governments, professionals, experts, partners, academia, civil society, and international organisations to contribute to the strengthening and sustainability of programmes that respond to their respective national objectives.



CHAPTER 3

Advancing the integration of school feeding programmes to accelerate improved nutrition, human, social and economic development in Latin America and the Caribbean

3.1 Introduction

National school feeding programmes in Latin America and the Caribbean (LAC) – which benefit more than 80.3 million children and adolescents in the region (WFP, 2022) – have great potential to effect children and adolescents' education and their health and nutrition status. An individual's health and nutrition status are determinants of one's ability to learn, and schools offer a unique space to influence both aspects (UNESCO, UNICEF and WFP, 2023) (Box 3.1). In the context of the multiple economic, political, and social challenges facing the region, school feeding – together with other integrated and multisectoral activities – has enormous potential to contribute to social protection and enhance human development. Achieving this requires an integrated and multisectoral approach to school meals that aims to ensure the provision of balanced and nutritious diets while universalizing the right to adequate food, to enhance the role of school meals in achieving the 2030 Sustainable Development Goals.

Box 3.1

Healthy, well-nourished children learn better

Students' health and nutrition are critical to their learning and educational achievement. Firstly, the availability of food in schools through school feeding programmes increases educational coverage, reduces absenteeism, and can improve academic performance, particularly among the most vulnerable populations and girls (Snilstveit et al., 2015; Drake et al., 2017). Especially in areas where food insecurity exists, such as rural areas affected by drought or displacement, school feeding programmes play a crucial role (UNESCO, 2019).

According to a 2020 study by Wang and Fawzi in nine low-income countries, school feeding improves school attendance and short-term math and cognitive task performance. Likewise, although marginal, the impact of school feeding programmes on nutritional indicators is greater among socially marginalized populations (Wang and Fawzi, 2020). In the specific case of girls and adolescents, school feeding contributes to closing educational gender gaps, by increasing their recipients' short-term memory

A 2019 study in Peru revealed that breakfast provided through the *Qali Warma* School Feeding Programme has positive and significant short-term effects on cognitive test performance among children who do not eat breakfast at home, especially in areas belonging to the lowest quintiles (MIDIS, 2019). The programme also generates savings between 10 and 17 percent of monthly consumption expenditure for households.

There is ample evidence that integrating multisectoral activities into school feeding deepens its scope and impact, and examples of health and nutrition activities abound (Bundy et al., 2018). School feeding programmes must therefore move towards a multisectoral platform to combat the main challenges to eradicating hunger and addressing malnutrition in all its forms. To this end, based on good practices such as the experience of Brazil, food security policies must integrate school feeding programmes, as well as multisectoral actions and roles for each sector.

In contexts where there are deworming campaigns coupled with micronutrient supplementation, it is estimated that on average children obtain 2.5 more years of education (Bundy, 2011). It is estimated that the delivery of fortified foods in schools can reduce anemia among adolescent girls by up to 20 percent (Adelman et al., 2012). Handwashing, meanwhile, can reduce absenteeism in schoolchildren by up to 61 percent by reducing the incidence of diarrheal and other hygiene-related diseases (McMichael, 2019). Other complementary efforts to school feeding, such as environmental sustainability programmes, are also relevant to food, health, and nutrition. The promotion of sustainable healthy diets in schools, through a lens that considers both sustainability and the nutritional value of diets, can contribute significantly to reducing food waste and promoting nutritious eating. This involves offering healthy and culturally acceptable food (FAO, 2020; Sternadt et al., 2021).

School feeding programmes are estimated to generate a return on investment of up to US\$9 for every US\$1 invested (WFP, 2022; Verguet et al., 2020). An analysis (Box 3.2) of the costs and benefits of school feeding programmes in 14 countries, including Brazil, Chile, Ecuador, and Mexico, shows that the potential benefits of investing in comprehensive, multisectoral school feeding may amount to \$180 million; in health and nutrition \$24 million; and in education \$156 million. In addition, the potential benefits in terms of social protection are estimated at \$7 million, as well as a potential of \$23 million for the agricultural economy (Verguet et al., 2020). At the level of the LAC region, the estimated potential returns are significant (Box 3.2).

Box 3.2

What are the potential returns of school feeding to health, education, social protection, and agriculture in Latin America?

Intersectoral school feeding programmes, if well designed, have the potential to improve the quality of education and can help improve student health and nutrition. This in turn contributes to improving human capital and brings economic returns at the individual and societal levels later in life. A 2020 study quantified the potential costs and benefits multisectoral school feeding programmes in Latin America using data from 4 countries: Brazil, Chile, Ecuador, and Mexico.

The study showed that with an average feeding cost per child per year of US\$105 for LAC:

- Potential gains in health and nutrition are from US\$126 to US\$335 per student and generate a cost-benefit ratio of 2.6.
- Substantial potential benefits can be calculated related to education, with an average variable gain per student of US\$2,096, generating a cost-benefit ratio of 20.

School feeding programmes also provide additional benefits for social protection. The study quantified the benefit generated by the transfer, as well as the benefits generated by local purchases:

- The estimated average direct income transfer benefit is US\$67 per student in LAC.
- Benefit to local agriculture could result in an economic impact of US\$273 per child in LAC.

Source: Verguet et al., 2020.

Recently, the Food and Agriculture Organisation (FAO) and the University of the West Indies conducted a cost-benefit analysis of school feeding programmes in Caribbean countries. The results for Dominica, Jamaica, and Saint Kitts and Nevis showed that the benefits outweigh the costs: the cost-benefit ratio in the three countries averaged US\$1.50, meaning that for every dollar spent, the return is US\$1.5. In Dominica, the ratio was US\$1.64, while in Jamaica it was slightly higher at US\$1.67. Finally, Saint Kitts and Nevis, with US\$1.76, presented the best cost-benefit ratio of the Caribbean countries studied. The study also concluded that the Saint Kitts and Nevis school feeding programme has benefited from its centralized nature and economy of scale (the programme feeds a large number of students). Likewise, the high cost-benefit ratio is related to the very high minimum wage in this country, and the sensitivity of the cost-benefit ratio to the value of a basic salary (FAO and University of the West Indies, 2021).

3.2 Integration of complementary activities to school feeding programmes in LAC

Scope and main objectives of school feeding programmes

School feeding programmes in LAC have broad coverage during the initial and primary education levels and play an important role in the fight against hunger and malnutrition. According to a regional study carried out in 16 countries by the World Food Programme (WFP), 12 of the countries analysed have school feeding programmes in public schools in the national education system at the preschool and primary levels (Bolivia, Brazil, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, and Peru). Only three of countries (El Salvador, Cuba, and Brazil) reported providing school meals to students beyond primary school. The study showed that, unlike school meals programmes elsewhere in the world, most of which have educational objectives as their main goal, in LAC, nutrition and health stand out as the main objective of the programmes. In total, 12 of the 16 countries evaluated in this study (Brazil, Bolivia, Colombia, Cuba, Dominican Republic, El Salvador, Haiti, Honduras, Nicaragua, Panama, Paraguay, and Peru) reported a specific or nutrition-sensitive component as their focus (WFP, 2017) (Box 3.3).

Box 3.3

Nutrition-specific and nutrition-sensitive interventions

Nutrition-specific interventions or programmes address the immediate determinants of nutrition and foetal and child development – adequate food and nutrient intake, feeding practices, care and upbringing, and low burden of infectious diseases.

Nutrition-sensitive interventions or programmes address the underlying components of foetal and child nutrition – food security, adequate care resources at the maternal and household levels, access to health services and a safe environment – and incorporate specific nutritional goals and actions, thus accelerating the development of nutrition-specific interventions.

Source: Ruel and Alderman, 2013.

This last finding coincides with the results of the Global Survey of School Meal Programs conducted by the Global Child Nutrition Foundation (GCNF), which collects self-reported data from countries. An analysis of that data finds that the main objective of school feeding programmes in the region is to achieve nutritional and/or health goals, followed by educational, social protection, obesity reduction, or agricultural objectives (GCNF, 2022) (Figure 3.1). At present, as the triple burden of malnutrition among the child population – chronic malnutrition, obesity, and overweight and micronutrient deficiencies – is evident throughout the region, it is surprising that only eight countries report having specific objectives for obesity prevention or that only four report pursuing agricultural objectives.

Figure 3.1

Objectives of school feeding



Source: Own elaboration based on self reported data in the GCNF 2019 and 2022.⁴

⁴ Own analysis of twenty countries' self-reported data. Information is from 19 countries (Antigua & Bermuda, Argentina, Bahamas, Barbados, Belize, Brazil, Chile, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Peru, Uruguay, and Panama) from 2021 and one (Colombia) from 2019. See Annex A.1.1 in the GCNF Global Survey of School Meal Programs results report for more detailed information (GCNF, 2022).

Activities implemented as part of school feeding programmes

The variety of complementary activities to school feeding implemented in the region is consistent with the main objective of the programmes reported by the countries to meet nutritional or health objectives. Although it is true that a diverse set of activities are implemented in the region related to health promotion, the scope of their implementation is limited (Figure 3.2). As reported by countries, Water, Sanitation and Hygiene (WASH) activities are implemented more frequently. However, even handwashing – which was most frequently implemented – was only reported in 13 of the twenty countries assessed. Height and weight measurement was the second most reported activity in seven of the twenty countries. Other essential health strategies for academic achievement, such as visual and auditory evaluations, or menstrual hygiene management for girls and adolescents, are scarcely reported in the region.





Complementary services offered in health

Source: Own elaboration based on self reported data in the GCNF 2019 and 2022.

The 2021 Global Survey of School Meal Programs mentions that specific activities aimed at improving nutrition are implemented more frequently. As shown in Figure 3.3., the majority (17) of feeding programmes report having dedicated nutritionists as part of their workforce. Just under half of the countries (9) offer nutrition training to school food preparers. While 14 out of the 20 countries surveyed report providing fortified foods through school meals programmes, national efforts for micronutrient supplementation or biofortification are almost nil. It should be noted that limited implementation of health activities represents a missed opportunity in nutrition. For example, treatment of parasitic diseases is essential for good health, and for the use of micronutrient supplementation and fortification interventions (Hall, 2007; Sarma, 2022). However, only four countries reported deworming as part of their school feeding programmes.

Figure 3.3



Complementary services offered in nutrition

Source: Own elaboration based on self reported data in the GCNF 2019 and 2022.

The implementation of activities in health, nutrition, and physical activity and other themes related to education on agriculture and food production were much more frequently reported throughout the region (Figure 3.4). At least 50 percent of countries report implementing some type of educational strategy in eight topics related to health and nutritional well-being (physical education, reproductive health, health, hygiene, school gardens, agriculture, and food and nutrition). On the contrary, particularly in terms of HIV, only three countries reported carrying out educational strategies for its prevention. Again, the frequency of the topics of food and nutrition, school gardens, health, and physical education reaffirms the trend observed in terms of the programmatic objectives of the programmes and their commitment to improving health and nutrition through school feeding. Box 3.4 provides an example of an educational strategy for teachers in the region.

Figure 3.4



Complementary educational programmes implemented as part of school feeding programmes

Source: Own elaboration based on self reported data in the GCNF 2019 and 2022.

Box 3.4

Strengthening the capacities of El Salvador's teaching staff through a virtual diploma

The Virtual Diploma "Development of Healthy and Sustainable School Environments" aims to contribute to the improvement of school feeding as one of the strategies for the achievement of the human right to adequate food among Salvadoran children. Malnutrition data show that in the country, there are still 13.6 percent of children under five years of age with chronic malnutrition or growth delays, iron deficiency anaemia affects 16 percent of schoolchildren in public schools and 21 percent of children under five years of age; while overweight and obesity are increasing, affecting 8 percent of children under five years of age, 30.7 percent of first-grade schoolchildren and 38.4 percent of school-age adolescents, according to various official sources.

This pilot initiative places schools as ideal spaces for the promotion of food and nutrition education strategies. Encouraging exploration, critical and creative thinking and the training of teaching staff as agents of change is a fundamental axis for the promotion of healthy eating habits and practices among students and other actors in the school community. More than 5,000 teachers nationwide have been trained to date thanks to the joint effort between the Ministry of Education, Science, and Technology, the Teacher Training Institute, FAO, the local NGO EDUCO, and Zamorano Pan-American Agricultural School, with technical and financial assistance from the *Consolidation of School Feeding Policies for Latin America and the Caribbean project* of the Brazil-FAO Cooperation.



Institutional frameworks

The laws, public policies and national standards governing school feeding programmes provide valuable information on their shape and programme priorities. These are essential to ensure the sustainability of programmes and over time. According to information reported to the Global Survey of School Meal Programs, 70 percent of school feeding programmes surveyed in the region report having a law, a public policy, or national school feeding standards. The same number of countries (14 out of twenty) report having a policy related to school feeding with respect to nutrition and more than half of the countries (60 percent) report having a food safety policy. Less than half of the countries (7 out of twenty) have any related health policy in place and just 5 countries report having an agricultural policy linked to school feeding (see Figure 3.5).



Figure 3.5

Regulatory frameworks as part of school feeding

Source: Own elaboration based on self reported data in the GCNF 2019 and 2022.

According to FAO, a solid legal framework for school food and nutrition goes beyond the existence of a law and involves additional legal instruments that govern the different vital aspects that constitute a comprehensive approach. Consistent with the relatively broad regulation of school feeding activities, even more countries (27) have food-based dietary guidelines (GABAs) than the number of existing school feeding laws (14). GABAs provide context-specific recommendations and principles on healthy eating and lifestyles, which are based on solid evidence and respond to the country's public health and nutrition priorities, food production and consumption patterns, sociocultural influences, food composition data, and accessibility, among other factors. To respond to current nutritional challenges, they must be updated regularly (Alipui and Oshea, 2015).
Case Study 3.1

Mexico: keeping guidelines current and relevant for better nutrition

Since May 2014, Mexico has guidelines for the sale of food and beverages in schools within the National Educational System (SEN), both public and private (Diario Oficial de la Federación, 2014). The guidelines are a set of rules and guidelines established by the Ministry of Public Education (SEP) and the Ministry of Health (SSA) with the aim of promoting healthy eating and preventing malnutrition in students. They seek to regulate the food and drinks that are offered and sold in schools.

Mexico has a broad culture of evaluation of its policies and programs (CONEVAL, 2015). In the National Institute of Public Health of Mexico (INSP) as well as other institutions, several studies and evaluations of the guidelines have been carried out, including analyses of the perspective of the actors before their implementation, the implementation process, and the impact of the guidelines (Monterrosa et al., 2015; Perez-Ferrer et al., 2018; López-Olmedo et al., 2018; Huges et al., 2021). The evaluations reveal important challenges in the implementation that limit their impact and the need to strengthen them so that they effectively improve the food environment. They also allowed the identification of a series of barriers and useful lessons learned to feed back into a revision process (Théodore et al., 2018).

These results, as well as the advances in regulation for the prevention of obesity, highlighted the need to update the guidelines. This resulted in a revised proposal of guidelines for publication. The revision proposes that the guidelines be strictly observed, and that they are aligned with NOM-051, which establishes a frontal labeling system for packaged food and beverages and that prohibits advertising aimed at children of food with frontal labeling. As part of this review, the sale or advertising of food and beverages that contain seals will not be allowed either. In addition, it establishes sanctions for non-compliance.

Several national programs carry out efforts to align their programs with the labeling policy, including the Comprehensive Strategy for Social Food Assistance (IASA) of the National System for the Development of Children and the Family (SNDIF). The latter oversees the school breakfast program, among others, and already complies with the guideline to not acquire or distribute supplies that have frontal labeling to school establishments. Soon states will be evaluated for compliance with this provision. Given the lessons learned from the multiple studies and evaluations, it will be essential to monitor and evaluate the implementation of these new guidelines.



Despite the ample scope of school feeding programmes and the various strategies and activities that are integrated into these programmes in schools, there are few adequate monitoring mechanisms or precise indicators to measure their impact (Schultz and Ruel-Bergeron, 2022). In those cases where there are no national monitoring and evaluation systems that report on the implementation and effectiveness of the school meals programme, and their various strategies, it is difficult to take corrective actions in lieu of evidence. It is true that several countries have carried out evaluation exercises and have developed indicators, including measures of acceptability, scope of assistance and well-being, among others, but existing mechanisms are insufficient to measure the performance of programmes in the implementation of food policies and their impacts, a limitation that has already been highlighted by the Organisation for Economic Cooperation and Development (OECD, 2022).

Monitoring and evaluation models in the region are not continuous or robust enough to respond in situations where rapid action, coordination or innovation is required. Chile, where a comprehensive evaluation of the school feeding programme was recently conducted, offers a relevant example for the region. As part of the comprehensive evaluation of the programme, important determinants such as relevance, coherence, efficiency, effectiveness, sustainability, and evaluability were addressed (UC and DICTUC, 2021). The improvement proposal that was developed for the school feeding service in the country was based on this exhaustive analysis of the programme and urges the redesign of public policy to overcome gaps in quality, coverage, and efficiency, identified as part of the assessment.



Case Study 3.2

School feeding during the first 8,000 days: the Chilean integrated model

Recent evaluations of the Programa de Alimentación in Chile confirm its impact on the eradication of hunger in children and adolescents (FAO, 2016) and its role in combating malnutrition by providing adequate nutrients for students to develop their learning process (UC and DICTUC, 2021; FAO, 2016 and 2020). Its strong design was decisive in its success. It has several regulatory frameworks and crosssectoral objectives (GCNF, 2021). Among its programmatic objectives, it seeks to fulfil educational objectives, offer a social safety net, and prevent malnutrition. In regulatory matters, it has a public policy on school feeding and specific policies on nutrition, food security and private sector involvement. School feeding is included in an integrated package as part of an institutional programmatic offer that is focused on health and nutrition, which includes actions such as income verification, anthropometric measurements, hearing tests, and visual and dental controls. It also has complementary education programmes in food and nutrition, promotion of school gardens, hygiene, school health, and recreational activities. The programme delivers fortified foods, has the support of nutritionists in its planning and implementation, and aims to ensure that students are well nourished while attending school and preventing obesity. The programme has another peculiarity with respect to other programmes in the region: it provides student meals throughout the school trajectory from nursery to higher education, delivering food that is appropriate to the student's developmental stage.

For the past 15 years, the investment and focus of interventions for human capital development – most notably in health and nutrition – has been directed at the first 1,000 days of life (Bhutta et al., 2008). This period is a critical window in child development where various processes occur that largely determine the physical and intellectual potential of people. And while this approach is essential, the most recent evidence suggests that it is necessary to expand the range of interventions – as well as research and data collection efforts – to the whole of childhood and adolescence (8,000 days), a stage that has traditionally been neglected (Bundy et al., 2017). During the 8,000 days between gestation and 21 years, there are several phases that determine the development and human capital of an individual. Health and nutrition status during the growth and consolidation phase of middle childhood (from five to nine years of age), the accelerated growth phase of adolescence (from ten to 14 years), and the growth and consolidation phase of adolescence (from 15 to 19 years) are also determinants for the generation of human capital. Therefore, exploring strategic interventions before reaching adulthood is also a critical aspect of development. The integrated Chilean approach of 8,000 days begins in the nursery with the Programa de Alimentación para Párvulos, an infant feeding programme, and continues with school feeding in educational establishments, covering from pre-primary to all primary and to secondary education. After that, it is accompanied under a voucher type modality that is delivered by students who continue their studies in technical and higher education in educational institutions accredited by the State, supporting the entire educational trajectory.

The potential scaling up of health and nutrition efforts also implies potential trade-offs in terms of cost and efficiency to be considered. For example, the large number of children receiving pre-school and primary-age school meals – especially in countries with near-universal programmatic coverage – can limit the quality of interventions, particularly in the context of countries with budgetary constraints or crises common to the region. This is largely why, although evidence indicates that adolescents, especially girls, are a critical group for school-level health and nutrition interventions, current programming rarely covers this population group.

