



SCALING UP

THE BRAZILIAN SCHOOL FEEDING MODEL

Using South-South Cooperation to share Brazil's experience of school feeding in Latin America and the Caribbean



Food and Agriculture
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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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FOREWORD

As one of the first United Nations agencies to promote South-South Cooperation (SSC), the Food and Agriculture Organization (FAO) has been facilitating the sharing and exchange of key development solutions – knowledge, technical know-how, expertise and technologies – among countries of the Global South for nearly three decades. Since 1985, more than 2000 experts from southern countries have been fielded in more than 80 countries in Africa, Asia and the Pacific, Latin America and the Caribbean, and the Near East.

The Strengthening of School Feeding Programmes in the Framework of the Hunger-Free Latin America and Caribbean 2025 Initiative – a trilateral project involving Brazil, FAO and 13 other countries in the region – provides an excellent example of South-South Cooperation, of tried and tested solutions in one country being adopted in others with similar economic conditions.

Brazil has made tremendous progress in reducing malnutrition. In 1990, 14.8 percent of the population suffered from hunger; the figure is now just 1.7 percent. This remarkable transformation owes much to the country's school feeding programme. By 2014, the programme was supplying approximately 43 million pupils with one or more servings of food per day, in almost 250 000 schools across the country. By law, at least 30 percent of the food must be sourced from family farms, thus providing significant benefits to over 120 000 rural families.

The activities implemented by the project include: training courses, the provision of technical advice, technical visits to Brazil and other countries, national studies and the implementation of “Sustainable Schools” projects. These activities are helping governments to gain a practical experience of developing school feeding programmes linked to family farming.

This booklet focuses on the school feeding experiences in Brazil and the implementation of Sustainable Schools activities in Nicaragua and El Salvador. During a relatively short period of time, this approach has brought huge benefits, leading to better nutrition among schoolchildren, the integration of food and nutritional education, greater community involvement and significant improvements in the income and welfare of family farmers.

Festus K. Akinnifesi

Chief, FAO South-South Cooperation Team





Daisy Morena Garcia belongs to a cooperative in El Salvador that has dramatically increased members' income by supplying fresh fruit and vegetables.

INTRODUCTION

In 2013, farmers belonging to Las Bromas Cooperative in El Salvador won their first contract to supply fruit and vegetables to local schools. “In the past we struggled to make a living,” recalls Daisy Morena Garcia, a mother of three, “but since we began supplying the schools, my income has increased by over 60 percent. I’m even earning enough to pay for my eldest daughter to study law at university.”

Daisy left school when she was 13, and her daughter will be the first member of the family to benefit from higher education. With the extra money she now earns, she has also been able to buy better clothes and household goods. Talk to other members of the cooperative and they will tell you a similar story.

Daisy and her friends are among the beneficiaries of a school feeding project managed by the local municipality and the government of El Salvador, with the support of FAO-Brazil Cooperation. The aim of the project is to strengthen the school feeding programmes in the participating countries by providing school children with nutritious meals made from food grown on local family farms. Pupils also learn about crop production, and other matters related to food and nutrition, through their school gardens. The model for this and many similar projects in Latin America and the Caribbean comes from Brazil.

Established over 50 years ago to provide food for poor children, Brazil’s National School Feeding Programme has been transformed in recent years. During the past two decades, it has helped to reduce

malnutrition, improved access to healthy food and led to a change in eating habits. Access to school meals has become a universal right under Brazilian law, and 43 million pupils in 250 000 schools now get at least 30 percent of their daily nutritional needs when they attend school. Besides improving the health of millions of young people and reducing absenteeism, the programme provides a guaranteed market for 120 000 family farmers.

Such has been the success of Brazil's school feeding programme that its strategies are being replicated and adapted elsewhere in Latin America and, more recently, the Caribbean. Although most countries already had some form of school feeding programme – consisting, in some cases, of little more than a daily biscuit – considerable progress has been made in recent years, thanks, in part, to the support of the Brazilian government and FAO.

The Strengthening of School Feeding Programmes in the Framework of the

Hunger-Free Latin America and Caribbean 2025 Initiative – a trilateral project involving Brazil, FAO and a growing number of countries in the region – has three main aims: first, it seeks to help countries strengthen their school feeding programmes and policies; second, the project is building the capacity, skills and knowledge of people involved in school feeding programmes at every level, from central government to local councils and schools; third, the project is generating knowledge and information which is being widely shared.