3.3 Discussion

Under the premise that children and adolescents should reach their full development and are guaranteed the right to adequate food, as well as other fundamental rights associated with school feeding, and that consequently, countries should pursue sustainable development, it is essential to invest in and strengthen school feeding programmes. The mandatory nature of primary education in the LAC region guarantees that school feeding programmes have a potential for great scope and are positioned as an ideal facilitator for integration. The information available at the regional level suggests that school feeding programmes in the region are generally sensitive to the importance of integrating multisectoral activities for better performance and greater impact. This is reflected both in the variety of complementary activities that exist—covering a range of activities related to a greater extent to health and nutrition, but also affecting agricultural and food production issues—and in the regulatory framework that governs them. However, in practice, the implementation of integrated models is limited.

The current context is one of economic slowdown where socio-political instability and the migration crisis, environmental changes, demographic, epidemiological and nutritional transitions, as well as the outcomes of the COVID-19 pandemic, threaten to reverse the results achieved on multiple fronts by education, social protection, health, and nutrition. In parallel, the dramatic increase in the cost of food leaves healthy eating out of reach for 22.5% of people in LAC (FAO et al. 2022). Integrated health, nutrition and school feeding programmes have the potential to contribute to efforts to fill the gap left by the current situation for millions of children and adolescents in the region and enhancing their reach is urgent. Filling this gap requires concerted actions at the regional and country levels, not only to advocate for the programmes' importance, which is already well known, but also to reconceptualize school feeding from the multi-sectorial level and to promote comprehensive policies and financial commitments for implementation and sustainability over time.

In 2020, multilateral organisations and UN agencies formed a new partnership, *Stepping Up Effective School Health, and Nutrition*, which brings together actors from health, education, agriculture, WASH and social welfare, inviting governments to be more strategic in planning and investing capital in school feeding programmes and seeking to support them in the process (UNESCO, 2020). In 2021, the *Research Consortium for School Health and Nutrition* was launched under the School Meals Coalition, a collaboration between academic, scientific, programmatic and development partners that aims to support decisionmaking with a database and evidence in school health and nutrition. The reasoning is irrefutable: not investing in a healthy and educated population compromises the sustainable development of countries. At the same time, to transform to integrated approaches, programmes must build monitoring and evaluation systems that are based on results frameworks that include process, product, results, and impact indicators. In their absence, it is impossible to maximize the reach and impact of school feeding programmes in the region. Although the intentions to foster integration in the region are genuine, current implementation is not sufficient, it is not universal, and it is not yet at the level that produces tangible results for students and for society. It is imperative to act.

3.4 The way forward

Although most governments offer school meals alongside some complementary health and nutrition interventions, there is an urgent need to **ensure integrated packages that meet all of children's health and nutrition needs** so that they can learn and thrive. Few countries invest adequately in integrated health and nutrition packages, including multisectoral investment, for example, in health interventions that have been shown to support children's well-being and academic achievement. This investment is even more necessary now, after the COVID-19 pandemic and the lack of health and nutrition services that were available to children.

School feeding policies should highlight their contributions to educational objectives.

Most programmes still have great potential to **maximize their benefits by adopting greater sensitivity to address malnutrition in all its forms**: setting clear programmatic objectives, implementing monitoring systems designed in parallel, and monitoring the implementation and impact of such programmes. This is critical to progress against malnutrition in LAC.

The triple burden of malnutrition – chronic undernutrition, obesity and overweight, and micronutrient deficiencies – requires **specific targets and programmes that demonstrate impact, backed up by evidence,** for its prevention. Interventions that prevent overweight and obesity should be encouraged and sustained.

It is not enough to meet a caloric gap with foods that do not add diversity to the diet, that don't promote the consumption of nutritious foods, and do not provide the macronutrients and micronutrients necessary for a healthy diet. It is time to invest in the future human capital of the region by **ensuring healthy school meals and using this platform as a springboard for comprehensive health in schools**.

Aware of the importance of healthy diets from sustainable food systems, several countries have taken up the task of developing specific dietary guidelines. As other countries in the region join this initiative, it is vital to **promote the adherence of school meals programmes to these guidelines**. It should be recognized that the dramatic increase in the cost of a healthy diet in the region could make it difficult to adhere to these guidelines at the territorial level and that as recommended in Chapter 6 of this publication, they should align with Indigenous Peoples' food systems, and reflect the nutritional content of biodiverse Indigenous foods.



CHAPTER 4

Home-grown school feeding in Latin America and the Caribbean: Linking food systems and schools

4.1 Introduction

Over the past two decades, many Latin America and Caribbean (LAC) countries have proven to be pioneers in testing, implementing, and institutionalizing innovative home-grown school feeding (HGSF) models. In Chapter 1 of this report, the findings show that at least 15 countries of the 31 for which data is available have implementation models in place that allow them to purchase at least a share of the food produced locally, including from smallholder producers to different extents and scale. Of these, many have adopted enabling policy frameworks and regulations (FAO et al., 2023a). While a number of initiatives have faced financial, institutional, and technological barriers as well as sustainability challenges, in some cases slowing their replication and expansion, many countries in the region are demonstrating that successful models can be consolidated and implemented at scale.

Box 4.1

Defining home-grown school feeding

Home-grown school feeding constitutes a school feeding model that is designed to provide children in schools with safe, diverse, and nutritious food, sourced locally from smallholder farmers.

Source: FAO and WFP (2018), Home-Grown School Feeding Resource Framework.

Brazil is the undisputed HGSF pioneer in the region. After establishing a Food Purchase Programme (PAA) in 2003, issuing a Food Security and Nutrition Law in 2006, and constituting the "right to food" through a Family Farming Law in 2016, Brazil refocused its National School Feeding Programme (PNAE) in 2009 to link family farmers with school feeding. This included a requirement that schools allocate a minimum of 30 percent of their food procurement federal budget to direct purchasing from small farmers (Kelly and Swensson, 2017).

After Brazil's successful experience, new models were tested and institutionalized, and HGSF has gradually gained recognition across the region. In 2015, the Community of Latin American and Caribbean States (CELAC) adopted the Plan for Food and Nutrition Security and the Eradication of Hunger 2025 which featured the importance of local school feeding as a key intervention for the region (FAO, 2015). In its 2010 Regional Food and Nutrition Security Policy, the Caribbean Community (CARICOM) highlighted the need to use local foods in national school feeding programmes to ensure that children receive adequate levels of micro-nutrients (CARICOM, 2010). Several Caribbean countries, including Jamaica and Guyana, are making efforts to increase local purchases from small farmers, capitalizing on decentralized procurement systems and recognizing the inclusion of local food systems in their institutional frameworks.

The Purchase for Progress (P4P) initiative, promoted by WFP in Central America between 2009-2014, expanded the links between school feeding programmes and local agriculture, increasing the proportion of basic grains for school meals sourced from local smallholder producers, while improving farmers' production and capacity. Between 2009 and 2014, the P4P initiative supported 34,000 small producers and allowed the purchase of 70,000 metric tons of food, worth US\$40 million. Nearly 33 percent of this investment benefited school feeding programmes (WFP and FAO, 2018). After 2014, countries such as Honduras, Guatemala, El Salvador, Ecuador, and Bolivia, among others, have started to extend local purchases to locally grown fresh foods. Following the lead of these successful examples, other countries, including Haiti and Cuba are increasingly strengthening links between schools and local food systems,

while others, such as Colombia, are exploring opportunities and testing innovative models. In 2009, FAO and Brazil jointly launched the Sustainable School Initiative, with the intent to socialize the Brazilian home-grown approach and encourage countries to promote new models devoted to increase the links between schools and local farming, including through school gardens. Between 2009 and 2021 the initiative has reached over 1.6 million schoolchildren in 23,000 schools in 13 countries (FAO et al., 2022a).

Figure 4.1

A brief history of homegrown school feeding in LAC



Source: Centre for Tropical Agriculture (CIAT), 2023. Linking National School Feeding Programmes with Local Food Systems in Latin America and the Caribbean. Forthcoming.

4.2 Home-grown school feeding (HGSF) between the COVID-19 pandemic and the cost of living crisis

During the COVID-19 pandemic, school closures, the suspension of school feeding programmes, restrictions imposed by governments, and even the eventual adaptation of programmes to take-home rations or cash distributions, in some cases, cut off local food producers and smallholder farmers from supplying their produce to schools. Honduras is a case where the HGSF programme was largely interrupted during the pandemic, while Guatemala managed to continue, at least in part, its local purchases from family farming. The pandemic also slowed, or even stopped, logistics and production processes and in the wake of the pandemic, prices increased. Inflationary pressure then continued due to further disruptions to key production chains, including fertilizers, caused by the war in Ukraine and other factors (ECLAC, 2022). Global food prices have since increased sharply. Higher energy prices, as well as the long-lasting effects of the COVID-19 pandemic, have also exacerbated the situation.

While there are no sufficient data available to measure the impact of this recent global food crisis on HGSF, the rising levels of food insecurity, especially among the most vulnerable groups, is largely affecting smallholders, their families, and their production capacity. A survey on food security and livelihoods in the Caribbean, carried out by WFP in August 2022, estimates that 4.1 million people out of 7.1 million (57 percent) in the English-speaking Caribbean are food insecure, a dramatic increase of 1.3 million since February 2022. On average, food inflation in the English and Dutch-speaking Caribbean has risen by 10.2 percent across twenty countries as of March 2022. Among the many effects of the cost-of-living crisis, the survey reports that half of the respondents faced challenges in accessing markets and deteriorated food consumption and diets. On changes in terms of costs and access to agricultural inputs, most farmers reported important increases in the costs of basic inputs, such as animal feed, fertilizers, seeds, water, and even labour (WFP, 2022a). The survey highlights the effects of the crisis on local agriculture, recommending strengthening local food systems and expanding initiatives to boost local and regional food production, transformation, and consumption, while strengthening and increasing coverage of national social protection programmes.

HGSF initiatives are one of the key entry points that may help small producers overcome the effects of the crisis, securing a stable market for their produce, thereby providing the income to potentially reverse what appears to otherwise be a negative cycle.

4.3 What is the latest evidence telling us?

HGSF and local food systems

The literature suggests that HGSF can be beneficial to local food systems (IFPRI, 2017; FAO et al., 2021; Valencia et al., 2019). It can improve family farmers' capacity and access to markets, and their increased participation can lead to more income-generating opportunities, including for women and youth (WFP, 2017). However, recent studies have highlighted the need to consolidate the available evidence and to invest more in quantitative analysis and empirical evidence that measures effects on local food systems, smallholders and the community at large (CIAT, 2023). HGSF approaches are complex, and their multiple impacts depend on many variables and conditions, including local supply chains, access to markets and price dynamics, financing, as well as socio-economic and cultural patterns. Procurement processes are also shaped by the availability of local foods, geographic location, and the demand, which for schools comes from the menu. Commodity baskets based on menus designed according to local availability and agroecology enable schools to source food from local producers (Gelli et al., 2016)

In a recent evaluation of the decentralized school meal programme in Honduras, it was highlighted that, while the lack of evaluation data makes it difficult to quantify economic benefits, local producers agree that their income has improved over time, and that HGSF has helped them access a more secure market, allowing to expand and diversify their production (WFP, 2021). Another analysis carried out in Ecuador found that 83 percent of smallholder associations in the provinces of Esmeraldas, Carchi, and Imbabura, agree that links to school procurement had boosted their incomes. Producers also acknowledged that they had been fairly compensated for their products (CIAT and WFP, 2023). Between 2012-2016, school procurement purchases for the department of Chuquisaca, Bolivia, totalled US\$2.8 million of which US\$1.1 million, almost 40 percent, was used for purchasing food directly from family farmers (WFP, 2017b).

Alongside the effects of better income opportunities for smallholders, available evidence suggests that HGSF can improve farmers' resilience, boost local economies, increase sources of employment, and reduce food transportation time by promoting shorter supply chains, among others. A 2021 review of school feeding programme in the Caribbean published by FAO and the University of West Indies highlights the importance of increasing procurement for school meals from smallholders and family farmers. One of the most compelling justifications for a state-funded school feeding programme in the Caribbean, the report said, is its expected impact in increasing domestic agricultural production leading to a reduction in the food import bill and increased job creation and economic activity, especially in rural areas. However, in most of the Caribbean countries, this impact has not taken place and in many countries; instead, school feeding programmes have been using increasing amounts of imported, as opposed to local foods (FAO and UWI, 2021).

HGSF is also seen as a potential catalyser of different opportunities to support local food systems and help them grow and thrive. The links between school feeding and local agriculture go beyond the mediated market paradigm. These programmes can also be used as platforms to address issues such as access to credit for small farmers by providing direct links with agriculture banks and collateralizing forward contracts (Bundy et al., 2018). This is a very important aspect for the LAC region where, in many countries, access to credit, informality and lack of financial and administrative capacity are among the main recognized challenges for smallholder producers (CIAT and WFP, 2023). Overall, the investments made in HGSF programmes in the region have increased support to farmers and local producers' networks organisations, building and strengthening their production and administrative capacities to access formal markets.

Women farmers, youth, Indigenous Peoples and Afro-descendants

In terms of generating better opportunities for women, youth, Indigenous Peoples, or Afro-descendants, evidence is scarce. The Special Report in this publication looks at those HGSF initiatives that have tried to be more inclusive of Indigenous People in certain regions, or are more inclusive of local food cultures, and provides more information on direct linkages between HGSF, Indigenous groups, and their foodways.

Challenges related to gender seem to be a common trend across the region, primarily in terms of unequal participation of men and women along the school food value chain. Only 20 percent of the region's agricultural farms are led by women; however, women perform a large proportion of work on the land. In Central America, this figure drops to 15 percent, and in the Caribbean and South America it rises to 23 percent, according to the latest available census data (FAO, 2017; ECLAC, 2021). In schools, while food production and management seem to be dominated by men, with little female representation, food preparation is often considered as a mandatory female duty with little or no remuneration at all (CIAT and WFP, 2023). Some reports help us understand the proportion of women farmers supplying schools in some contexts. According to WFP, in the Higuito Intermunicipal Council, Honduras, where over 22,000 students received school meals in 2019, out of 99 producer associations, 33 were led by women (CIAT and WFP, 2023). In the Nippes Department, Haiti, where a successful HGSF initiative is in place, in seven of the 29 associations supplying schools, women make up more than 50 percent of the active members. In two associations, 100 percent of the members are female (CIAT and WFP, 2023). Despite these and other local examples, due to scarce data, it is difficult to describe more precisely wider country and regional trends. One of the few comparative studies involving six LAC countries (Brazil, Colombia, the Dominican Republic, Honduras, Paraguay, and Peru) found women's participation as being very low, except in Brazil, where some measures have been taken to improve their involvement. What is interesting from this review is that, in cases such as Brazil, where efforts are made to enhance women's participation in local purchasing, this has contributed to improvements in the diversity and quality of the food served and consumed in schools and other public facilities (Siliprandi and Cintrão, 2021). Overall, it is clear from the available information that women still face multiple barriers and constraints to their effective participation as suppliers of national school feeding programmes. While conditions to improve the participation of women in these programmes have often been set, what little evidence there is suggests that female producers remain underrepresented. Greater effort and attention is needed to understand why this is the case (Cintrão, 2018).





HGSF and nutrition

HGSF is also acknowledged to have benefits related to the sustained provision of local, fresh, and healthy food to schoolchildren, fostering better and more diverse diets, and contributing to improve local food environments and behaviours within and around schools. HGSF enables nutrition-sensitive agriculture through two main pathways. The first is by supporting the production of the fresh, nutrient dense foods that are part of a nutritionally diverse commodity basket, with a particular focus on micronutrient rich foods, and the second is through links with small farms, which make a particularly important contribution in providing essential micronutrients (Ruel and Aldreman, 2013).

Box 4.2

The nutritional composition of a school meal comprised of locally purchased foods in Ecuador

The Government of Ecuador and WFP have joined efforts to design and implement a home-grown school feeding programme in the north of the country. A new initiative was launched in the Cantón Montúfar, an area with high rates of malnutrition, reaching 1,134 children in 22 schools. The initiative provides daily local, fresh, and nutritious meals sourced from smallholder and family farmers.

The food is prepared and served in schools and consists of a hot lunch or breakfast designed to meet the highest nutritional value, while prioritizing fresh produce respectful of local traditions and prepared according to ancestral practices. Compared to the recommended daily intake for school age children (350-450 Kcal), this initiative provides a menu of about 500 kcal (276 kcal in carbohydrates, 74 kcal in proteins, 151 kcal in fats). Menus are designed with *NutrirEC*, a software that calculates nutritional compositions by age group and type of meal. They consist, for example, of corn, broad beans, potatoes with cheese and tomato salad, radish, onion, broccoli, and egg, accompanied by half a banana. Its nutritional composition meets 100 percent of the macro and micronutrients that schoolchildren require.

In 2014, the Global Panel on Agriculture and Food Systems for Nutrition released its technical brief: *How can agriculture and food system policies improve nutrition*? In this publication, the panel recommends the implementation of policies across the food system to reduce undernutrition as well as growing overweight, obesity, and other diet-related non-communicable diseases. Some of the policy recommendations include making better use of existing public food distribution programmes, such as school feeding, ensuring they are agriculture-supportive and nutrition-sensitive; integrating nutrition education into all available national services reaching consumers; expanding agriculture-supportive targeted social protection programmes; further linking school meals with national food based dietary guidelines; and improving the diets of adolescent girls and adult women as a priority (WFP, 2020b).

In a region like LAC, where the triple burden of malnutrition is an increasingly worrying concern, especially among school-age children, using schools as a platform to diversify diets and change behaviours within and around schools is a very powerful and recognized entry point. Findings suggest that undernutrition, obesity, and diet-related non-communicable diseases are intrinsically linked through early-life nutrition, diet diversity, food environments, and socioeconomic factors (Hawkes et al., 2015). Addressing the specific needs of adolescent girls and young women both at school and in the household is also crucial. In the Dominican Republic, a study highlighted that where food rations distributed to remote rural areas were purchased from local producers, students under this scheme did not suffer from anaemia or vitamin B12 deficiency (Reyes and Morales, 2021). In Bolivia, it was found that the provision of locally procured school meals reduced medical expenses by US\$5.11 in urban areas and US\$14.1 in rural areas (Staniszewska and López, 2017).

Complementing HGSF approaches with social behaviour change communication initiatives (SBCC), nutrition education interventions, capacity strengthening, training activities, and other schoolbased interventions, is essential for HGSF approaches to succeed. One common trend in the region over the past years has been the implementation of school gardens, a pedagogical space within the school premises that can contribute to shape the school food environment and eventually influence food consumption both at school and in the household. SBCC approaches and campaigns are being increasingly implemented, using schools as entry points and platforms to foster change in the household and the community at large. These approaches can be used to generate change in a number of areas, including fostering healthier eating habits and better nutrition, addressing social conflicts, or genderbased violence, among others. Several initiatives building on SBCC approaches have been implemented, for example in Colombia, to promote social inclusion in areas with high presence of migrant schoolchildren, in Haiti, focusing on gender, nutrition and hygiene, and in Cuba, where it is used to foster nutrition sensitivity and food acceptability while promoting purchases of local foods for school meals (WFP and Anthrologica, 2022).

While overall stronger evidence on specific impacts of local purchases on health and nutrition is missing, the information available and qualitative analysis suggest that there are benefits in terms of improving and enlarging healthy consumption choices and achieving more diverse diets among schoolchildren, including by improving acceptance of local, healthier foods. However, important conditions for HGSF to be effective in terms of nutrition and health on schoolchildren, are the quantity, quality, safety, and coverage throughout the school year, as well as other environmental conditions (CIAT and WFP, 2023).



4.4 Best practices and lessons learned from the region

The LAC region has witnessed a gradual adoption of national laws and policies either promoting, recommending, or even enforcing local purchases from smallholders to supply school feeding programmes.

Following Brazil, countries such as Bolivia, Ecuador, Honduras, Guatemala, and Panama, among others, have issued national school feeding laws with clear recommendations in favour of the increase of local purchases to smallholder farmers. Guatemala and Ecuador, for example, have adopted a law setting a minimum threshold for local purchases to family farming at 50 percent. In 2018, Haiti adopted its first national school feeding policy, dedicating great attention to purchases from local markets. Other countries in the Caribbean, including Barbados, Jamaica, Dominica, Trinidad and Tobago, and Saint Lucia, among others, have or are in the process of adopting new national policies specific to school feeding and school nutrition. In its regional Food and Nutrition Security Policy, CARICOM encourages member states to adopt policies fostering that the meals provided under national school feeding programmes should have at least a 50 percent regional food content and recognizes the great potential of national school feeding programmes to promote and integrate local production and gradually reduce the number of imported foods (CARICOM, 2010).

While national institutional frameworks and laws have developed significantly in favour of local food systems, in some cases their execution is happening slowly. Barriers include a variety of technical, political, social, institutional and economic reasons, including excessive red tape and bureaucracy, delayed payments, institutional discrimination faced by Indigenous Peoples and rural women producers or the strict food safety standards that rule out many traditional foods and artisanal food products from smallholder producers (CIAT and WFP, 2023). Some constraints in the utilization of local foods in school feeding programmes include the transportation and scheduling logistics of obtaining food items from a large number of small farmers, and the need to process raw food ingredients obtained from small farms, before they can be easily utilized in school kitchens or by caterers (Tauranac, 2018). In some cases, small farmers are not in the position or do not have the sufficient organisational, administrative, or financial capacity to operate at scale and compete with lower prices and better standards offered by larger companies (Raboso Campos and González, 2021).

Although countries such as Brazil, Bolivia, Guatemala, or Jamaica, among others, have historically adopted decentralized models, purchasing food for school meals locally, these approaches did not necessarily lead to buying fresh foods from local farmers. In Jamaica, for example, while food for school meals is mostly purchased locally, the ingredients used for their preparation are mostly imported. Even in rural contexts, schools rarely buy from smallholder farmers, primarily because of transaction costs involved, including the time spent searching for supplies, negotiating, and monitoring transactions.

Brazil has certainly been a pioneer and an inspiration for many countries. Between 2011 and 2018, the PAA benefited almost 450,000 family farmers, acquired two million tons of food, encompassing 80 percent of the Brazilian municipalities (Sambuichi et al., 2020). Brazil, however, also faces important challenges in some regions. In the State of Minas Gerais, for example, Antunes dos Anjos et al. (2022) found that, to the detriment of local economic development, only slightly above 50 percent of schools were able to meet the 30 percent commitment to purchase directly from family farms. According to national authorities, in the state of Sao Paulo, only about 37 percent of schools were able to reach the 30 percent threshold (FNDE, 2017).

In countries where school feeding programmes are characterized by a centralized supply chain and management structure, such as Ecuador, Honduras and Haiti, home-grown models have been developed alongside or complementing the centralized programmes. These approaches have been gaining recognition and are, in some cases, gradually scaling up. Honduras has developed over time a successful HGSF programme. In 2021 the programme reached about 300,000 schoolchildren with fresh, locally-purchased food, representing about 25 percent of the total coverage of the national programme. Honduras has a national school feeding law fully integrating HGSF (WFP, 2021a). Ecuador has a model in three northern provinces that reached 17,000 schoolchildren with locally purchased fresh food between 2014 and 2019. Thanks to the support of partners such as WFP, 98,000 schoolchildren in Haiti's Department of Nippes are reached with locally-purchased school meals, with efforts in place to expand this successful model to other provinces across the country.

In other cases, such as Colombia, Cuba, Dominican Republic, El Salvador, Nicaragua, or Peru, experiences have been more fragmented, and progress slower due to different barriers. These may include strict legal frameworks related to food quality and safety, poor capacity of local value chains, corporate influence, or financial constraints, among others. Experiences in the Caribbean region have also faced challenges that have prevented small scale initiatives implemented in the past years to scale up. A recent review identified home grown school feeding cases (Map 4.1).

Map 4.1

Identified home-grown school feeding cases



Source: Centre for Tropical Agriculture (CIAT) and WFP, 2023. Linking National School Feeding Programmes with Local Food Systems in Latin America and the Caribbean. Forthcoming.

4.5 The way forward

Available evidence and lessons learned strongly suggest that HGSF programmes can benefit local food systems, smallholder farmers, and communities, while fostering better lifelong food habits among schoolchildren and their families. However, a number of challenges and opportunities are to be addressed for these initiatives to maximize their impact, scale up and be sustainable, efficient, and effective over time.

Investing in evidence generation and advocacy efforts. While available qualitative information suggests a number of benefits and opportunities primarily for schoolchildren and farmers, the lack of strong quantitative evidence is a still a barrier to measure the impact of HGSF on both local food systems and schoolchildren's health and nutrition. Quantifying these benefits is key to inform policy and programmatic improvements that may be necessary to achieve higher quality, greater nutrition-sensitivity, and cost-efficiency, as well as to feed advocacy efforts necessary to increase funding and achieve greater sustainability. Through the School Meal Coalition and its Research Consortium, LAC stakeholders can share their experiences to consolidate worldwide information gaps.

Invest in stronger monitoring, evaluation, and reporting systems comprising of indicators that are specific to HGSF and are integrated within national systems, and that can track local purchases, measure impacts, identify barriers, and inform decision-making processes.

Foster multisectoral coordination and further embed HGSF approaches within wider national food systems policies. Stakeholders in various sectors, including education, agriculture, health and nutrition, and social protection, should join efforts to move from policy to action and address the current barriers that are preventing successful models to scale up. Countries should continue to adapt their legal and institutional frameworks in favour of these interventions, setting up multisectoral roles and responsibilities, and investing more in the expansion of approaches that have proven to be successful. While some countries have created institutional platforms to improve coordination, such as national school feeding committees and multisectoral task forces, often these bodies are underutilized.

Build stronger regional communities of practice. Partners should continue to invest in promoting and help countries exchange lessons learned and best practices on HGSF, including through regional and global platforms and community of practices, such as the School Meals Coalition, as well as through South-South and triangular cooperation.

Invest in local producers' capacity and improve their access to institutional markets, including in times of crisis. Supporting smallholder producers, with a view of strengthening the whole local food system, is key for HGSF models to function and become sustainable. The support should be institutional, ensuring that legal frameworks and public procurement processes are inclusive and allow purchases from smallholder producers, and it should be technical, helping farmers to access the needed inputs, as well as credit and technical and organisational skills. Furthermore, ensuring a stable supply of local foods to schools in good quality and quantity year-round may be challenging, especially in areas that are vulnerable or particularly exposed to different types of shocks. Recent global crises have confirmed the importance for countries and partners to continue investing in adjusting programme and policy design to prevent, manage and respond to shocks.

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Complement HGSF efforts with interventions devoted to developing healthier school food environments and foster behaviour change. On the demand side, to impact the health and nutrition of schoolchildren and their families, and to generate better and more nutritious lifelong food habits, HGSF models need to be complemented with interventions that foster capacity strengthening and behaviour change in a sustainable way. Providing nutritious meals, including through the implementation of national food based dietary guidelines, investing in complementary school-based health and nutrition interventions, such as social and behaviour change communication (SBCC) campaigns and education initiatives can multiply the effects of HGSF initiatives on schoolchildren and their families.

Maximize benefits for women, youth, Indigenous groups and Afro-descendants.

School meals programmes offer a number of opportunities to increase and consolidate the participation of women farmers as well as youth and Indigenous producers in the school value chain. Schools have proved to be excellent platform to help address, for example, gender inequalities and gender-based violence, more in general to foster social change. While evidence is scarce and more analysis is needed to shed light on this area, lessons learned so far show that opportunities for women and Indigenous producers to become suppliers of national school feeding programmes are largely untapped.



CHAPTER 5

School feeding programmes in times of crisis

5.1 Introduction

School feeding programmes in LAC have proven to be resilient and adaptable to crisis situations. They can be, and have been, used as a platform to channel assistance to people affected by different types of shocks. More than a decade ago, many countries in the region channelled resources through these programmes to respond to the Global Financial Crisis of 2008-2009. Over the years there have also been experiences of responses to natural hazards, such as in Nicaragua, Honduras, and Haiti (Beazley et al., 2016). The global crisis caused by the COVID-19 pandemic – together with other contemporary crises such as the rise in food prices in 2022-2023 and large migration flows – accelerated this trend.

These shocks and crises represented major challenges for school feeding programmes, from the inclusion of migrant populations to food assistance to children, adolescents and family members affected by natural hazards. Programmes had to be completely converted in the face of the crisis caused by the COVID-19 pandemic. The massive suspension of face-to-face education in early 2020, in nearly all LAC countries, put access to school meals and other complementary interventions at risk during the first days of health restrictions – sometimes even for weeks or months.^{5,6}

This chapter addresses the resilience and adaptability of school feeding programmes in LAC. It presents experiences and challenges of recent crises such as the COVID-19 pandemic, natural hazards, migration flows, and rising international food prices. It also presents some proposals for the preparation and use of programmes in emergency contexts.

5.2 Using programmes to respond to shocks

This section presents individual experiences of resilience and adaptability to crises, although some crises coexisted and affected some countries in multiple ways. For example, Guatemala and Nicaragua were affected by hurricanes Eta and lota, and in the case of Saint Vincent and the Grenadines, by the eruption of the La Soufriere volcano, while the COVID-19 pandemic was occurring. Moreover, countries like Colombia, Ecuador, and Peru, among others, had to face the pandemic while attending to the migratory flow.

The COVID-19 pandemic

Ensuring the operational continuity of school feeding programmes in the context of the crisis caused by the COVID-19 pandemic was an unprecedented challenge. Programmes were not prepared to deal with a crisis of such magnitude, with schools closed, mobility restrictions, social distancing, and urgent and widespread needs. Even the time during which schools were closed in LAC was very long: three times longer than in Eastern Europe, for example (World Bank et al., 2021).

⁵ According to the Survey of <u>UNICEF (2020)</u>, as of March 30, 2020, out of a total of 24 countries surveyed, only Nicaragua did not close schools.

⁶ Some of the complementary interventions affected by the temporary closure of schools include health, water and hygiene services, recreational programmes, extracurricular activities, psychological and psycho-pedagogical support.

The widespread response at the regional level was to replace school feeding with baskets of products to prepare at home (WFP, 2021). A few countries changed the delivery to cash transfers (Jamaica and Trinidad and Tobago) and others opted for a combination of strategies, such as Colombia, where three temporary modalities were implemented: an industrialized ration, a take-home ration, and a food voucher.⁷

Table 5.1

Adapting school feeding programmes during the COVID-19 pandemic

	Prepared / industrialized ration	Product basket	Monetary transfer
Argentina			
Belize			
Bolivia			
Brazil			
Chile			
Colombia			
Costa Rica			
Dominican Republic			
Ecuador			
El Salvador			
Guatemala			
Honduras			
Jamaica			
Panama			
Paraguay			
Peru			
Trinidad and Tobago			
Uruguay			
Venezuela			

Source: WFP (2021c) based on data from Rubio et al., 2020; WFP 2020 and IPC-IG, 2021

Note: (i) The prepared or processed ration modality includes ready-to-eat food, (ii) cash transfers include money or voucher transfers.

⁷ The most implemented modality in Colombia was the Ration to Prepare at Home (88 percent) followed by the Industrialized Ration (6 percent) and finally the Food Voucher (2 percent). Each secretary of Education in the country could choose the most convenient modality. This choice was based on the type of school food supply service in force, logistical aspects, food conservation, and availability, population habits, biosecurity aspects, and social distancing, among others.



One of the risks associated with the delivery of a school meals ration for the home is the intra-family dilution of rations. A qualitative study in Peru indicates that there was a high probability that food baskets delivered during the pandemic by the Qali Warma National School Feeding Programme were also consumed by other family members (Government of Peru, 2022). This is an effect that may have predominated in this type of response, although studies or evaluations addressing this issue are lacking.

The vast majority of responses to COVID-19 consisted of ways to change delivery, while keeping the same target population: almost no programmes were used to assist non-school population. An exception is Peru, where the Qali Warma Programme expanded horizontally and provided assistance to adults and children in vulnerable conditions. Legislative Decree 1472 authorized the programme to provide temporary complementary feeding to people in vulnerable conditions, such as through community pots (WFP, 2021). ^{8,9}

The temporary adaptation of school feeding programmes faced many challenges that led to delays in many cases. In general, countries had to make regulatory changes to enable new forms of service delivery, they had to establish new biosafety delivery protocols, new forms of monitoring and supervision, and new communication mechanisms, among others. For example, in Peru, the Qali Warma programme had to modify 18 protocols. It was also necessary in some cases to revise contracts with local operators and establish new roles for families and teachers (WFP, 2021).

It is very likely that the difficult and long process of returning to school in the region, together with the economic difficulties that followed the pandemic, have increased the number of children and adolescents who dropped out of school, as shown in the projections made by the World Bank and in the first reports of the governments of the region (World Bank, 2021). While school meals programmes likely helped to maintain some relationship between schoolchildren and schools when they were out of session, schoolchildren have faced multiple barriers to return to school and now face setbacks in academic performance post-pandemic. School feeding is one of the policies needed to reduce school dropout, along with policies to invest in the education system, which are necessary to reverse the negative effect of the pandemic on education.

⁸ In the literature on reactive social protection in emergencies, a horizontal expansion implies that a programme gives temporary assistance to non-beneficiaries (it "expands" horizontally). Conversely, a temporary expansion involves assisting those who are already beneficiaries of the program with additional transfers or services.

⁹ Legislative Decree 1472 establishes as persons in situations of vulnerability the following: persons in situations of poverty, women and members of the family group, the elderly, persons with disabilities, Indigenous or native peoples, persons in prisons and juvenile centres.

Case Study 5.1

School feeding in crisis in Haiti

During the COVID-19 pandemic in Haiti, the Inter-American Development Bank, the World Bank and WFP financed projects that supported the national education sector to respond to the impact of the pandemic. A key initiative was the transition from school feeding rations to take-home rations. In April 2020, WFP distributed 1,000 metric tons of food as take-home rations to 93,000 families in the school feeding programme.

At the start of the 2022-2023 school year, amid intensifying social and political unrest, with increased violence from armed groups and protests against kidnappings, schools were temporarily closed. WFP provided school meals in the form of take-home rations: a total of 934 metric tons of food were distributed through this modality, reaching 95,880 students and their families in more than 450 schools in the North, Northeast, Grand 'Anse and Centre. The take-home rations were designed to cover the equivalent of fifty days of food for a child, meeting around 40 percent of the daily energy intake requirements and making up for the first school quarter which was affected by school closures.

In addition to implementing emergency response and emergency relief programmes, WFP is also actively engaged and contributing to improving the resilience of local communities and supporting smallholder farmers. This is done through its Home-Grown School Feeding (HGSF) Programme, which aims to transition from an imported food school feeding model to one that sources all of its food, with the sole exception of oil, locally. Through the HGSF Programme, WFP supports three key objectives: (i) boosting the Haitian economy through local purchases; (ii) diversify the diet of schoolchildren; (iii) promoting local agriculture by improving small farmers' access to markets.

Local HGSF school feeding programmes support the resilience of Haitian supply chains. By decentralizing the school feeding supply chain, which typically follows a highly centralized model, and encouraging local purchases, supply chains become shorter, stronger, and better equipped to withstand disruption. As schools gradually reopened in some parts of the country in November 2022, HGSF's decentralized model enabled WFP to deliver to schools more regularly and quickly. For example, in November and December, when the country was under lockdown and food deliveries from Port-au-Prince were difficult, WFP purchased eighty million tons locally across four departments to reach more than 48,000 school-age children.

Natural hazards

While there are many experiences in LAC of using cash transfer programmes to assist populations affected by natural hazards, school feeding programmes have been used much less frequently – despite their large coverage in the region (Beazley et al., 2019). Also, when they have been used, it has often been to give additional assistance to schoolchildren who were already receiving food, that is, a vertical programme expansion. This was the case of Nicaragua facing drought between 2014 and 2016, and of Honduras, extending food to cover the school recess period during the drought of 2015, and of Saint Maarten after Hurricane Irma in 2017. In some other cases, such as in Haiti after Hurricane Matthew in 2016, the school feeding programme used available stocks to assist people in shelters, including adults (Beazley et al., 2016).

An interesting experience is that of Nicaragua, in response to hurricanes Eta and Iota. By the end of 2020, hurricanes Eta and Iota affected 56 of Nicaragua's 153 municipalities and material damage was recorded for a value of 743 million dollars, equivalent to 6.2 percent of national GDP (UN Coordination Nicaragua, 2020). The two hurricanes made landfall in the same area of the country just two weeks apart. Its impact was devastating for local people, crops, and critical infrastructure. In this context, the school feeding programme provided assistance not only to pupils, but also to their families (vertical and horizontal expansion).¹⁰

Following immediate humanitarian assistance, the government of Nicaragua, together with support from WFP, decided to respond through the Comprehensive School Nutrition Programme (PINE). The response prioritized the most affected areas and was implemented under two complementary modalities to the regular programme: one in which the reinforcement of the school snack began in February 2021, together with the start of the school year, and consisted of an additional snack for a total of approximately 200,000 children in 2,501 schools (vertical expansion); and the other in which take-home food rations provided food assistance not only to the students but also to three of their relatives or cohabitants (vertical and horizontal expansion). Between the months of April and June, a total of 73,755 packages were distributed through PINE in 1,474 different schools and then in December 2021 a new delivery of 75,366 packages was made with the aim of covering five family members for ten days, with the aim of covering food needs during the closure of the school year (WFP, 2022a).

Another experience to highlight is the case of Saint Vincent and the Grenadines. In 2021, the country faced a double crisis when La Soufriere volcano erupted on April 9, intensifying the impact of the pandemic. This catastrophic event forced more than 20,000 Vincentians to evacuate their homes to safety, sheltering in 87 shelters, including many schools. With the gradual improvement of conditions after the eruption, the Ministry of Education took action, implementing a phased approach to reintegrating students into the education system. The Ministry established 55 temporary learning centres to facilitate this process. A crucial element of the national emergency response efforts was the adaptation of the supply chain to ensure the provision of school meals to students attending these learning centres. This initiative was designed to address the immediate and changing needs of the most vulnerable families and individuals, ensuring both education and food security.

¹⁰ Among the most affected municipalities were 322 Indigenous communities within the North Caribbean Coast Autonomous Region (RACCN), mainly Miskito and Mayangnas. Both have high poverty rates, are usually located on the banks of rivers, with limited access to basic services and fragile infrastructure.

Massive migration flows

Over the last decade, the scale and level of complexity of migratory flows within Latin America and the Caribbean has increased significantly. Between 1990 and 2020, the proportion of school-age migrant children and adolescents as a percentage of the total school-age population increased considerably, especially in Central and South American countries (Elías et al., 2020).

Even though in LAC access to education is a right beyond nationality, administrative and practical restrictions persist that prevent the full exercise of this right (IPC-IG et al., 2021). These barriers include structural problems related to financing, infrastructure, quality and degree of education system coverage, the lack of student places in schools, issues with recognition of certificates and validation of degrees, and an inability to process students that lack identification and other documentation requirements, among others (Elías et al., 2020).

Even access does not necessarily translate into participation in the local school feeding programme. In some cases, countries opt for geographic or individual targeting, or a combination of both. Individual targeting may require additional documentation or processes that end up preventing access to school meals.

The drastic increase in school enrolment in the countries that received the largest number of migrants imposed enormous challenges on both education and school feeding. In Colombia, enrolment of migrants increased by 1,619 percent between 2018 and 2022, according to data from the Ministry of National Education. Naturally, there are important regional variations within Colombia: the proportion of enrolees in 2022 amounted to 33.9 percent in the Central East and 32.7 percent in the Caribbean, while in the Pacific, the Plains, the South Centree, and Amazon it is below 10 percent, according to official data.¹¹

Despite the large number of migrants in several countries in the region, there were almost no cases of school feeding programmes that implemented specific measures for this population. The trend in the region was to continue implementing the programmes in the same way. An interesting case is WFP's support to the school feeding programme in Colombia, with a series of strategies aimed at migrants (Case Study 5.2).

¹¹ The enrollment of migrants in Colombia went from 34,030 in 2018 to 585,075 in September 2022 (Ministry of National Education).

Case Study 5.2

Assistance to migrants through the school feeding programme in Colombia

PAE-migrantes: Since 2018, WFP has financially and logistically supported the extension of the school feeding service to children and adolescents. The service provided to migrants is the same as the regular service; students do not notice any difference between the regular PAE and the PAE that migrants receive. In 2022, this service reached a daily maximum of 44,261 migrants in around 450 schools in Barranquilla, Cúcuta, Guajira, Santa Marta, and Valledupar. In 2021, in response to the crisis generated by the COVID-19 pandemic, the PAE-migrantes expanded to twenty municipalities in the Atlántico department.