Technical visit participants with staff from Joinville Council in a school garden.



All of this should be seen within the context of FAO's South-South Cooperation programme. Brazil is sharing its experience and knowledge of school feeding programmes with 13 countries in Latin America and the Caribbean. More recently, the school feeding experiences are being shared with three countries in Africa, Ethiopia, Malawi and São Tomé and Príncipe. This is carried out in a variety of ways, including technical visits, study tours, seminars, policy dialogues, training events and courses overseen by project staff.

The first chapter of this booklet focuses on the school feeding story in Brazil and is based on a four-day technical visit to the state of Santa Catarina, organized as an activity of the Strengthening of School Feeding Programmes Project. Participating countries included Costa Rica, Ecuador, El Salvador, Guatemala, Paraguay, Peru, Venezuela, the Dominican Republic, Antigua and Barbuda, Barbados, Jamaica and St Lucia.



Lunchtime at Aguas Amarillas School, El Tuma La Dalia, Nicaragua.

Those attending included staff from national and local departments of education, health and agriculture.

The following two chapters describe the achievements of sustainable school feeding activities in Nicaragua and El Salvador, both launched with the support of the Strengthening of School Feeding Programmes Project. Although these draw heavily on the experience in Brazil, the countries themselves are firmly in charge, shaping their school feeding programmes to meet local needs, policy conditions and culture.



Access to school meals has become a universal right under Brazilian law, and 43 million pupils in 250 000 schools now get at least 30 percent of their daily nutritional needs when they attend school.

1. THE BRAZILIAN EXPERIENCE

Brazil's school feeding programme was established in 1950. "It was very centralized, and it only served the neediest children in the poorest areas," explains Isabel Almeida, a nutritionist from the National Fund for Education Development (known by its Portuguese acronym, FNDE). "Over the years, the programme has evolved, and it now aims not only to improve nutrition, but contribute to education and social development."

In 1988, a new constitution recognized the universal right of all children in the public school system to receive some form of school meal. The emphasis, in those days, was on providing calories rather than a balanced diet. This changed following the introduction of the *Fome Zero* – or Zero Hunger – strategy. Launched by President Luiz

Inácio Lula da Silva in 2003, its aim was to eradicate hunger and poverty. One of the key elements was the School Feeding Law, enacted in 2009. This created a legal framework for the school feeding programme, which has institutionalized the National Schools Nutritional Policy and established guidelines guaranteeing access to school feeding programmes for all pupils and students in nursery, kindergarten, primary, secondary, youth and adult education, with special consideration for 'quilombolas', those of African descent, and indigenous communities.

The programme is coordinated by FNDE, which allocates financial resources for school feeding to Brazil's 27 states and 5 570 municipalities. FNDE also sets nutritional targets and is responsible for monitoring and evaluation. However,

the daily running of the school feeding programme is in the hands of state and municipal education departments and the schools themselves.

“The school feeding programme is all about collaboration,” explained Roque Antonio Mattei, Secretary of Education in Joinville, when he addressed the visitors from Latin America and the Caribbean on the first morning of the technical visit. At the national level, the programme relies on close collaboration between the ministries responsible for education, agriculture, social development and finance. At the local level, its success depends on collaboration between local



government departments, schools, food producers and local communities. “Everything you’re going to see in the next few days has been financed with state resources,” explained Roque, “but community involvement has been absolutely key to the success of the school feeding programme here.”

In Joinville, the third largest city in southern Brazil, some 65 000 pupils attend 150 schools managed by the council. Brusque, a two-hour drive south of Joinville, has a smaller population, but managing the school feeding programme is still a major operation. Approximately 11 500 pupils attend schools run by the council, and during the course of the year they receive over 3.8 million meals. The costs of the school feeding programme, here as elsewhere, are shared between the council and central government.

Roque Antonio Mattei, Secretary of Education in Joinville, discussing the school feeding programme with Gillian Smith from FAO Jamaica.

PROVIDING A BALANCED DIET

“Providing good food is incredibly important for the development of young children,” says Luciano Castillo, the Director of Miraci Dereti Primary School in Joinville. “If we give children a balanced diet they will grow up to be healthy and they will learn much more readily than children who are hungry.” The school, which opened in 2010, consists of a collection of brightly painted, airy buildings. A spotless kitchen serves daily meals to 300 children. Indeed, the school feeding programme is about much more than food: providing clean, modern facilities – especially kitchens and dining rooms – is very much part of the story.