What does equality taste like? This is the name of a communication strategy for social and behavioural change designed and implemented by WFP that strengthens the experience of school feeding as an opportunity for inclusion and transformation, to prevent any kind of discrimination in the school environment. The strategy was co-created through participatory workshops and has four dimensions: pedagogy, social mobilization, communications, and advocacy. Each of these dimensions includes playful tools such as a school calendar, teacher kits for handling issues related to inclusion and equality, activities, and decoration of the school environment, among others, aimed at parents, guardians, students, manipulators, teachers, and the educational community at large. In 2022, the strategy reached a total of 11,278 beneficiaries including 8,955 students, 791 teachers, 1,487 parents or guardians and 45 handlers from ten schools in each of the following cities: Cúcuta, Santa Marta, Barranquilla, and Maicao.

Information on the temporary protection status for migrants: In 2021 WFP distributed leaflets developed by the Inter-Agency Group on Mixed Migration Flows to all beneficiaries of the PAE-migrantes, taking advantage of the take-home ration during the pandemic. In this way, WFP used the school meals programme to provide information to 42,000 migrant families about their rights. In 2022, in addition to handing out brochures to nearly 25,000 families, WFP also assisted migrant families with virtual pre-registration days to access the registry.

School feeding at the border: WFP delivered food to more than 1,200 Colombian returnee children and adolescents in the city of Cúcuta. These schoolchildren received monthly rations to prepare at home at the Francisco de Paula Santander border bridge of the humanitarian corridor opened by the local government at the end of 2020 and during 2021.



The food price crisis

The war in Ukraine, coupled with the earlier effects of the pandemic, led to a significant increase in international food prices affecting the region. The FAO Food Price Index, measured in real terms, rose 64 points between June 2020 and March 2022, and reached an all-time high of 156.3 points in in March 2022. The index fell by almost 15 percent between March and October 2022, but then remained at a higher level than the highs of past decades (ECLAC et al., 2022). According to the IDB, in 2022 food inflation amounted to 11.7 percent, on average, in Central America, Panama, the Dominican Republic, Haiti, and Mexico, the highest in more than a decade (Deza and Ruiz-Arranz, 2022). The price increase further affected those countries that depend on food imports, as in the case of the Caribbean (WFP, 2022).¹²

Rising food prices raise the costs of school feeding programmes and jeopardize the quality and quantity of supply. In turn, rising prices hinder access to adequate diet and increase the risks of food insecurity.

There are still no clear trends in how school feeding programmes in the region responded to this shock. Overall, budgets have remained stagnant. There are few cases of budget increases, although they do not always respond directly to rising prices. There are early indications that some programmes may be absorbing higher costs, for example, by reducing the number of days the programme provides food or by offering less nutritious and more affordable foods. The crisis also appears to be lengthening hiring processes for managers and requiring more demanding processes to monitor and adjust to changing prices. In turn, there are cases of countries – particularly in the Caribbean – that promoted the use of local foods (ECLAC et al., 2022).



¹² Corresponds to September 2022.

5.3 Lessons and proposals

Recent emergencies have highlighted the commitment of governments in the region to school feeding and the centrality of these programmes as an instrument of social protection. School feeding programmes have shown resilience, flexibility, and adaptability and, therefore, have demonstrated the fundamental role they can play in emergency contexts, even in the face of large-scale crises and unforeseen effects, such as the COVID-19 pandemic.

The COVID-19 crises especially demonstrated the need to invest in preparing programmes to face emergencies. In many of the experiences briefly described above, programmes had to assume roles for which they had not been prepared. This is not unique to school feeding programmes, i.e., it is common in emergency-reactive social protection: for example, many cash transfer programmes also had to fulfil roles for which they had not been prepared. While not all crises can be predicted, it is important to equip programmes – their staff, regulations, management capacity and infrastructure – with adequate capacity to prepare and respond.

Recent experiences show that different shocks lead to different challenges. Some shocks lead to the discontinuity of regular service, as was the case with the pandemic or can occur in the face of devastating disasters. Other shocks, such as inflation, can affect the quality and quantity of supply, or in the case of mass migration, can imply a greater demand for services and the need to adapt to a population with sometimes different needs. In turn, shocks do not affect all actors in the same way: for example, large suppliers and small local producers. Finally, events may occur that do not affect school feeding programmes directly (e.g., disasters that do not affect school supply or attendance), but schools and school feeding programmes can still be used as platforms to provide assistance to those affected.

Collaboration with humanitarian agencies and aid workers can improve the responsiveness of school feeding programmes to a crisis. The examples of collaboration between the governments of Colombia and Nicaragua and WFP, for the response to the migratory flow in the first case and to natural threats in the second, shows the potential of this type of partnership.

Generating evidence and disseminating experiences helps raise awareness of the true potential of feeding programmes in responding to shocks. The programmes were not designed for that purpose, not all implementing entities have experience in this field, and public policy makers do not always conceive of school feeding programmes as actors that can play important roles in emergency response. The dissemination of experiences such as those shared here helps to foster this debate.

Reflection will also need to be given to how school feeding programmes can ensure not only supply, but also minimum nutritional intake during periods of crisis. The intra-family dilution of the rations, the lack of nutritional adequacy of the packages and the absence of some foods (e.g., fruits) can undermine the nutritional contribution of the programme. While school feeding allows consumer targeting and ensuring certain processing standards, this is more difficult to achieve when delivering food to be consumed at home, unless specific measures are taken.

Finally, the experience of the responses to the pandemic raises important questions for the future of school feeding, which exceed the scope of this chapter but are worth highlighting. Should the schools have been closed? Should governments move quickly to close schools when the next pandemic occurs? Has this experience changed the way governments think about the role of school meals in responding to other crises? Should school feeding programmes be prepared to guarantee service delivery even when schools are closed? Reflections on these questions based on the growing body of evidence on the educational losses incurred during the pandemic will be valuable for the future of the region.

5.4 The way forward

While each programme will need to design its preparedness and response strategies according to its own objectives, capabilities, and risk scenarios, here are some generic proposals. These proposals arise from the experiences shared in this chapter, as well as in the global literature on reactive social protection in emergencies.

- Prepare programmes both to ensure their operational continuity and to respond to new needs. Develop contingency plans, alternative mechanisms for hiring, delivery and preparation of food to face future crises. Also include strategies and protocols for local purchase, in order to avoid negative effects on local producers, shortages, and price increases.
- **Ensure the operational continuity of the programmes.** This includes from contingency protocols, alternative modalities, and even adequate contractual clauses with suppliers and operators and budgetary adjustment mechanisms, among others.
- **Give additional assistance to schoolchildren** (vertical expansion). Of course, giving additional assistance to those already in the programme is a simpler type of response than assisting those who are not part (horizontal expansion). The additional response may consist of snacks, food, or complementary services that meet the food, nutritional, and other needs that arise as a result of the emergency.
 - Assist the non-school population (horizontal expansion). Although this type of response is a priori more difficult than vertical expansion, the region already has successful experiences. The response to the non-school population may consist of take-home rations, food in the same schools, assistance through other programmes, i.e., the transfer of food stocks to humanitarian responses assisting the non-school population. Horizontal expansions also entail the need to develop a targeting mechanism to ensure that assistance reaches those most affected by the crisis.
 - **Design the school feeding response as part of a comprehensive strategy.** The role of school feeding programmes should be part of a broader strategy that includes other social protection programmes and the civil protection system, among others, depending on the nature of the crisis. This alignment can range from the complementarity of interventions (e.g., division of geographical areas, population groups, types of assistance, between different responses), to information sharing, human resources, etc.
 - Use emergency responses to promote a transition to regular social protection. Sometimes an emergency response makes it possible to identify people who are eligible for different social protection programmes but who are excluded. The approach to the social protection system during the emergency can be used as an opportunity to expand the coverage of regular programmes and reduce exclusion errors.
 - Strengthen mechanisms to monitor food prices, access to healthy diets, food security and malnutrition. The lack of integration with sectors that have such information is a huge barrier to realizing the true role of school feeding programs.
 - All the above measures must be accompanied by **commensurate budget allocations**, as well as contingent financing mechanisms for times of crisis.



SPECIAL REPORT

Towards an intercultural approach to school meals in the region

6.1 Context

Indigenous Peoples in Latin America and the Caribbean (LAC) number around 58.2 million (FAO, 2021). They live in the highlands and lowlands across the region and can be found in both geographically remote and urban areas. It is a population made up of 826 culturally diverse peoples speaking over 500 languages.¹³

Indigenous Peoples often reside in areas rich in biodiversity and possess knowledge preserved for generations. Yet, as noted by the Inter-American Development Bank (IDB), despite their cultural richness, they are 2.7 times more likely to live in extreme poverty than their non-Indigenous counterparts.¹⁴ In Guatemala, for example, multidimensional poverty among Indigenous Peoples is registered at 80 percent compared to 50.1 percent among the non-Indigenous populations (MIDES and OPHI, 2018). Poverty also has a gender dimension. In Bolivia, Chile, Colombia, Ecuador, and Peru, 34 percent of Indigenous women live in a condition of poverty compared to 26 percent of non-Indigenous women (OIT, 2022).

Poverty is the major distal determinant of stunting (Black et al., 2013). In countries like Ecuador, stunting prevalence is nearly twice as high for Indigenous children below the age of five than their non-Indigenous counterparts. Indigenous Peoples' children are also more likely to suffer micronutrient deficiency (vitamins and minerals) than non-Indigenous children (Palma, 2018). This situation is compounded by the high cost of food in the region. As per the United Nation Regional Panorama 2023, LAC is the region of the world with the most expensive healthy diet, which particularly affects Indigenous Peoples and Afro-descendants, who allocate a greater percentage of their income to the purchase of food (FAO et al., 2023b).



¹³ Data can vary depending on source, methodology, year, number of countries covered, and other variables.

¹⁴ Gender and Diversity: Indigenous Peoples. Retrieved 28 July 2023 from <u>https://www.iadb.org/en/gender-and-diversity/indigenous-peoples</u>.

Finally, educational gaps must also be noted as they are higher among Indigenous Peoples in Latin America and the Caribbean – almost 32 percent of Indigenous adults in employment have no formal education, compared to 13 percent of non-Indigenous adults (ILO, 2020).

A school meals programme is a strategy to address inequalities and to ensure Indigenous Peoples' children attend and stay in school while also meeting some of their nutritional needs. Across the region Indigenous Peoples' communities tend to benefit from school feeding programming. Poverty indicators are often used to identify areas to target which are likely to coincide with those where Indigenous Peoples live, such as in Mexico and Peru.

This special report explores how the concept of interculturalism is being integrated in school meals programming (Box 6.1). This includes inquiries into local purchase, Indigenous Peoples' participation in decision-making at local levels, culturally adapted menus, and enabling legal frameworks. However, it is not a comprehensive review. Although this report recognizes the diversity of cultures within the region, and the existing opportunities for inclusive approaches that address Afro-descendant communities and migrating children, it focuses on programming in Indigenous Peoples' communities. The analysis has drawn on available literature, interviews with government actors leading school meals programmes, and various partners with knowledge on the topic. It considers that prioritizing a culturally adequate diet is a way of supporting Indigenous Peoples in a meaningful way that fully respects their right to food¹⁵ and self-determination¹⁶ by ensuring they participate and are involved in decision-making.

Box 6.1

Definition of interculturalism for this publication

Interculturalism is the result of a process that includes a continuous interaction, communication, and learning amongst people and communities, valuing different traditions, aiming at building mutual respect, and providing conditions for the individual and community to develop capacities beyond their cultural or socioeconomic differences. It is also the result of a process that takes place in a safe environment, in which different cosmogonies and cultures coexist, enabling the conditions for the recuperation of knowledge and diets related to Indigenous Peoples' food systems and respect for the environment.¹⁷

¹⁵ The right to food is the right to have regular, permanent, and unrestricted access – either directly or by means of financial purchases – to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual, and collective, fulfilling, and dignified life free of fear. *About the right to food and human rights: Special Rapporteur on the right to food.* Retrieved 28 July 2023 from https://www.ohchr.org/en/special-procedures/sr-food/about-right-food-and-human-rights.

¹⁶ The United Nations Declaration on Indigenous Peoples includes rights to self-determination and to freely pursue their economic, social, and cultural development.

¹⁷ The first part of this definition is based on a collection of definitions that exist from national policies, the *Red de seguimiento, evaluación y sistematización* LAC (ReLAC, 2021). The second part was developed by the authors of this Special Report.

6.2 Approaches to school feeding: from centralized to differentiated programming

Central approaches to school feeding have given way to more decentralised ones, or to more differentiated programming for Indigenous Peoples, such as in Brazil through its *Programa Nacional de Alimentação Escolar* and Colombia's *Programa de Alimentación Escolar - PAE para-Pueblos Indígenas*. Centralised programming, which procures goods at central level and distributes uniformly across the country, tends to incorporate fewer local participatory processes and purchase less local, fresh, or traditional¹⁸ foods, all of which are key to more differentiated approaches. Differentiated approaches consider Indigenous Peoples' cultural uniqueness, food preferences, habits, and governance practices, as well as unique logistical challenges in remote areas such as the Amazon, where food items must be brought by boat or plane.

One example of differentiated programming is Colombia's 2018 Resolution on technical guidelines for the school feeding programme for Indigenous Peoples (*Lineamientos técnico-administrativos, estándares y condiciones mínimas del Programa de Alimentación Escolar - PAE para–Pueblos Indígenas*), which has made room for Indigenous Peoples' collective approaches through specific programming in certain communities in Indigenous territories benefitting 390,000 children. The specialized programme works with the Indigenous and traditional authorities; and involves the design of an Indigenous Peoples' Plan which includes menus that are approved by the same authorities. The implementation of the plan is often through an *olla comunitaria* or community pot.¹⁹ Colombia's programming is couched in a perspective of rescuing cultural and ancestral traditions and incentivizing local production and purchasing.

In this review, decentralised school meals programmes refer to how national governments disburse funds to states or departments to implement programming. For example, in Mexico the federal government designs policies that are adapted in each state, based on specific conditions. Furthermore, each state relies on each municipality to deliver the programme to schools. The federal government also provides indicators that are used at each level to determine the amount of funds allocated to each municipality. One of the most important indicators is poverty. In Guatemala, which also has a decentralised programme, funds are distributed directly from the Ministry of Education to the local volunteer-led parent organizations.

Decentralised approaches to school meals enable local decision-making, either at the school level or through the local or autonomous government. For example, in the case of Guatemala, the schools' volunteer parent-led organizations administer the funds provided by the state. In the case of Guatemala, US\$0.75 (75 cents) are provided per child. There, the parent-led organizations implement the meal scheme at the school from a list of proposed menus provided by the Ministry of Education that have been decided in consultation with nutritionists and representatives from urban and rural areas, yet not necessarily Indigenous Peoples. Nevertheless, the menus in Guatemala tend to incorporate local foods and use traditional ways of preparation (MINEDUC, 2020a; MINEDUC, 2020b). In some exemplary cases, school menu recipe books have been prepared in Indigenous languages using ancestral foods.

¹⁸ Traditional foods refer to preferred foods and/or ancestral foods – those foods prepared and consumed over generations from locally derived products.

¹⁹ A *community pot* brings people together to cook and eat from the same large pot. The community pot also represents an ancestral tradition based on the collective. The preparation of food is done for all and enables different sources of financing and contributions in kind by the community. See more: World Bank and UAPA, 2022.
These shifts to decentralised and differentiated approaches are also upheld through normative frameworks such as Bolivia's *Ley 622 de alimentación escolar en el marco de la soberanía alimentaria y la economía plural* that recognizes cultural diversity and the principles of *buen vivir*²⁰, in addition to promoting local purchase to support family farming (Mercado et al., 2016).

Local purchase is a key component to differentiated programming. Brazil, for example, ensures its school meals programme use at least 30 percent of its resources to buy food locally (Bellinger and Andrade, 2016). In the state of Amazonas, with a large Indigenous population, the municipality of Gabriel da Cachoeira uses 100 percent of the funds to buy food locally (Case study 6.1). Indigenous Peoples' communities' remoteness to receive services reinforces the need to produce or generate the food locally, so it is not only more culturally adequate, but also economically and environmentally viable (Case study 6.1). Moreover, in Guatemala national guidelines indicate 70 percent of the food must be bought and produced locally to support family farming in the country.

6.3 What triggers a change in approach?

Implementing differentiated approaches to school meals programmes in multicultural²¹ regions is not an easy task. It demands a variety of practices, procedures, resources, public policies and an understanding of various cultures and their relationship to food. Across the LAC region, different factors have triggered these intentional approaches. For instance, in the case of Colombia, the change of approach stemmed from the need to promote the development of communities. Many of the actions in differentiated programming support local economies and promote the development of a community and/or area. Governments are also seeking ways to support sustainable food systems across the value and supply chain, to be resilient in a moment of crisis like that of the COVID-19 pandemic. From a human rights framework perspective, governments are also obliged as duty bearers to ensure no one is left behind no matter how small the population. In other cases, the food provided in school meals does not meet the expectations from a given culture (such as different tastes or habits), leading to waste and unmet goals regarding support to Indigenous children's development.



²⁰ The concept of *buen vivir* is based on principles that recognize harmony between nature and human beings.

²¹ Areas with communities of people from different cultural backgrounds living in the same place (Rosado, 1996).

Case Study 6.1

School feeding in Indigenous Peoples' communities: The Indigenous PNAE in Amazonas

Context

Brazil's National School Feeding Programme, *Programa Nacional de Alimentação Escolar (PNAE)*, in 2019, fed over forty million children in the country for 200 days a year, making it one of the most well-established school meals programmes in Latin America. The federal government transfers funds to states, municipalities and schools according to the number of students enrolled. The Indigenous population of Brazil numbers approximately one million. They belong to 300 ethnicities distributed in 7,000 localities and are largely concentrated in the north and northeast regions of the country where there are some of the highest levels of poverty and social vulnerability. According to the most recent data from 2020-2022, the programme reached 178,300 elementary schools, 3,541 (1.9 percent) of which are in Indigenous Peoples' territories (INEP, 2023).

To respond to the socio-economic vulnerabilities and cultural specificities of its Indigenous Peoples, the PNAE set guidelines for school meals programs in 2017 and 2018. These include:

- School meal menus should meet Indigenous Peoples' community's needs, covering at least 30 percent of the nutritional and energy needs from a culturally adequate perspective while in part time schools in other regions, the culturally adequacy recommendation is 20 percent.²²
- The per capita value for students enrolled in basic education schools located in Indigenous areas is R\$0.64 versus R\$0.36 in the rest of the schools.
- At least 30 percent of the funds used to buy food should be used to buy directly from smallholder farmers/Indigenous Peoples' locally. In bidding and procurement processes across the country, the Indigenous Peoples' food producers have preference, even in a city or school that is not located in Indigenous Peoples' territories.
- The National Fund for the Development of Education, or FNDE as per its acronym in Portuguese, recommends that states and municipalities with students enrolled in schools located in Indigenous areas should have at least one member representing Indigenous Peoples or communities in their School Feeding Councils.

Lack of implementation of state requirements sparks change:

In 2016 the Amazonas region, mostly accessible by boat or canoes, was not meeting the government requirements. Only 21 percent of Amazonian municipalities complied with the minimum obligation of purchases from smallholder farming in 2016 and 55 percent of the municipalities did not acquire food from local farmers or Indigenous Peoples.

In the same year, the Commission of Traditional Foods of the Peoples in Amazonas, a joint initiative of the federal, state, and municipal governments, Indigenous movements and leaders, traditional communities, and civil society organizations led by the Public Federal Ministry of Amazonas, was established to seek a solution to the challenges of 'adequate' food for Indigenous children.

²² Based on the higher level of food insecurity and overall malnutrition observed in Brazilian Indigenous children, the programme aims to cover more of their daily nutritional and caloric needs.

It found that:

- 1. Food sent to the region was often of poor quality, highly industrialized, and decontextualized from Indigenous Peoples' cultures.
- 2. Indigenous Peoples' food was not being purchased, despite being more nutritious and affordable because legislation at national level did not consider other forms of production and consumption.
- 3. Public managers were not aware of the regulations set by the PNAE.
- 4. Indigenous Peoples' needed training to be able to connect and access some policies and participate actively with PNAE.

Some of the actions taken during 2017 and 2018 to address these challenges were:

- 1. Training workshops for local actors on Indigenous school feeding.
- 2. Agreement on terms of commitment with local decision-makers.
- 3. Implementation of pilot projects with distinguished public calls of interest for Indigenous farmers.
- 4. Coordination with rural assistance agencies to issue the necessary documentation for Indigenous farmers to be able to participate in public purchases.
- 5. Formal recommendations for the public ministry to implement the legislation to municipal managers, highlighting that non-compliance may result in accountability to the municipality or state's executive manager.
- 6. Monitoring of public calls of interest and elaboration of a specific notice model for Indigenous Peoples.
- 7. Continuous monitoring and support of municipal public managers.

According to the PNAE, more than a third of the municipalities in the state of Amazonas made purchases and deliveries in Indigenous communities. This benefited 350 Indigenous families that produce food, 200 schools and 20,000 students with an expenditure of approximately US\$761,400.²³

In the community of São Gabriel da Cachoeira, the municipality with the largest Indigenous population in the country, sales from local smallholder farmers reached 100 percent of the amount the FNDE transferred to the municipality to execute the PNAE in 2020.

Lessons learned:

Involving Indigenous Peoples' and other actors can support and boost local economies, reducing environmental costs and overall expenditures. In 2020 a new National Technical Note²⁴ based on the experience of the Amazonas, regulation was established to scale up and replicate good practices in other states, expanding the right to self-consumption to the Indigenous Peoples and communities of Brazil and facilitating the supply of healthy food to all Brazilian elementary school students.

Source: WFP Centre of Excellence against Hunger and FNDE. (2021). School Feeding in traditional communities: Policy Brief #4. The Indigenous PNAE in Amazonas. Available at <u>https://centrodeexcelencia.org.br/wp-content/uploads/2021/10/PolicyBrief4-Indigena-EN.pdf</u>

²³ This case study uses the exchange rate of 1 Brazilian Real = US\$ 0.2538, the average for 2019.

²⁴ Ministério Público Federal, Procuradoria Geral da República, 6ª Câmara de Coordenação e Revisado – Populações Indígenas y Comunidades Tradicionais. Nota técnica No. 3/2020/6ªCCR/MPF.

6.4 Why is a differentiated and culturally appropriate approach important?

Differentiated approaches are critical because the foods Indigenous Peoples consume also have a cultural value in addition to a nutritional one, as foods are linked to territory and identity (Table 6.1). In many instances, their foods are also part of cultures, beliefs or are linked to specific celebrations or traditions. Non-culturally adequate diets can have a negative effect on Indigenous Peoples' health besides being a violation to their right to food in which adequacy (corresponding to the cultural traditions of the people to which the consumer belongs) is an important element.

Not providing adequate diets causes changes in food habits and diets which can be detrimental to Indigenous Peoples (FAO and CINE, 2009) as it can lead to a reliance on market-based products which alienate them from their traditional²⁵ food practices and knowledge systems that are essential for the sustainability of their territories and landscapes, their resilience, and the maintenance of their culture (Bellinger and Andrade, 2016; Girardi et al 2021). For example, a study among the North American Nuxalk Indigenous People indicates that Indigenous Peoples living in their territories and relying on traditional foods have a better health status as compared to their counterparts living in urban areas (Egeland et al., 2009; Kuhnlein and Chotiboriboon, 2022). Moreover, in Chile and Colombia, results indicate that implementing culturally adapted diets can help to reduce food waste by 30 percent (Sternadt, 2021).

Hence, not adapting school meals risks food waste, alienating children from their parents, elders, and community's tastes, which includes aromas, textures, colours, and practices. Moreover, it also leads to a dependence on the market and highly processed foods, which undermines their nutritional status and health (Swensson et al., 2021). Nutrition objectives are not met, and economic resources are lost if the children do not consume appropriate and nutritious food.

Identifying Indigenous Peoples' foods that are nutrient rich can have a significant impact (Kuhnlein and Chotiboriboon, 2022). They can contribute to healthy diets (Kennedy et al., 2021), be absorbed into the local economy, can contribute to diversifying economies, and can substitute reliance on imported products thus stimulating local and self-development.

In some cases, school meals programs in the region include Indigenous foods and preparations. For example, in Peru, the national school meals program has included native potatoes in the food basket to promote the inclusion of local foods. In 2022, the *Qali Warma* national school meals programme distributed 411.89 tons of native potatoes during the school year, which were distributed to users of public educational institutions located in the Junín, Pasco, Huancavelica, and Cajamarca regions. In Guatemala, school meals include, for example: a typical broth, *caldo de Tobik*, which means broth of celebration and is also known by the name *made together by all*, in the municipality Totonicapán; *pinol*, a corn-based dish that has been declared part of Guatemala's cultural heritage and is a sign of the cultural identity of the indigenous areas of San Juan Sacatepéquez, San Pedro Sacatepéquez, and Baja Verapaz; and the typical rice and beans with stewed chicken dish of the Garífuna culture. The official menus that include these foods also detail their preparation (MINEDUC, 2020a; MINEDUC, 2020b). In Colombia, the PAE Indígena includes Indigenous foods and preparations (World Bank and UAPA 2022).

²⁵ Traditional refers to practices and knowledge developed by a people over generations based on observation and interaction with the natural environment of a specific area.

Indigenous Peoples' food systems: key features²⁶

1. Cosmovision and the centrality of

territory, where humans and nature are not separated. Indigenous Peoples' follow the natural cycles of their territory. Their territories are an essential part for their resilience and livelihoods. These practices enable sustainability. 2. Indigenous Peoples' knowledge is the backbone of their food systems. It is embedded in their territory. Through adaptation and innovation, they know what to harvest according to the season, what to use for food and medicine. For example, Mayan Indigenous communities in the Yucatan use between 300-500 species of plants and animals (Toledo et al., 2008) for food, medicine, and energy.

3. Circularity is an essential part of the system through which waste is minimised. This is the case of an Eyuujk community, which turned the foods used for a ceremony or ritual into meals for families for the whole week.

4. Social norms, values and governance structure that promote social capital and reciprocity within the community. Much of the Indigenous Peoples' resilience is grounded on their organisational structures, social capital, and moral economies. For example, during COVID-19 the World Bank surveyed 17 Indigenous communities and 70 percent reported they accessed food either through self-production or exchanges with other communities. Of these, five reported no food shortages or hunger in 2020 (Cord and Pizarro, 2021). Martínez-Cruz reports how solidarity and collective action supported the elders in a vulnerable situation during COVID-19 in an Indigenous community in Oaxaca, Mexico (2020).

²⁶ Adapted from Martínez-Cruz, TE and Rosado-May, F. (2022). Indigenous Peoples' Food Systems: Using Traditional Knowledge to Transform Unsustainable Practices. Religions for Peace and UNEP.

6.5 Challenges to successful differentiated programming

Despite greater openness and recognition of the significance of culturally adapted diets for school meals that support local farmers and Indigenous Peoples' traditional food systems, there are challenges.

Challenges in differentiated programming:

- Differentiated programming requires a multi-sectoral approach. Various government agencies should be involved in design and implementation, especially agriculture, education, health, gender, social protection/development and finance as well as autonomous authorities.
- Consultations with Indigenous Peoples and their governance structures require time, language skills, personnel who understand intercultural perspectives, and extra resources to enable those processes.
- Greater awareness is needed to understand the link foods have to identity, cultural traditions, and place (environment and geography) for Indigenous Peoples in addition to the nutritional value that Indigenous foods possess.
- Information needs to be translated into Indigenous Peoples' languages²⁷ and made accessible to Indigenous Peoples' communities. WFP for example in Nicaragua is supporting the translation of national school feeding guidelines into Miskito and dialects of Mayangna.
- Dialogue is needed between Indigenous communities and national authorities to develop procedures so that the government's nutritional requirements are met while respecting the Indigenous Peoples' food cultures and cosmovisions.
- School meals programs often must meet dietary guidelines that are developed centrally; for differentiated programming to work, dietary guidelines can and should be made to align with Indigenous Peoples' food systems, and to reflect the nutritional content of biodiverse Indigenous foods.

Challenges in decentralised programming:

- The participation and increased engagement of Indigenous Peoples' community leaders and representatives of Indigenous Peoples' communities in public policy and design of normative frameworks remains a challenge across all types of programming. Even in decentralised programs, for example, in Guatemala the committees that design the menus need to ensure the participation of Indigenous parents.
- In decentralised approaches where funding may go directly to communities, national frameworks
 or guidelines are important in addition to capacity strengthening to accompany the process and
 ensure that the communities and the parent teacher committees are aware of what balanced,
 nutrient-rich and healthy diets are.
- Robust accountability systems need to be developed to ensure transparency and the integrity of the use of funds. There is a risk of sending funding directly to communities who then buy in bulk what is cheapest, which may most likely be processed foods.

²⁷ In Brazil, Indigenous Peoples speak more than 150 languages (Bellinger and Andrade, 2016).

Challenges to local purchase:

- Differentiated programming requires Indigenous Peoples' producers to be aware of the local market opportunities. Programs need to have well-defined and transparent procedures that are accessible and reasonable to ensure Indigenous Peoples' producers' access.
- Purchasing local products from local producers has its own set of difficulties; for example, producers should be well-organized to guarantee deliverables in the amount and quality needed by the programme. For local produce to be integrated into programming, it must meet the programmes' standards of food safety. Administrative delays in payment can be problematic, especially for smaller farming operations. Moreover, some programmes require purchase from small scale or Indigenous Peoples' producers, but these regulations can be difficult to enforce.
- Programmes need to have adequate but also flexible and supportive processes, especially in areas that are vulnerable or particularly exposed to different types of shocks where Indigenous Peoples' production may be variable. The support should be institutional, ensuring that legal frameworks and public procurement processes are inclusive and allow purchases from smallholder producers, and it should be technical, helping farmers to access the needed inputs, as well as credit and technical and organizational skills.

Common programming challenges:

- Food safety and quality assurance of local and fresh products is a challenge overall, but specifically in Indigenous Peoples' regions. Diverse foods, including ancestral foods, or traditional methods of food preparation are sometimes not allowed in rules and regulations. Additionally, more cultural awareness is needed on the side of implementers or policy makers to increase the acceptance of Indigenous Peoples' practices (Martinez-Cruz, 2022; Mercado et al., 2018).
- Food storage and waste can present challenges to Indigenous Peoples' communities. In remote areas for example, waste disposal from canned and boxed goods can be detrimental in delicate ecosystems like the Amazon. Moreover, communities may not have the facilities to store food.
- Robust and comprehensive monitoring and evaluation of the impact and success (or not) of school meals, with community participation, must accompany any programme. Timely corrective action that can adapt to changes can ensure programme effectiveness.
- Disaggregation of data according to gender must be integrated into all programming to provide a gender analysis that could shed light on any gaps addressing Indigenous girls and boys, and producers (Siliprandi and Cintrão, 2021).

6.6 The way forward

Latin America and the Caribbean's social fabric is composed of different cultures sharing the same territory. It is a multicultural setting incorporating various food habits and preferences with unintended pressure on the land. Schools are made up of children from these diverse cultural contexts. In a social setting where one culture is present, having a menu that meets the expectations of the children and the adults is possible as in the examples of the differentiated approaches in Indigenous Peoples' communities. However, in a multicultural setting the process is more complicated and foods from the dominant culture will most likely dominate. If we seek an intercultural approach which enables a process of exchange and learning aimed at building the mutual respect of cultural and socioeconomic differences in a safe environment, then menus that incorporate Indigenous Peoples' foods and food traditions are to be encouraged and must have a place in school meals.

In Chile, since 2020 the school feeding project *Cocina con raíces* (Cuisine with roots) has been incorporated within the national school feeding programme *Programa de Alimentación de la Junta Nacional de Auxilio Escolar y Becas (JUNAEB). Cocina con raíces* serves foods and recipes from Chile's Aymara, Mapuche, and Rapa Nui Indigenous communities in a public school system that reaches 1,600,000 children. This approach may also be an opportunity to revitalise Indigenous Peoples' foods and cultures in peri-urban and urban schools, and one that could potentially be replicated given that 52 percent of the Latin America and Caribbean region's Indigenous population live in urban areas.

Yet the process needs to be accompanied not only by diverse menus but with dialogue and the participation of Indigenous Peoples' including the purchase of local products from communities. School meals in a multicultural setting can provide conditions for a process that could lead to integration without any of the cultures losing their identity because of the integration.

The challenge moving forward is to enable processes that contribute to intercultural societies that abide by the principles of providing healthy, nutritious food produced locally (all or in part), encourage sustainable food systems for the local economy, and participation in decision making.

Moreover, one of the potential ways to influence more inclusive and intercultural policies is through global processes which raise awareness and work in partnership with governments, Indigenous Peoples' organisations, and various partners, among them UN agencies, to promote and support Indigenous sensitive programming. The Coalition on Indigenous Peoples' Food Systems (Box 6.2) which emerged from the Food Systems Summit in 2021 is one such mechanism.

Box 6.2 Coalition on Indigenous Peoples' food systems

Policy change plays an important role in school meals programming. Policies that apply an intercultural lens have the potential to be more transformative and sustainable. During the United Nations Food Systems Summit 2021, thanks to the leadership of Indigenous Peoples, the UN Permanent Forum on Indigenous Peoples' Issues, FAO and other UN agencies, and seven governments, a Coalition on Indigenous Peoples' food systems was launched. The goals of the Coalition are to strengthen and reinforce Indigenous Peoples' Food Systems to achieve their rights to food, health, and self-determination. Consultations with Indigenous Peoples from different regions of the world have defined areas of work to take forward. Adequate meals for Indigenous children were set as a priority and a working line on school meals programmes was established.²⁸

The analysis of the school meals programmes in different countries indicates there are multiple understandings of what is meant by an intercultural approach to a school meals programme. The definition provided in Box 6.1 is solid, but flexible enough to serve as a point of reference to each programme, decentralised or not. It also serves as a reference to those organizations or stakeholders outside of the government school meals programme, who are critical when linking food and diets to local production and food systems.

This Special Report provides an overview of the actions taking place to ensure school meals reach and respond to Indigenous Peoples' right to food which includes a dimension of adequacy and cultural appropriateness. The overview explored how Indigenous Peoples' preferences and needs are considered to improve children's food and nutrition security. Although there are several challenges, the region is taking steps towards an intercultural approach to school meals. School-based programmes can also serve as platforms and entry points to address broader issues regarding the right to self-development and food, and identity. A differentiated approach is the path to achieve intercultural school meals. Yet more sensitization is needed across the region from the policy level to the design and to the implementation of the programme with the active engagement of Indigenous Peoples. In conclusion, sovereign communities are better able to chart the course forward.

²⁸ Analysing the various United Nations Food Systems 2021 country pathways and looking at the intersection of school meals programmes and Indigenous Peoples' food systems, the authors found that 29 countries could implement school meals based on Indigenous Peoples' food systems.

Case Study 6.2

Reflections on a visit to an Indigenous elementary and preschool in Quintana Roo, Mexico (May 2023)

The following is based on a visit to an Indigenous elementary and preschool serving "warm" food in the municipality of José María Morelos, Quintana Roo, Mexico. Interviews were held with people working in the kitchen and the director of the school. State and municipal representatives of the government agency in charge of the school meal programme, *Desarrollo Integral de la Familia (DIF)* were also present.



Each school has a committee made up of 3-5 parents. Some work in the kitchen either cooking or serving. The composition of the elementary school's committee changes yearly with options of remaining on the committee. At the preschool each meal costs MX\$ 10.00 (approximately US\$ 0.56) The cost increases to MX\$ 15.00 for the elementary school students. At the preschool, around 50 percent of the 170 students eat the school meal, compared to 60-75 percent at the elementary school.

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Every month DIF provides a list of products that the state buys, but not from local producers. The kinds and quantity of products depends on reports the school provides and, on the menu, which is designed by a dietician at state level. Locals do not participate in the design of the menu.



The state monitors the children's weight and height, in addition to other basic health indicators like blood pressure. Levels of sugar, salt, and carbohydrates in the diet are also monitored. The parents, school and DIF personnel are committed to a job well done and have the wellbeing of the children in mind. They understand the meals should be designed using local products, but the present conditions are not set for moving in that direction. To do so the programme requires the intervention of other local and government agencies.



The personnel could work on standardizing procedures, and levels of decision-making. This could range from supplying kitchen goods and building better facilities for storage to identifying areas of opportunity in public policies that can enhance the number of students benefiting or ensuring job security to the employees and reducing the rotation rate of the personnel.

Based on the visit, and assuming it reflects the state's program, it can be said that school meals in Quintana Roo have reached acceptable levels of implementation. However, the programme needs to scale up to meet the expectations of good intercultural practices. Quintana Roo can be a model for the country on how to implement an intercultural school meals program with training and a clear understanding of a pathway to interculturalism.

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Conclusions

Conclusions

Strengthen school meals programmes post-pandemic

As the region faces compounding crises, including rising food prices as well as climate and mass migration crises, school meals programmes administrators and policymakers should design preparedness and response strategies according to programme objectives, capacities, and risk scenarios, including risk-financing initiatives.

Chapter 3 argues that investing now in quality programming that addresses the holistic needs of the learner and is integrated with initiatives that support health and nutrition will ensure the greatest return in academic achievement and wellbeing. School feeding programmes generate mostly educational benefits, with an exceptional cost-benefit ratio of 14.8 (Verguet et al., 2020). These results demonstrate the positive impact that school meals have on the academic development and well-being of students.

Chapter 5 demonstrates that countries can learn from the adaptations that were made to school feeding programmes during the COVID-19 pandemic to strengthen the institutional resilience of school meals programmes. Programmes can build their capacity to support schoolchildren and their surrounding communities before, during and after shocks by preparing them both to guarantee their operational continuity and to respond to new needs.



Strengthen school meals programmes to support the generation of students that has lost learning during the pandemic. Strengthen their institutional resilience and their role in responding to crises, including food, climate, and migration crises.

Reach the most in need

In the current education crisis in LAC, reaching full coverage is the key priority action. Data from <u>Chapter 1</u> suggest that many school feeding programmes in the region do not reach full coverage.

<u>Chapter 1</u> also finds that in LAC, the educational journey of over 118 million boys and girls between the ages of four and 17 is in jeopardy. Their access to quality education is uncertain, and this poses a significant threat to their academic progress and future opportunities. Ensuring that especially the most vulnerable areas receive quality, integrated school meals programmes is essential.

To do this, regional inequalities will need to be addressed, with expenditure per child that enables quality programming, especially in low income and lower-middle income countries where the cost-per-child is much lower.

Chapter 3 finds that few countries adequately invest in integrated health and nutrition packages, with multisectoral investment, to ensure well-being and academic performance, which is even more necessary now after the COVID-19 pandemic. The chapter finds that reaching the most in need through integrated school health and nutrition package of interventions in schools contributes to school performance.



Ensure school meals coverage is sustained throughout the school year where full coverage is reached and expanded where it does not. Support financing initiatives, especially in low-income and lower-middle income countries, to reduce regional inequalities in expenditure per child and to ensure quality programming at full coverage.

Learn from other countries, regions and evidence and offer LAC's experience

Chapter 2 find that the long tradition of exchange between governments and partners in the region offers opportunities to share evidence, build on best practices and share solutions to common problems. The vibrant ecosystem of cooperation including regional networks such as the Red RAES network, should be leveraged to exchange lessons learned and best practices. The tools and connections of the School Meals Coalition should be used to further the ambitious national commitments that have been made in the framework of the School Meals Coalition, and to accelerate progress towards larger, better, and stronger school feeding programmes.

It is essential to invest in evidence, studying what works to address the double burden of malnutrition, quantifying and better understanding the effects of local purchase on local food systems, and researching under-researched areas including intercultural approaches to school meals.



Strengthen regional cooperation and information sharing at technical and strategic levels, with a focus on multisectoral, integrated approaches to school meals. Strengthen data and evidence sharing, through regional networks, academic and research consortiums, communities of practice, and the School Meals Coalition and its initiatives.