FNDE provides guidance, based on the school feeding law, to local councils about students’ nutritional needs, local purchases from family farming, and food and nutritional education. The councils conduct regular assessments in every school to ensure that children are getting



Local councils help schools to plan their menus so that they provide pupils with a balanced diet.

the right balance of carbohydrates, proteins and micronutrients and they monitor all activities related to school feeding. Pupils attending for half a day receive at least 30 percent of their daily nutritional requirements, divided between two meals. Those attending full-time get 70 percent of their daily nutritional requirements, provided by three or four meals.

The councils are also responsible for analyzing the nutritional status of school pupils. In Brusque, 73 percent were recently classified as being of adequate weight and height. However, 2 percent were undernourished, 15 percent were at risk of being overweight, 5 percent were

Izabela Albani, a nutritionist with Brusque Council, is helping schools to tackle obesity and poor nutrition.

overweight and 5 percent were obese. “One of our aims is to reduce levels of obesity by ensuring that the children have a healthy, well-balanced diet,” says Izabela Albani, a nutritionist at the Department of Education in Brusque. The councils also devise diets for pupils with special needs, such as those suffering from diabetes or food allergies.

During her 10 years with Brusque Council, Izabela has witnessed dramatic improvements in the quality of school meals. “Since 2009, we have encouraged schools to increase the amount of fresh fruit and vegetables they use, and reduce the use of canned and processed foods and the amount of sugar and salt served in food,” she says.

Between 2008 and 2014, the number of dairy products and vegetables served by schools in Brusque rose from nine to 22 per month. Instead of eating canned fish, the children are now served fresh tilapia from local fish farms. Recent additions to the menu include peppers, broccoli,



beetroot, papaya and garlic. The council is also encouraging schools to use more whole foods, such as brown rice, and to buy organic food whenever possible.

Community participation is an important element of the school feeding programme, and many schools arrange meetings with parents at the beginning of the academic year to explain the aims of the programme. They ask parents not to give their children junk food – bringing sweets and fizzy drinks to school is forbidden – and encourage them to provide healthy meals for their children at home.

Nutrition has become part of the teaching curriculum in many schools. “We do a lot of work in relation to healthy food,” explains Patricia Soares Venzon, Director of Homenagem à Família de Laura Diegoli Batistotti School, which caters for children between three and 12 years old. “We give the children lots of fruits, vegetables and salad, and we teach them good eating habits.”

According to Patricia, when children first come to her school many are consuming too much sugar. The teachers have encouraged the children to reduce their sugar consumption, and many have even given up eating sweets at home. Last Easter some of her pupils even told their parents that they did not want chocolate eggs.

On our first day in Brusque, Izabela and her colleagues took us to Padre Lenselino Wienes School, which has 350 children who come in two batches, half attending in the morning and half in the afternoon. Each child gets two meals a day. When we arrived, four girls were waiting to be

picked up by the school bus. We asked how they liked the school meals. “The food is much better here than it is at home,” said one. “I think it’s about the same as at home, and it’s good in both places,” said another.

So we could see for ourselves, the school offered us the same lunch as the children had eaten an hour before. Barbecued chicken was accompanied by brown rice, cassava, black beans, green

Nutrition is now part of the teaching curriculum in many Brazilian schools, so the children learn about the importance of eating healthy food.



beans, lettuce, tomatoes and raw carrot. For dessert, we could choose between bananas with jelly and home-made biscuits. The technical visit participants agreed that this meal was far superior, and certainly healthier, than most of the food we had eaten at local restaurants.

QUALITY MATTERS

School Feeding Councils (known by their Portuguese acronym, CAE) are responsible for monitoring school feeding programmes at the state and municipal levels. Besides ensuring wise use of financial resources, the CAEs encourage the efficient delivery of the programme. “We are very reliant on CAE when it comes to oversight and supervision,” says Gleusa Luci Fischer, Secretary of Education in Brusque. “We have a very good working relationship with CAE and they let us know when there are problems with the programme.”

Each of the 5 570 municipalities in Brazil has a CAE with a minimum of seven

members, including teachers, students and individuals from civil society. In the case of Brusque, the elected president, Cesar Silva, is a representative of the Teachers’ Union. “We get a lot of support from the Department of Education,” he says, “and they swiftly respond to our advice whenever we give it.”