Strengthen local food systems in all their diversity

Chapter 4 and the **Special Report** of this publication showcase the need to source more food locally, diversifying the menu for schoolchildren and supporting smallholder and family farmers, with a view to strengthening the local food system, making school food environments healthier, and promoting the participation of women farmers, youth, Indigenous Peoples, and Afro-descendants in the school value chain.

To effectively strengthen local food systems via school meals, stakeholders in the region need to build up robust evidence that will improve the quality of this approach to programming. Investments in stronger monitoring, evaluation, and reporting systems comprising of indicators that are specific to local purchase and are integrated within national systems, such as those that track local purchases from women farmers, youth, Indigenous groups, and Afro-descendants will help to measure impacts, identify barriers, and inform decision-making processes. Fostering multisectoral coordination and further embedding school meals purchases within wider national food systems policies will be essential.

The **Special Report** finds that school meals programmes in LAC are increasingly realizing their role in creating intercultural societies. Key principles to an intercultural approach to school meals include providing healthy, nutritious food produced locally, encouraging sustainable food systems for the local economy, and ensuring participation in decision making. Incorporating and encouraging Indigenous foods and food traditions in school meals programmes is a major part of seeking an intercultural approach, which enables a process of exchange and learning aimed at building the mutual respect of cultural and socioeconomic differences in a safe environment.

The challenge to inclusive, intercultural school meals programmes in the region today is to ensure that programme policies and regulations facilitate dialogue and participation, including the purchase of local products from communities. Programme administrators and policymakers should also look to strengthen intercultural approaches to school meals in multicultural settings, including urban and peri-urban areas.



Invest in the connection between school meals and local food systems. Prioritize producing robust evidence on school meals and local food systems in all their diversity and share that evidence along with technical know-how across countries, strengthening regional communities of practice. Consolidate, scale up, and embed local purchase in national systems.

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References

Abizanda, B., Almeyda, G., Ortiz, E.A., Berlanga, C., Bornacelly, I., Bos, M.S., Díaz, Ela, Dueñas, Ximena, Elacqua, Gregory, Elías, Alison, Fernández-Coto, R., Frisancho, V., Moreno, V.A.G., Cardozo, J.C.H., Hincapié, D., Margitic, J.F., Marotta, L., Díaz, M.M.M-B., Morduchowicz, A., Muñoz, F., Näslund-Hadley, E., Ruiz-Arranz, M., Thailinger, A., Rodríguez, F.J.V.R., Vezza, E., and Zoido, P. (2022). How to Reboot Education Post-pandemic: Delivering on the Promise of a Better Future for Youth. Washington, D.C.: Inter-American Development Bank. Available at: http://dx.doi.org/10.18235/000424.

Adelman, S., Gilligan D., and Lehrer K. (2012). The Impact of Food for Education Programs on School Participation in Northern Uganda. Economic Development and Cultural Change. Vol 61(1): pp. 187–218. Available at: https://www.journals.uchicago.edu/doi/10.1086/666949_

Alipui, N. and O'Shea, S. (2015). Investing in all children: Towards equitable, inclusive, and sustainable development. Harvard International Review. September.

Beazley R., Solórzano A. and Barca V. (2019). Reactive social protection in the face of emergencies in Latin America and the Caribbean: Main findings and recommendations. OPM in collaboration with WFP.

Beazley, R., Solórzano, A. and Sossouvi, K. (2016). Study on Shock-Responsive Social Protection in Latin America and the Caribbean: Theoretical Framework and literature review. OPM in collaboration with WFP.

Bellinger, C., and Andrade, L. de M. (2016). Alimentação nas escolas indígenas: desafios para incorporar práticas e saberes. São Paulo: Comissão Pró-Índio de São Paulo.

Bhutta, ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, Haider BA, Kirkwood B, Morris SS, Sachdev HP, Shekar M; Maternal and Child Undernutrition Study Group. (2008). What works? Interventions for maternal and child undernutrition and survival. Lancet. 2008 Feb 2: 417-40.

Black, R.E., Victora, C.G., Walker SP, Bhutta, Z.A., Christian, P., de Onis, M., Ezzati, M., Grantham-McGregor, S., Katz, J., Martorell, R., Uauy, R., and Maternal and Child Nutrition Study Group. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet. 2013; 382 (9890): 427–51.

Browne J, Lock M, Walker T, Egan M, Backholer K. (2020). Effects of food policy actions on Indigenous Peoples' nutrition-related outcomes: A systematic review. BMJ Glob Health. 2020; 5:1–15.

Bundy D. (2011). Rethinking school health: A key component of Education for All. Directions in Human Development. Washington D.C.: World Bank. Available at:

https://documents.worldbank.org/en/publication/documents-reports/ documentdetail/900271468332690641/r

Bundy, D., Burbano, C., Lloyd-Evans, E., Sorgho, G., Lavadenz, F., Adam, Z., Drake, L., Rowland-Jones, S., and Piot, P. (2020). A Commentary on the Inter-institutional Symposium: "Building a Healthier Future: A Human Capital Perspective on Health and Education", presented at the European Congress of Tropical Medicine and International Health, Liverpool, UK, October 2019. International Health, 12(4): 235-237. Available at: https://doi.org/10.1093/inthealth/ihaa009

Bundy, D., Silva, N. d., Horton, S., Jamison, D. T., and Patton, G. C. (2018). Re-imagining School Feeding: A High-Return Investment in Human Capital and Local Economies (Donald A. P. Bundy, Nilanthi de Silva, Susan Horton, Dean T. Jamison, & George C. Patton, Eds. Vol. 8). International Bank for Reconstruction and Development / The World Bank. Available at: <u>https://docs.wfp.org/api/documents/WFP-0000116138/download/</u>

Bundy, D., Silva, N. d., Horton S., Patton, G., Schultz, L., and Jamison, D. T. (2017). Child and Adolescent Health and Development: Realizing Neglected Potential. In: Child and Adolescent Health and Development. 3rd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2017 Nov 20. Chapter 1.

CARICOM (2010). Regional Food and Nutrition Security Policy.

CIAT and WFP (2023). Linking National School Feeding Programmes with Local Food Systems in Latin America and the Caribbean. Forthcoming.

Cintrão, R.P. (2018). Mujeres rurales y programas de compras públicas en América Latina y Caribe.

CELAC (2015). Plan for Food and Nutrition Security and the Eradication of Hunger 2025.

CONEVAL. (2015). La Política de Evaluación en México: 10 años de Coneval, Consejo Nacional de Evaluación de la Política de Desarrollo Social. ISB: 978-607-9384-10-4. Ciudad de México: 2015.

Consejo Nacional de Evaluación de la Política de Desarrollo Social (2015). La política de evaluación en México: 10 años de CONEVAL, Consejo Nacional de Evaluación de la Política de Desarrollo Social. ISBN: 978-607-9384-10-4. Ciudad de México.

Cord L. and Pizarro D. (2021). Indigenous Peoples' resilience: Supporting Solutions from within Available at: https://blogs.worldbank.org/voices/indigenous-peoples-resilience-supporting-solutions-within

Cruz, L. (2020). Legal Guide on school food and nutrition - Legislating for a healthy school food environment. FAO Legal Guide No. 2. Rome, FAO. Available at: <u>https://doi.org/10.4060/ca9730en</u>

CPI-IG. (2021). Social Protection Responses to Covid-19 in the Global South – Database.

Deza, **M.C.**, **Ruiz-Arranz**, **M.** (2022). "Panorama and responses to ensure food security in the region." Inter-American Development Bank.

Diario oficial de la Federación, (2014). ACUERDO mediante el cual se establecen los lineamientos generales para el expendio y distribución de alimentos y bebidas preparados y procesados en las escuelas del Sistema Educativo Nacional. DOF: 16/05/2014.

Drake, L., Cousin, E., & Kim, J. Y. (2016). Global School Feeding Sourcebook: Lessons from 14 Countries. Imperial College Press. Available at: <u>https://openknowledge.worldbank.org/handle/10986/24418</u>

Drake L, Fernandes M, Aurino E, Kiamba J, Giyose B, Burbano C, Alderman H, Mai L, Mitchell A, Gelli A. (2017). School Feeding Programs in Middle Childhood and Adolescence. In Disease Control Priorities 3, ed. D. Bundy, N. De Silva, S. Horton, D. Jamison, G.C. Patton, 147-164. Washington D.C.: World Bank.

ECLAC. (2021). Implications of gender roles in natural resource governance in Latin America and the Caribbean. Bulletin No. 2, January 2021, ISSN: 2709-0213.

ECLAC. (2022). Social Panorama of Latin America and the Caribbean, Santiago, 2022. Available at: http://repositorio.cepal.org/bitstream/handle/11362/48519/S2200946_en.pdf?sequence=1&isAllowed=yv

ECLAC, FAO, and WFP. (2022). Towards sustainable food and nutrition security in Latin America and the Caribbean in response to the global food crisis.

Egeland, G. M., Charbonneau-Roberts, G., Kuluguqtuq, J., Kilabuk, J., Okalik, L., Soueida, R. and Kuhnlein, H. V. (2009). Back to the future: using traditional food and knowledge to promote a healthy future among Inuit. In: Indigenous Peoples' Food Systems: The many dimensions of culture, diversity and environment for nutrition and health. 9-22.

Elías, A., Granada, I., Näslund-Hadley, E., Ortiz, P., Romero, J., Dával, A. (2022). Migration and education: challenges and opportunities. Inter-American Development Bank. Technical Note 2547.

FAO. (2015). The CELAC Plan for Food and Nutrition Security and the Eradication of Hunger 2025.

FAO. (2017). Panorama of Food and Nutrition Security in Latin America and the Caribbean. Available at: <u>https://iris.paho.</u> org/bitstream/handle/10665.2/34343/9789275319727_spa.pdf

FAO. (2019). Nutrition guidelines and standards for school meals: a report from 33 low and middle-income countries. Rome.

FAO. (2021). Los pueblos indígenas y afrodescendientes y el cambio climático en América Latina - Diez experiencias de colaboración interculturales escalables. Santiago. Available at: <u>https://doi.org/10.4060/cb4847es</u>

FAO and CINE. (2009) Indigenous Peoples' Food Systems: The many dimensions of culture, diversity and environment for nutrition and health. Kuhnlein H., Erasmus, B and Spigelski, D.

FAO and WFP. (2018). Home-Grown School Feeding. Resource Framework. Technical Document. Available at: <u>http://www.fao.org/3/ca0957en/CA0957EN.pdf</u>

FAO and WHO. (2020). Sustainable Healthy Diets - Guiding Principles. Rome. Available at: https://doi.org/10.4060/ca6640es

FAO and The University of the West Indies. (2021). A review of school feeding programmes in the Caribbean Community. Saint Augustine. Available at: <u>https://doi.org/10.4060/cb4650en</u>

FAO and UNDP. (2018). Public food procurement from smallholder farmers: literature review and best practices. Working Paper Number 176.

FAO, FIDA, OMS, PMA, and UNICEF. (2021) El estado de la seguridad alimentaria y la nutrición en el mundo 2021. Transformación de los sistemas alimentarios en aras de la seguridad alimentaria, una nutrición mejorada y dietas asequibles y saludables para todos. Roma, FAO Available at: <u>https://doi.org/10.4060/cb4474es.</u> FAO, ABC/MRE and FNDE/MEC. (2022a). Situational state of Sustainable Schools 2021: Executive summary.

FAO, IFAD, UNICEF, WFP, and WHO. (2022b) The State of Food Security and Nutrition in the World 2022. Repurposing Food and Agricultural Policies to Make Healthy Diets More Affordable. Rome, FAO. Available at: https://www.fao.org/ documents/card/en/c/cc0639en.

FAO, ABC/MRE y FNDE/MEC. (2023a). Marcos normativos para una alimentación escolar sostenible - Un diálogo a partir del escenario de América Latina y el Caribe. Brasília. Available at: https://doi.org/10.4060/cc6140es

FAO, IFAD, PAHO, UNICEF and WFP. (2023b). Regional Overview of Food Security and Nutrition – Latin America and the Caribbean 2022: towards improving affordability of healthy diets. Santiago. Available at: https://doi.org/10.4060/cc3859en

FAO, IFAD, UNICEF, WFP and WHO. (2023c). The State of Food Security and Nutrition in the World 2023. Urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum. Rome, FAO. Available at: https:// doi.org/10.4060/cc3017en

Federal Government of Brasil. (2009). Directrices de la Alimentación Escolar en Brasil. Ley N°11.947/2009, Directrices de la Alimentación Escolar, 2009.

Gatica-Domínguez, G., Mesenburg, M.A., Barros, A.J.D. et al. (2020). Ethnic inequalities in child stunting and feeding practices: results from surveys in thirteen countries from Latin America. International Journal for Equity in Health 19, 53. Available at: https://doi.org/10.1186/s12939-020-01165-9

Gelli, A., E. Masset, G. Folson, A. Kusi, D. K. Arhinful. (2016). Evaluation of Alternative School Feeding Models on Nutrition, Education, Agriculture and Other Social Outcomes in Ghana: Rationale, Randomized Design and Baseline Data.

Girardi, M.W., Leao, L.P.G. and da Silva, L.L. (2021). Public food procurement and Indigenous Peoples: the case of the Brazilian National School-feeding programme. In: L. Swensson et al. (eds.) Public food procurement for sustainable food systems and healthy diets. FAO, Alliance of Bioversity International and CIAT, Editora da UFRGS. Volume 1, pp 227-247.

Global Child Nutrition Foundation. (2022). School Meal Programmes Around the World: Results from the 2021 Global Survey of School Meal Programmes. Available at: https://gcnf.org/wp-content/uploads/2022/09/School-Meal-Programs-Around-the-World_-Results-from-the-2021-Global-Survey-of-School-Meal-Programs%C2%A9.pdf

Gobierno de Colombia y WFP. (2022). Declaración Final del IX Foro Regional de Alimentación Escolar para América Latina y el Caribe 2022. Available at: https://es.wfp.org/noticias/declaracion-final-noveno-foro-alimentacion-escolar-para-america-latina-y-el-caribe

Government of Peru. (2022). Continuity evaluation of the Qali Warma National School Feeding Program (PNAEQW). Output 3: Final PNAEQW Continuity Assessment Report. School of Public Management of the University of the Pacific.

Hall, A. (2007). Micronutrient supplements for children after deworming. The Lancet Infectious Diseases, 7(4), 297-302.

Hawkes, C., Ruel, M. T., Salm, L., Sinclair, B., and Branca, F. (2015). Double-duty actions: seizing programme and policy opportunities to address malnutrition in all its forms.

Hugues Y, Díaz-Zavala RG, Quizán-Plata T, Corvalán C, Haby MM. (2021) Insatisfactorio cumplimiento de las pautas de ambiente alimentario escolar en escuelas primarias del Noroeste de México: Un estudio transversal. PLoS ONE 16(11): e0259720. Available at: https://doi.org/10.1371/journal.pone.0259720

IDB. (2023). Timely Interventions to improve access and learning. Forthcoming.

IFPRI. (2017). Schools as a System to improve Nutrition: A new statement for school-based food and nutrition interventions.

ILO. (2019). Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an inclusive, sustainable and just future. ISBN 978-92-2-134034-8. Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms 735607.pdf

ILO. (2020). Fact sheet - Implementing the ILO Indigenous and Tribal Peoples Convention No. 169: Towards an inclusive, sustainable and just future. Available at: https://www.ilo.org/global/topics/indigenous-tribal/publications/WCMS_735676/ lang--en/index.htm

INEP. (2023). Educação em terras indígenas: o que diz o Censo Escolar. Available online, accessed 18 May 2023: Available at: https://www.gov.br/inep/pt-br/assuntos/noticias/censo-escolar/educacao-em-terras-indigenas-o-que-diz-o-censo-escolar

IPEA. (2020). Programa de Aquisição de Alimentos nos municípios brasileiros.

Kelly, S., and Swensson, L.F.J. (2017). "Leveraging institutional food procurement for linking small farmers to markets: Findings from WFP's Purchase for Progress initiative and Brazil's food procurement programmes". FAO Agricultural Development Economics Technical Study, No. 1. Rome: Food and Agriculture Organization of the United Nations.

Kennedy, G., Kanter, R., Chotiboriboon, S., Covic, N., Delormier, T., Longvah, T., Maundu, P., Omidvar, N., Vish, P., and Kuhnlein, H. (2021). Traditional and Indigenous Fruits and Vegetables for Food System Transformation. Current Developments in Nutrition, Volume 5, Issue 8, 2021.

Kuhnlein HV, **Receveur O**, **Soueida R**, **and Egeland GM**. (2004). Arctic Indigenous peoples experience the nutrition transition with changing dietary patterns and obesity. J Nutr. 2004 Jun;134(6):1447-53. doi: 10.1093/jn/134.6.1447. PMID: 15173410.

Kuhnlein, H.V., and Chotiboriboon, S. (2022). Why and How to Strengthen Indigenous Peoples' Food Systems With Examples From Two Unique Indigenous Communities. Frontiers in Sustainable Food Systems. 03 May 2022 Nutrition and Sustainable Diets, Volume 6 - 2022. Available at: <u>https://www.frontiersin.org/articles/10.3389/fsufs.2022.808670</u>

López-Olmedo N, Jiménez-Aguilar A, Morales-Ruan M, Hernández-Ávila M, Shamah-Levy T, Rivera-Dommarco J. (2018). Consumption of foods and beverages in elementary schools: Results of the implementation of the general guidelines for foods and beverages sales in elementary schools in Mexico, stages II and III. Evaluation and Program Planning 66 (pp 1-6). Available at: <u>https://doi.org/10.1016/j.evalprogplan.2017.08.009</u>

Martínez-Cruz, T.E. (2020). Resisting in the mountains in Mexico: using territory and self-determination to resist Covid-19. Blog entry. CASAS collective, COVID-19 Series. Available at: <u>https://casasouth.org/resisting-in-the-mountains-us-ing-territoryand-self-determination-to-resist-covid-19/</u>

Martínez-Cruz, TE and Rosado-May, F. (2022). Indigenous Peoples' Food Systems: Using Traditional Knowledge to Transform Unsustainable Practices. Religions for Peace and UNEP.

McMichael, C. (2019). WASH in schools in low-income countries: A review of evidence of impact. International Journal of Environmental Research and Public Health. Vol 16(3): 35. DOI: 0.3390/ijerph16030359.

Mercado, G., Hjortsø, C.N., and Kledal, P.R. (2016) Public procurement for school breakfasts in the Bolivian Altiplan: Governance structures enabling smallholder inclusion. Journal of Rural Studies, Volume 44, Pages 63-76.

Mercado, G., Hjortsø, C., and Honig, B. (2018). Decoupling from international food safety standards: how small-scale indigenous farmers cope with conflicting institutions to ensure market participation. Agriculture and Human Values. September 2018, Agriculture and Human Values 35 (1).

MIDIS. (2019). Impact evaluation of the Qali Warma National School Feeding Programme. Evaluation report. Prepared by Pablo Lavado and Manuel Barrón of the Universidad del Pacífico. Lima, Peru.

MIDES and OPHI. (2018). Índice de Pobreza Multidimensional Guatemala. Ministerio de Desarrollo Social, Instituto Nacional de Estadística, Ministerio de Finanzas Públicas, y Secretaría de Programación y Planificación de la Presidencia. Available at: <u>https://www.mppn.org/wp-content/uploads/2019/10/Guatemala-Report-IPM-gt_29jul19-v1.1.pdf</u>

Ministerio de Educación, MINEDUC. (2020a). Menús de alimentación escolar 2020: Izabal. Dirección General de Fortalecimiento de la Comunidad Educativa (Digefoce), Subdirección de acompañamiento nutricional: Guatemala. Available at: https://www.mineduc.gob.gt/DIGEFOCE/documents/alimentacion-2020/09%20MENUS%20ESCOLARES%20 2020%20/ZABAL.pdf

Ministerio de Educación, MINEDUC. (2020b). Menús de alimentación escolar 2020: Totonicapánl. Dirección General de Fortalecimiento de la Comunidad Educativa (Digefoce), Subdirección de acompañamiento nutricional: Guatemala. Available at: <u>https://www.mineduc.gob.gt/DIGEFOCE/documents/alimentacion-2020/21%20MENUS%20ESCOLARES%20</u>2020%20TOTONICAP%C3%81N.pdf

Monterrosa EC, Campirano F, Mayo LT, Frongillo EA, Cordero SH, Kaufer-Horwitz M, et al. (2015). Stakeholder perspectives on national policy for regulating the school food environment in Mexico. Health Policy Plan. 2015;30(1):28-38. Available at: <u>https://doi.org/10.1093/heapol/czt094</u>

OECD Trade and Agriculture. (2022). How to make better policies for school meals (webinar). YouTube. Available at: https://youtu.be/QQhy_MdVezg.

OIT. (2022). Panorama laboral de los pueblos indígenas en América Latina: la protección social como ruta hacia una recuperación inclusiva frente a la pandemia COVID-19. Available at: <u>https://www.ilo.org/wcmsp5/groups/public/---ameri-cas/---ro-lima/documents/publication/wcms_864130.pdf</u>

Palma, A. (2018). Malnutrition among children in Latin America and the Caribbean. Challenges Newsletter Issue 21: Latin America and Caribbean children's right to nutritious food, April 2018. Available at: <u>https://www.cepal.org/en/insights/</u> malnutrition-among-children-latin-america-and-caribbean. **Pérez-Ferrer, C., Barrientos-Gutierrez, T., Rivera-Dommarco, J.A. et al.** (2018). Compliance with nutrition standards in Mexican schools and their effectiveness: a repeated cross-sectional study. BMC Public Health 18, 1411 (2018). Available online: <u>https://doi.org/10.1186/s12889-018-6330-8</u>

Raboso Campos, E. y González, J.U. (2021) Avances de la metodología de escuelas sostenibles en los programas de alimentación escolar en Mesoamérica - Estudio de caso en El Salvador, Guatemala y Honduras.

Republic of Guatemala. (2017) Ley de alimentación escolar de Guatemala, Decreto Número 16-2017: Ley de alimentación escolar.

Republic of Honduras. (2017) Ley de alimentación escolar de Honduras, Ley de Alimentación Escolar: Creación del Programa de Alimentación Escolar, Honduras, Decreto N. 125-2016 (3 de Julio de 2017).

Reyes, Y. and Morales, D. (2021). Evaluación de impacto del sistema de información y vigilancia de la alimentación y nutrición escolar. Revista de Investigación y Evaluación Educativa, 8(1), 18-37.

Rosado, C. (1996). Toward a definition of multiculturalism. Available at: <u>https://citeseerx.ist.psu.edu/docu-ment?repid=rep1&type=pdf&doi=a13f201a31c8485f2e013ba8bade9a8fa5e57b9d</u>

Rosselet, A. En Chile servirán menú escolar con platos originarios de etnias locales. La comida es cultura viva. Sabores. Retrieved 28 July 2023 from <u>https://www.upsocl.com/sabores/en-chile-serviran-menu-escolar-con-platos-originarios-de-et-nias-locales-la-comida-es-cultura-viva/</u>

Rubio, M., Escaroz, G., Machado, A. C., Palomo, N. and Sato, L. (2020) Social protection and response to COVID-19 in Latin America and the Caribbean II Edition: Social Assistance. UNICEF. CPI-IG.

Ruel M.T., and Alderman H. (2013). Maternal and Child Nutrition Study Group. Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? Lancet. 2013; 382 (9891): 536–51.

Rutledge, J.G. (2016). Feeding the Future: School Lunch Programs as Global Policy. New Brunswick, New Jersey, USA, Rutgers University Press.

R4V. (2022). End-Year Report 2022. Inter-Agency Coordination Platform for Refugees and Migrants from Venezuela. Available at: <u>https://www.r4v.info/</u>

Sambuichi, R.H.R., de Almeida, A.F.C., Perin, G., de Moura, I.F., Alves, P.S.C. (2020). Execução Do Programa de Aquisição de Alimentos nos Municípios Brasileiros; Instituto de Pesquisa Economica Aplicada—IPEA: Rio de Janeiro, Brasilia.

Sarma H, Wangdi K, Tariqujjaman M, Das R, Rahman M, Kelly M, Ahmed T, Gray DJ. The Effects of Deworming and Multiple Micronutrients on Anaemia in Preschool Children in Bangladesh: Analysis of Five Cross-Sectional Surveys. Nutrients. 2021 Dec 29;14(1):150. DOI: 10.3390/NU14010150. PMID: 35011023; PMCID: PMC8746749.

Schultz L and Ruel-Bergeron J. (2021) Considerations for Monitoring School Health and Nutrition Programs. Front. Public Health 9:645711. doi: 10.3389/fpubh.2021.645711

Schady, N., Holla, A., Sabarwal, S., Silva, J., and Yi Chang, A. (2023) Collapse and Recovery: How the COVID-19 Pandemic Eroded Human Capital and What to Do about It. Washington, D.C.: World Bank. doi:10.1596/978-1-4648-1901-8. License: Creative Commons Attribution CC BY 3.0 IGO.

Serra Borsatto, R., de Camargo Macedo, A., and de Lima Santos, L., Antunes Junior, W. F., Ferreira Souza-Esquerdo, V. (2021) Food Procurement as an Instrument to Promote Local Food Systems: Exploring a Brazilian Experience.

Siliprandi, E. and Cintrão, R.P. (2021). Challenges and opportunities for rural women in public purchasing programmes: case studies in Latin America and the Caribbean. In: L. Swensson et al. (eds.) Public food procurement for sustainable food systems and healthy diets. FAO, Alliance of Bioversity International and CIAT, Editora da UFRGS. Volume 1, pp 227-247.

Sobrevila, C. (2008) The Role of Indigenous Peoples in Biodiversity Conservation: The Natural but Often Forgotten Partners (English). Washington, D.C.: World Bank Group. Available at: <u>http:// documents.worldbank.org/curated/</u> en/995271468177530126/Therole-of-Indigenous-peoples-in-biodiversity-conservation-thenatural-but-often-forgotten-partners_

Snilstveit B, Stevenson J, Phillips D, Vojtkova M, Gallagher E, Schmidt T, et al. (2015). Interventions for improving learning outcomes and access to education in low-and middle-income countries: a systematic review. 3ie Systematic Review 24. London: International Initiative for Impact Evaluation (3ie).

Staniszewska, A. and Lopez, A., (2017) Análisis Costo – Beneficio Alimentación Complementaria Escolar de Bolivia, estudio de caso en 15 municipios. Published by Mastercard for WFP: La Paz, Bolivia.

Sternadt, D., Mellado, J.P., Rivas-Mariño, G. and Moyano, D. (2021). Tasty and waste-free food – The alternative to improve the use of public resources in School Feeding Programs in Latin America and the Caribbean. Santiago de Chile, FAO. Available at: <u>https://doi.org/10.4060/cb4910es</u>

Stevens, G.A., Beal, T., Mbuya, M.N.N., Luo, H., and Neufeld, L.M. (2022). Global Micronutrient Deficiencies Research Group. Micronutrient Deficiencies among Preschool-aged Children and Women of Reproductive Age Worldwide: A Pooled Analysis of Individual-level Data from Population-representative Surveys. Lancet Global Health. 2022 Nov 10(11): e1590-e1599. doi: 10.1016/S2214-109X (22)00367-9. PMID: 36240826.

Swensson, L., Hunter, D., Schneider, S. and Tartanac, F. (2021). Public food procurement for sustainable food systems and healthy diets - Volume 1. Published by FAO and Alliance of Bioversity International and CIAT.

Tauranac, M. (2018). Five models for local school food procurement. In: The Good Food Purchasing Programme.

Théodore FL, Moreno-Saracho JE, Bonvecchio A, Morales-Ruán MdC, Tolentino-Mayo L, Lo´pez-Olmedo N, et al. (2018). Lessons learned and insights from the implementation of a food and physical activity policy to prevent obesity in Mexican schools: An analysis of nationally representative survey results. PLoS ONE 13(6): e0198585. Available at: https://doi.org/10.1371/journal.pone.0198585

Toledo, V.M., Barrera Bassols, N., García Frapolli, E. y Alarcón Chaires, P. (2008). Uso múltiple y biodiversidad entre los mayas yucatecos (México). Interciencia, 33(5), 345-352. Available at: <u>http://ve.scielo.org/scielo.php?script=sci_arttex-t&pid=S0378-18442008000500007&lng=en&tlng=es</u>

Turner, N. J., Harvey, T., Burgess, S., and Kuhnlein, H. V. (2009). The Nuxalk Food and Nutrition Program, coastal British Columbia, Canada: 1981-2006. Indigenous peoples' food systems: the many dimensions of culture, diversity and environment for nutrition and health, 23-44.

UC and DICTUC Public Policy Center. (2021). Comprehensive Evaluation of the School Feeding Program. Report 1: Critical aspects of design. Commissioned by JUNAEB, Chile: Muñoz, N., Keim, D. and Coloma, M.

UC and DICTUC Public Policy Center. (2021). Comprehensive Evaluation of the School Feeding Program: Report 2: Critical aspects of implementation from the perspective of users. Commissioned by JUNAEB, Chile: Muñoz, N., Keim, D. and Coloma, M.

UC and DICTUC Public Policy Center. (2021). Comprehensive Review of the School Feeding Program. Report 3: Bidder Market. Commissioned by JUNAEB, Chile: Cataldo, A. Kramm, V. Redondo, S.

UC and DICTUC Public Policy Center. (2021). Comprehensive Evaluation of the School Feeding Program: Report 4: Proposals for Improvement. Commissioned by JUNAEB, Chile: Muñoz, N., Keim, D. and Coloma, M.

UNESCO, FAO, GPE, UNICEF, UNSCN, World Bank Group and WHO, W. (2020). Stepping up effective school health and nutrition: A partnership for healthy learners and brighter futures. Available at: <u>https://www.unicef.org/media/94001/file/</u> Partnership-for-Stepping-up-effective-SHN.pdf.pdf

UNESCO, Norad, World Bank and UNICEF. (2019). Making Evaluation Work for the Achievement of SDG 4 Target 5: Equality and Inclusion. In UNESCO Internal Oversight Service (IOS) Evaluation Office, K. Mundy, K. Proulx, and C. Manion eds. Available at: <u>https://unesdoc.unesco.org/ark:/48223/pf0000370558</u>.

UNESCO, UNICEF and WFP. (2023). *Ready to learn and thrive: School health and nutrition around the world.* Paris: UNESCO, UNICEF, WFP.

UNICEF. (2021). Childhood Overweight: A Call for prevention in Latin America and the Caribbean. UNICEF. Panama. Available at: <u>https://www.unicef.org/lac/media/29386/file/Overweight-report-2021.pdf</u>

UNICEF, UNESCO and WFP. (2020). Guidance notes on reopening schools in the context of COVID-19 for ministries of education in Latin America and the Caribbean. UNICEF. Panama City. Available at: <u>https://www.unicef.org/lac/en/me-dia/14696/file</u>

United Nations. (2007). United Nations Declaration on the Rights of Indigenous Peoples. Available at: <u>https://www.un.</u> org/development/desa/Indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

Valencia V., Wittman H., and Blesh J. (2019). Structuring Markets for Resilient Farming Systems. Agron. Sustain. Dev. 39, 25 (2019). Available at: <u>https://doi.org/10.1007/s13593-019-0572-4; https://rdcu.be/dh010</u>

Vázquez, V., Serrano, A., Cestti, R., and contributions from the Stockholm International Water Institute. (2021). Water Matters: Resilient, Inclusive and Green Growth through Water Security in Latin America, World Bank. World Bank, Washington, D.C. Available online: <u>https://siwi.org/publications/water-matters-resilient-inclu-</u> sive-and-green-growth-through-water-security-in-latin-america/ **Verguet, S., Limasalle, P., Chakrabarti, A., Husain, A., Burbano, C., Drake, L., and Bundy, D. A. P.** (2020). The Broader Economic Value of School Feeding Programs in Low- and Middle-Income Countries: Estimating the Multi-Sectoral Returns to Public Health, Human Capital, Social Protection, and the Local Economy. Frontiers Public Health, 8, 587046. Available at: <u>https://doi.org/10.3389/fpubh.2020.587046</u>

Wang, D., and Fawzi, W. (2020). Impacts of School Feeding on Educational and Health Outcomes of School-age Children and Adolescents in Low- and Middle-income Countries: Protocol for a Systematic Review and Meta-analysis. Systematic Reviews. Available at: <u>https://doi.org/10.1186/s13643-020-01317-6</u>

WFP. (2013). State of School Feeding Worldwide 2013. Rome (Italy), World Food Programme. Available at: <u>https://www.wfp.org/publications/state-school-feeding-worldwide-2013</u>

WFP. (2017a). Nourishing the Future: Nutrition-Sensitive School Feeding Programs in Latin America and the Caribbean. Available at: <u>https://es.wfp.org/publicaciones/nutrir-el-futuro-programas-de-alimentacion-escolar-sensibles-la-nutri-</u> <u>cion-en-america</u>

WFP. (2017b). Sistematización de experiencias. Manejo y administración de programas de alimentación complementaria escolar por la Mancomunidad de Municipalidades para la Alimentación Escolar en Chuquisaca (MAECH). Un modelo de gestión replicable.

WFP. (2017c). Smart school meals - Nutrition-sensitive national programmes in Latin America and the Caribbean. Retrieved 3 October 2022 from <u>https://www.wfp.org/publications/smart-school-meals-nutrition-sensitive-national-pro-grammeslatin-america-and-caribbean</u>

WFP. (2020a). State of School Feeding Worldwide 2020. Rome (Italy). World Food Programme. Available at: https://www.wfp.org/publications/state-schoolfeeding-worldwide-2020

WFP. (2020b). A Chance for every Schoolchild - WFP School Feeding Strategy 2020-2030. Available at: https://www.wfp.org/publications/chance-everyschoolchild-wfp-school-feeding-strategy-2020-2030

WFP. (2021a). Evaluación del modelo de descentralización del Programa Nacional de Alimentación Escolar (PNAE) en Honduras, 2016-2019.

WFP. (2021b). Impacto de la crisis COVID-19 en la compra y consumos de alimentos. Reportes Colombia, Ecuador y Honduras.

WFP. (2021c). "Respuestas de los programas de alimentación escolar al COVID-19 en América Latina y el Caribe." Available online: <u>docs.wfp.org/api/documents/WFP-0000134592/download/?_ga=2.77938972.962595274.1690395821-</u> 252070173.1690395821_

WFP. (2022a). "Caribbean Food Security and Livelihoods Survey Impacts of COVID-19 and the Cost of Living Crisis." Regional summary report.

WFP. (2022b). State of School Feeding Worldwide 2022. Rome, World Food Programme. ISBN 978-92-95050-16-7.

WFP Centre of Excellence against Hunger and FNDE. (2021). School Feeding in traditional communities: Policy Brief #4. The Indigenous PNAE in Amazonas. Available at: <u>https://centrodeexcelencia.org.br/wp-content/uploads/2021/10/Policy-</u> <u>Brief4-Indigena-EN.pdf</u>

WFP and Anthrologica. (2022). Research for Change in Colombia and Haiti: Why we need socio-behavioural evidence for transforming school-based programmes.

WFP and FAO. (2018). Strengthening School Feeding in Latin America and the Caribbean.

World Bank. (2018). The State of Social Safety Nets Washington, D.C.: World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/29115

World Bank. (2021). Let's act now to protect our children's human capital: The costs and response to the impact of the COVID-19 pandemic on the education sector in Latin America and the Caribbean. World Bank, Washington, D.C.

World Bank and the Special Administrative Unit for School Feeding Alimentos para Aprender (UAPA). (2022). PAE para pueblos indígenas: Resultados del análisis de la implementación del Programa de Alimentación Escolar para pueblos indígenas, entre 2018-2020. Bogota, D.C. Available at: https://documents1.worldbank.org/curated/ en/099720008222211935/pdf/P17465209bb8a508709add0b7b58141f844.pdf

World Bank, UNESCO, and UNICEF. (2021). The State of the Global Education Crisis: A Path to Recovery. Washington D.C., Paris, New York: The World Bank, UNESCO, and UNICEF.

Acronyms

ABC	Brazilian Cooperation Agency
CARICOM	The Caribbean Community
CELAC	Community of Latin American and Caribbean States
CIAT	International Center for Tropical Agriculture
COVID-19	Coronavirus Disease 2019
DIF	El Sistema Nacional para el Desarrollo Integral de las Familias en México
ECLAC	United Nations Economic Commission for Latin America and the Caribbean
FAO	Food and Agriculture Organization
FNDE	The National Fund for the Development of Education in Brazil
GABAs	Food-based dietary guidelines
GCNF	Global Child Nutrition Foundation
HGSF	Home-grown school feeding
IDB	Inter-American Development Bank
IFAD	International Fund for Agricultural Development
IFIs	International Financial Institutions
ILO	International Labour Organization
INSP	National Institute of Public Health of Mexico
IPC-IG	International Policy Centre for Inclusive Growth
JUNAEB	Junta Nacional de Auxilio Escolar y Becas en Chile
LAC	Latin America and the Caribbean
LaRAE	Latin American Network for School Meals
NGO	Non-governmental Organization
OECD	Organisation for Economic Cooperation and Development
PAA	Food Purchase Programme Brazil
PAE	School Feeding Program / Programa de Alimentación Escolar
PINE	Nicaragua's Comprehensive School Nutrition Programme
PNAE	Brazil's National School Feeding Programme
P4P	World Food Programme's Purchase for Progress initiative
RACCN	North Caribbean Coast Autonomous Region
RedRAES	Sustainable School Feeding Network
ReLAC	Latin American and Caribbean Network of Monitoring, Evaluation and Systematization
R4V	Interagency Coordination Platform for Refugees and Migrants
SBCC	Social and behaviour change communication
SISVANE	The School Food and Nutrition Surveillance System in the Dominican Republic
SFI	Sustainable Financing Initiative for School Health and Nutrition
TIP	The Indigenous Peoples' Partnership on Food Sovereignty
UAPA	Unidad Administrativa Especial de Alimentación Escolar - Alimentos para Aprender en Colombia
UNFSS	United Nations Food Systems Summit
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
WASH	Water, sanitation and hygiene activities
WFP	World Food Programme
WHO	World Health Organisation

Glossary

ADOLESCENCE

Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19. As a period of life characterized by important physical, psychological, and social changes - with specific health and developmental needs - adolescence carries new risks, but also provides unique opportunities. Investments in adolescents today will have broad implications not only for their own lives but also for family members and broader communities alike. The adolescents of today will be the parents, the teachers and the policymakers of tomorrow.

BENEFICIARIES

Those who receive the benefits of a particular social programme. For this publication, it refers to primary and secondary school-age children between 5-19 years who receive food in school feeding programmes.

COMMUNITY POT

A community pot brings people together to cook and eat from the same large pot. The community pot also represents an ancestral tradition based on the collective. The preparation of food is done for all and enables different sources of financing and contributions in kind by the community.

COSTS

The per-child cost of school feeding is estimated as the total expenditure associated with school feeding activities divided by the number of beneficiaries. The figure reflects costs related to commodity procurement, transportation, storage and handling, and personnel. Community contributions are not included (Gelli and Daryanani, 2013). Cost recovery refers to the programme costs being offset by contributions from the beneficiaries or communities.

COVERAGE

The proportion of school-attending children who are beneficiaries of school feeding programmes.

DEVELOPMENT PARTNERS

An umbrella term for stakeholders that support the development efforts of national, subnational or local authorities, depending on the particular context. Development partners can include: bilateral donors; UN agencies and institutions; international financial institutions; other multilateral agencies; multistakeholder partnership global pooled funds; international non-governmental organizations; international civil society organizations; and civil society at the local level.

DEWORMING

A treatment to control the intestinal worm infections such as helminths (roundworm, ringworm and hookworm) and schistosomiasis. The World Health Organization has recommended giving children albendazole or mebendazole to treat helminths and praziquantel to treat schistosomiasis.

DIETARY DIVERSITY

The consumption of a proper balance of different foods that provide all the macronutrients and micronutrients needed for healthy growth and productive life.

FOOD-BASED SAFETY NETS

Category of interventions that provide direct, regular and predictable food assistance, to the most vulnerable people to: (1) prevent them from falling below a minimum level of food security as a result of a shock; (2) to increase their resilience to shocks; and (3) in some cases, to promote their food security (Grosh et al., 2008). The retail value of a food transfer in the local market is referred to as an income transfer.

FOOD SYSTEMS

Interlocking networks of relationships that encompass the functions and activities involved in producing, processing, marketing, consuming and disposing of food from agriculture, forestry or fisheries.

FORTIFICATION

The practice of deliberately increasing the content of essential micronutrients (such as Vitamin A, iron, iodine or zinc) to foods (FAO and WHO, 2006).

HOME-GROWN SCHOOL FEEDING

A school feeding model that is designed to provide children in schools with safe, diverse and nutritious food, sourced locally from smallholders.

INVESTMENT

The total budget allocated to school feeding by the government or WFP, or an estimation of that budget. In this publication, these are estimates based on secondary data and not on information from national balance sheets.

NATIONAL SCHOOL FEEDING PROGRAMME

A programme managed by the government either alone or with the support of WFP or other development partners to provide food on a regular basis to schoolchildren.

NUTRITION SENSITIVE PROGRAMME

Interventions addressing the basic and underlying determinants of malnutrition; namely, food security, caregiving, and access to health services and a safe and hygienic environment. Nutrition-sensitive programmes also address the enabling environment, through technical assistance to governments, including advising on policies in complementary sectors.

SCHOOL FEEDING

The provision of food to children or their households through school-based programmes. Such programmes can provide meals, snacks or conditional household transfers in the form of cash, vouchers or in-kind, take-home rations.

SCHOOL MEALS COALITION

An emerging initiative of governments and a wide range of partners to drive actions that can urgently reestablish, improve and scale up food and education systems, support pandemic recovery and drive actions to achieve the Sustainable Development Goals (SDGs).

SOCIAL PROTECTION

A set of policies and programmes aimed at preventing or protecting all people against poverty, vulnerability and social exclusion throughout their life-course, with particular emphasis on vulnerable groups.

SCHOOL HEALTH AND NUTRITION

Health and nutrition programming designed for school-age children, as well as outreach activities that expand the effect of programmes within communities and to children not in schools. The services provided through School Health and Nutrition go beyond feeding, and may include additional interventions such as deworming, vaccination, vision screening, nutrition education, and water, sanitation and hygiene (WASH).

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Annexes

Annex I - Methodology and sources used for estimating children receiving school feeding, coverage and investment

A1.1 Sources

Like the State of School Feeding Worldwide 2020 (WFP, 2020d), this publication draws on a combination of primary and secondary sources for quantitative data about children receiving school feeding, coverage, and investment. Each source was selected based on the following criteria:

- 1. Relevance: sources that contain standard indicators on school feeding
- 2. Credibility: sources published by official and academic institutions
- 3. Availability: sources in open and public access
- 4. Timeliness: sources published recently.

Primary data for the 2022 edition were mainly drawn from:

- The U.S. Department of Agriculture (USDA) -sponsored Global Survey of School Meal Programs, published in 2021 (21 Π countries) and 2019 (Colombia) by the Global Child Nutrition Foundation (GCNF). The Global Survey of School Meal Programs © is the property of GCNF and is protected by copyright, all rights reserved. It may not be reproduced or distributed without prior written consent. Funding for the most recent survey in 2021 and 2019 is provided, in part, by USDA under agreement number FX18TA-10960G002.
- For six countries, parameters were estimated using the available information and other sources from the World Π Bank State of Social Safety Nets 2018 (Costa Rica) and WFP, Smart School Meals 2017 (Bolivia, Cuba, Dominican Republic, Nicaragua, and Paraguay).
- Estimates for three countries (Bermuda, Dominica, and Venezuela) were obtained from a comprehensive review of Π case studies, publications, and reports.

When data were not available from the sources above, data were drawn from secondary sources. When selecting secondary sources, the overarching principle was to use only sources published by official institutions. Therefore, three categories of publications were used as secondary sources: official reports published by governments; official reports published by international organisations; and peer-reviewed academic papers.

The full list of secondary sources used for this publication are:

- 1. The World Bank's The State of Social Safety Nets 2018 (World Bank, 2018) (Costa Rica)
- 2. WFP's Smart School Meals Nutrition-sensitive national programmes in Latin America and the Caribbean (WFP, 2017), published in 2017 (Bolivia, Cuba, Dominican Republic, Nicaragua, and Paraguay).

A specific effort was made to validate information from high-income countries through direct contact with government focal points.

This data was supplemented with publicly accessible, official sources including from the IDB, UNESCO, the World Bank, and WFP.

Several countries appeared in more than one of these secondary sources. In this case, only one data point was used for each country based on the following criteria:

- If more than one source cites data for the same country, the most recent data point was used, based on the refer-Π ence year.
- If more than one source of information is available for the same country and the same reference year, the most Π comprehensive source was used - for instance, one source may cover a particular programme while the other source covers all the existing programmes in the same country.

Figure A1.1

Breakdown of countries by data source



Table A1.1

Sources used for school feeding data

Source	Symbol	Number of countries used in this report	Country names		
GCNF Global Survey of School Meal Programs 2019	GCNF 2019	1	Colombia		
GCNF Global Survey of	GCNF 2021	21	Antigua and Barbuda	School year: 2020–2021	
School Meal Programs			Argentina	School year: 2020	
2021			Bahamas	School year: 2020–2021	
			Barbados	School year: 2020–2021	
			Brazil	School year: 2020	
			Chile	School year: 2020	
			Ecuador	School year: 2020–2021	
			El Salvador	School year: 2020	
			Guatemala	School year: 2020	
			Guyana	School year: 2020–2021	
			Haiti	School year: 2020–2021	
			Honduras	School year: 2020	
			Jamaica	School year: 2020–2021	
			Mexico	School year: 2020–2021	
			Panama	School year: 2020	
			Peru	School year: 2020	
			Saint Lucia	School year: 2020–2021	
			Saint Vincent and the Grenadines	School year: 2020–2021	
			Saint Kitts and Nevis	School year: 2020-2021	
			Trinidad and Tobago	School year: 2020–2021	
			Uruguay	School year: 2021	
World Bank, State of Social Safety Nets 2018	SSSN	1	Costa Rica		
WFP, Smart School Meals 2017	SSM	5	Bolivia, (Plurinational State of) Cuba, Dominican Republic, Nicaragua, Paraguay		
Estimations		3	Bermuda, Dominica, and Venezuela		

A1.2 Limitations

While the data set presented in this publication is only based on reliable sources, it has some limitations. The multiplicity of sources translates in differences of methodology: some sources report all children receiving school feeding in a particular country, but for other countries, only primary school children are reported.

Another limitation is the quantity of indicators provided by each source: the number of children is provided in all sources, but coverage data, funding data and other indicators were only available for a more limited set of countries. Table A2.2, "Possible configurations of school feeding programmes for the purpose of calculating net total beneficiaries," presented in this publication systematically specifies the sample size available for each indicator.

Further, the data available do not allow us to accurately confirm how many meals per day or per week children received, nor the exact type of meal (i.e., a snack or a proper meal).

The discrepancy in reference years is a third limitation of the data set presented in this publication. While some sources were published less than a year before this report was published, such as the GCNF Global Survey of School Meal Programs, other sources are older and/or present data pertaining to earlier school years.

As for State of School Feeding Worldwide 2020 (WFP, 2020d), to provide a comprehensive picture of school feeding programmes globally, this publication combines country data spanning almost a decade. This approach has been used in similar reports, such as the World Bank's *State of Social Safety Nets 2018* and provides a good level of confidence for most countries and for cross-country analytics and trends. The main advantage of this approach is its comprehensiveness as it maximizes the number of countries for which a data point is available, but the potential lack of accuracy of some older data points remains an important limitation.

Finally, in addition to data spanning almost a decade, the reference year for the numerator and denominator to compute coverage sometimes does not match (i.e., data could be available for the number of children fed in 2021, but the most recent data on the number of children enrolled in primary school for that country could date back to 2017).

A1.3 Children receiving school feeding

The number of children receiving school feeding presented in this publication represents the total number of children benefitting from school feeding in a given country.

While the majority of these children receiving school feeding are supported by a government-funded and government-led school feeding programme, some countries have opted for locally-managed school feeding programmes and/or collect contributions from parents to finance their school feeding programmes. In keeping with the approach in the *State of School Feeding Worldwide 2020* (WFP, 2020d), beneficiaries of school feeding should be understood as "children receiving meals, or another form of food, in schools" (not as "children benefitting from free and government-funded school meals"). When more than one school feeding programme exists in a given country, the number presented in this publication is the total number of individual beneficiaries, net of overlaps if any. This operation is generally made by the individual data providers listed in Table A2.1 of Annex II, and the net total corresponds to the number reported by each of these sources, but this was verified as part of the data consolidation process. As for the 2020 edition, even in this report three possible configurations were found, as described in Table A2.2 below.

In a limited number of countries, 2020 estimates needed to be updated in light of new data reported and published after the publication of *State of School Feeding Worldwide 2020*. The only countries where data on existing policy on national school feeding had to be updated Uruguay and Trinidad and Tobago, where *State of School Feeding Worldwide 2020* (WFP, 2020d) mistakenly reported there was an existing national school feeding policy.

Table A1.2

Possible configurations of school feeding programmes for the purpose of calculating net total beneficiaries

		Situation	Calculation of net total beneficiaries
1		The country has only one school feed- ing programme	The number of beneficiaries of this programme corresponds to the number of beneficiaries in this country
2	The country has two or more school feeding	The programmes overlap: some (or all) children benefit from both programmes	The number of beneficiaries does not add up. Depending on the situation, the size of the larger programme may correspond to the net total.
3 programmes		The programmes do not overlap: each programme benefits a distinct group of beneficiaries	The number of beneficiaries add up: the net total corresponds to the sum of beneficiaries of the different programmes

A1.4 Coverage

School feeding coverage in the country (or groups of countries) i (Ci) is defined as the number of children receiving school feeding in primary schools (Bi) divided by the number of pupils in primary schools (Pi):

$$Cx = \frac{B_i}{P_i}$$

Variables description

B: number of children receiving school feeding in primary schools in the country i, as reported in the best available source as defined in the present publication.

Pi: number of pupils in primary schools of country i, as reported by the UNESCO Institute for Statistics.

Coverage estimates ranges between 0 and 100 percent by definition, as there cannot be more children receiving school freeing than children at schools (pupils or enrolees).

The following formula was applied to calculate average coverage for a group of countries x, such as income groups or the BRICS group:

$$Ci = \frac{(\Sigma Bi, x)}{(\Sigma Pi, x)}$$

For each group of country x, the total number of school feeding beneficiaries $\Sigma P_{i,X}$ was divided by the total number of pupils $\Sigma B_{i,X}$

Box A1.1

Income classification of countries

This publication follows the classification of countries by income groups as defined in the State of School Feeding Worldwide 2020 (WFP, 2020d), which adopts the World Bank definition and it is updated every year. The version used in this publication is the "2020 fiscal year" classification of countries, which is based on the 2020 gross national income (GNI) per capita (Atlas method) <u>https://datatopics.worldbank.org/world-development-indicators/theworld-by-income-and-region.html</u>, and calculated as follows:

Income category	GNI per capita
Low-income countries	US\$1,034 or less
Lower middle-income countries	between US\$1,035 and US\$4,045
Upper middle-income countires	between US\$4,046 and US\$12,535
High-income countries	US\$12,536 or more

As a result, averages and percentages applicable to lower middle-income countries (resp. upper middle-income countries) are applicable to the entire lower middle-income category, as defined by the World Bank. In addition, averages and percentages applicable to the BRICS aggregate are applicable to the stand-alone group formed by these five countries (including Brazil). Double counting did not result from this approach – in subtotals and global totals, Brazil, was only counted once.

PLEASE NOTE: According to the latest World Bank data the following countries have changed income level in 2021, 1.*Haiti*: low to lower middle, 2. *Belize*: Upper middle to lower middle, and 3 *Panama*: High to Upper middle.

A1.5 Estimations

Using the same approach as reported in the State of School Feeding Worldwide 2022 (WFP, 2022), the number of children receiving school feeding and level of investment was estimated based on the following criteria and rules:

- The number of children receiving school feeding was only estimated for countries known to have a school feeding programme. This criterion was met whenever one of the previously mentioned sources reported school feeding beneficiaries in the past, and there have been no reports of termination of the school feeding programme.
- In these countries, beneficiaries were estimated using the average coverage in countries from the same income group, applied to the number of primary schoolchildren as reported by the UNESCO Institute for Statistics.

Coverage by income group was calculated based on all countries with reported data, which belong to one of the four income groups classified by the World Bank (see Box A2.1 above). The percentages used to calculate these estimations are shown in Table A2.5 below.

Table A1.3

Coverage rates used for estimating beneficiaries

Income category	Coverage rate used for estimations	Regional estimates (%)		
Low-income countries	18%	NA		
Lower middle-income countries	39%	100		
Upper middle-income countries	48%	89		
High-income countries	61%	100		

In order to estimate school feeding beneficiaries in country i (Bi(estimated)), the coverage by income group (Cx) was multiplied by the number of pupils in primary schools in country i (Pi):

B_i (estimated) = $C_X \times P_i$

Pi was obtained from the UNESCO Institute for Statistics. Of the 20 countries for which beneficiaries were estimated, 3 were lower middle-income, 14 were upper middle-income countries, and 3 were high income countries.

Calculations for the regional investment in school feeding are presented in Table A2.4. Investment is defined as the total budget allocated to school feeding, or an estimation of that budget. Information on country expenditure on school feeding is not available in all countries, but available data is presented in this present publication. Only countries with data on school feeding programme were included in the investment estimation.

Table A1.4

Four estimates of the total yearly investment in school meals

Source	Number of countries	Number of children receiving school meals	Investment value	Estimated regional investment (US\$)
Actual	21	64.1 million	Budget allocated	3.6 billion
only 21 64.1 million	Average cost per income group	7.6 billion		
Actual reported cost and estimations	31	80.3 million	Budget allocated for 100 countries which have data average cost per income group for remaining 76 countries	9.2 billion
	31	80.3 million	Average cost per income group	9.2 billion

The different methods used to estimate the regional investment in school feeding reported in the above table are the following:

(1) Estimated regional investment: US\$3.6 billion

Sample: 21 countries

The first approach, which resulted in a figure of US\$3.6 billion, is based on national budgets as reported in the GCNF Global Survey of School Meal Programs (21countries). According to this approach, the regional investment $M_{(1)}$ is the sum of all reported national budgets (Gi) across these 21countries for which data was available:

$$M_{(1)} = \sum_{i=1}^{80} G_i$$

(2) Estimated regional investment: US\$7.6 billion

Sample: 21 countries

The second approach, which resulted in a figure of US\$7.6 billion, is an alternative estimation for the same sample of countries as the first estimation. Instead of using reported national budget figures, total investment M(2) was estimated as the sum of the average cost AC from income group x multiplied by the number of beneficiaries in country i across the 21 countries:

$$M_{(2)} = \sum_{x=1}^{4} \sum_{i=1}^{80} (AC_x \times B_i)$$

Bi may have been reported in the survey or estimated using average coverage as described earlier. The income grouping used for average costs is the same as the one used in beneficiary and coverage calculations. Table A2.5 presents the average cost per income group as used for this calculation.

 Table A1.5

 Average cost per income group used for estimating regional investment

 Income category
 Average cost used for estimations¹

 Issues middle income category

Lower middle-income countries	US\$ 42.06
Upper middle-income countries	US\$ 112.04
High-income countries	US\$ 328.99

(3) Estimated regional investment: US\$9.2 billion

Sample: 31 countries

The third approach, which resulted in a figure of US\$ 9.2 billion, was calculated using the two previously discussed methods, applied to a broader sample to include not only countries with reported cost, data but also countries with no cost data, based on reported or estimated beneficiaries. To the US\$ 3.6 billion figure estimated using approach (1), it adds an estimation using approach (2) for an additional 10 countries which are known to have a national school feeding programme, and for which no reported budget data was available. The number of beneficiaries, as reported in this publication, was multiplied for each country by the average cost corresponding to the income group of that country. The resulting values were summed up across the set of 31 countries. The full calculation for approach 3 is described as follows:

$$M_{(3)} = \sum_{i=1}^{80} G_i + \sum_{x=1}^{4} \sum_{i=81}^{154} (AC_x \times B_i)$$

(4) Estimated regional investment: US\$9.2 billion Sample: 31 countries

The fourth approach, which resulted in a figure of US\$ 9.2 billion, was calculated using approach (2), applied to the full sample of countries where beneficiary data was available. As described above, the number of beneficiaries as reported in the present publication was multiplied by the average cost per income group of the country, and these values were summed up across the full set of 31 countries. This calculation can be summarized by the equation below:

$$M_{(4)} = \sum_{x=1}^{4} \sum_{i=1}^{154} (AC_x \times B_i)$$

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¹ The average cost used for estimations is the average cost per child observed in each income group.

		WFP State of the School Feeding Worldwide 2020			Norldwide 2020 WFP State of the School Feeding Worldwide 2022		
Country	Income level	Reference year	Number of children receiving school feeding	Estimated coverage	Number of children receiving school feeding	Source*	Estimated coverage
Antigua and Barbuda	н		8,560	-	6,951	GCNF21	
Argentina	UM	2015	1,687,785	36%	2,810,772	GCNF21	44%
Aruba	н					NA	
Bahamas	н				6,000	GCNF21	
Barbados	н		17,097	-	25,645	GCNF21	
Belize	UM		29,426	-		GCNF21	
Bermuda	н		3,507	-	3,507	est	
Bolivia (Plurinational State of)	LM	2013	2,383,408	100%	2,383,408	SSM	100%
Brazil	UM	2019	40,200,000	100%	40,200,000	GCNF21	100%
British Virgin Islands	н					NA	
Cayman Islands	н					NA	
Chile	н	2015	1,828,556	100%	2,029,882	GCNF21	100%
Colombia	UM	2018	5,387,504	63%	5,387,504	GCNF	65%
Costa Rica	UM	2014	691,294	100%	691,294	SSSN	100%
Cuba	UM	2015	827,070	100%	827,070	SSM	100%
Curaçao	н					NA	
Dominica	UM		4,245		4,245	est	
Dominican Republic	UM	2016	1,739,355	100%	1,739,355	SSM	100%
Ecuador	UM	2015	2,873,148	100%	2,941,952	GCNF21	84%
El Salvador	LM	2016	1,300,000	100%	703,506	GCNF21	59%
Grenada	UM	2012	7,051	53%	6,000	GCNF21	53%
Guatemala	UM	2018	2,459,053	84%	2,526,650	GCNF21	87%
Guyana	UM	2018	13,539	-	81,712	GCNF21	
Haiti	L	2016	876,000	-	857,350	GCNF21	
Honduras	LM	2018	1,300,000	80%	1,256,227	GCNF21	100%
Jamaica	UM	2012	311,000	100%	131,663	GCNF21	33%
Mexico	UM	2015	6,357,712	45%	6,518,168	GCNF21	47%
Nicaragua	LM	2015	1,200,000	-	1,200,000	SSM	ĺ
Panama	н	2018	463,172	95%	385,340	GCNF21	71%
Paraguay	UM	2014	1,085,942	100%	1,085,942	SSM	100%
Peru	UM	2015	2,398,480	67%	4,199,532	GCNF21	71%
Puerto Rico	н		192,425	-	192,425	est	
Saint Lucia	UM	2018	6,824	41%	7,700	GCNF21	45%
St. Vincent and the Grenadines	UM		7,650	-	10,231	GCNF21	
Sint Maarten (Dutch part)	н					NA	
St. Kitts and Nevis	н		4,610	-	3,406	GCNF21	
St. Martin (French part)	н					NA	
Suriname	UM					NA	
Trinidad and Tobago	Н	2018	141,484	-	25,524	GCNF21	
Turks and Caicos Islands	н					NA	
United States Virgin Islands	н					NA	
United States of America	н	2018	30,000,000	100%	28,000,000	GCNF21	65%
Uruguay	н	2018	273,732	66%	208,176	GCNF21	69%
Venezuela (Bolivarian Republic of)	UM		1,904,346	-	1,904,346	est	

Annex II - Country-specific indicators of school feeding

*GCNF Global Survey of School Meal Programs reports specify the school year that was reported. See Annex I for country information.

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