The CAE in Brusque conducts unannounced spot-checks two days a month, with each day involving four different school visits. Like other CAEs, they have established a checklist of things to monitor when visiting schools, such as the state of hygiene in the kitchens, the state of the cooks’ uniforms, the way food is stored and the condition of perishable and non-perishable products.

According to Noemi da Silva, a cook at Raio de Sol Secondary School in Joinville, the guidelines issued by FNDE and supervision from CAE have helped to improve standards. “In the past, we didn’t worry too much about hygiene, but

we do now,” she says. “We’ve received training in hygiene, as well as training in preparing the menus. I think the food is healthier than it used to be.” Last year, the school received an award based on the quality of the food and factors such as storage and hygiene. As a result, other schools have sent staff to see what Noemi and her colleagues are doing.

SCHOOL GARDENS: LEARNING ABOUT FOOD AND NUTRITION

Last year, 14-year-old Emanuela Sebastião and other members of her class at Joinville’s Governador Pedro Ivo Campos School, which has almost 1 000 pupils between the age of six and 14, undertook a project on healthy eating. Emanuela is also involved in managing the school garden, which has become an important centre of learning for all age groups.

“I love working in the garden,” she says. “I have learned a lot about how to grow vegetables and about the importance of a healthy diet.” During the course of



14-year-old Emanuela Sebastião in the Governador Pedro Ivo Campos School garden.

the year, she took many photographs of the garden and wrote a blog, which she posted on the web. Not only are she and her friends now more aware about the importance of a healthy diet, there has been a knock-on effect beyond the school gates. “Because of my involvement with the healthy food project and the school garden, my mother is now eating more vegetables and fruit,” says Emanuela.

According to Lesani Zerwes Becker of Joinville Council, school gardens are

playing an increasingly important role in public schools. “Many schools have had gardens for a long time, but it’s only been in the last two years that they’ve become an important learning tool,” she says as she shows us around the beautifully laid out vegetable garden at Alfredo Germano Henrique Hardt Primary School on the outskirts of Joinville.

In the past, school gardens were designed to produce modest quantities of food for the kitchen; most were hidden away and managed by part-time gardeners or teachers with a special commitment and interest. Now they play a prominent role in school life, acting as outdoor classrooms for teaching different subjects, where the children learn how to sow, tend and harvest a wide variety of vegetables and herbs.

The gardens’ success depends, to a considerable extent, on the enthusiasm of the school directors. “We propose gardening projects to schools and provide teaching materials, but the gardens only

thrive if the directors are supportive,” says Lesani. “The director here is particularly keen on developing the garden and using it for educational purposes.”

Carolina Michele Brunken, who was appointed director of Alfredo Germano Henrique Hardt School two years ago, has made sure that teachers and children make full use of the garden. She has also designed a project to reduce food waste. “When I first came here, I saw that a lot of food was left after meals, and I wanted to reduce the waste,” she says. She set up a “leftovers” project, which involves weighing all the waste after every meal. The children are responsible for drawing up charts each month, showing which particular foods are left on the plates.

“The project has changed the children’s behaviour,” says Carolina. “They now see reducing waste as a challenge. They’re very committed. Now, most of them ask for the amount of food they think they will eat.” This is all part and parcel of encouraging children to adopt healthy eating habits.

SUPPORTING FAMILY FARMS

Before Joinville Council invited local farmers to supply food to its schools, Clyre Wiezbicki and his neighbours struggled to make ends meet. “We used to sell what we grew in the town square, but there was no guaranteed market and we didn’t earn much,” he recalls.

Today, Clyre is supplying fresh produce to schools in and around Joinville. “We know in advance what products we need to supply to the school feeding programme,” he reflects, “and my family is now much better off than we were before.” He and his wife Eva have set up a bakery and rebuilt their house; they have even been able to buy a vehicle to transport food to the schools.

Brazil’s 2009 School Feeding Law stipulates that at least 30 percent of the food provided to the school feeding programme should come directly from local family farms. Many councils, including Joinville, are now doing even better than that. In 2010, 31 percent of

the food supplied to schools managed by the council in Joinville was purchased from family farms. The figure had risen to 37 percent by 2013 and is expected to exceed 50 percent – worth approximately BRL 3 million (USD 1.25 million) – by 2014.

“The school feeding programme has helped to transform the lives of many farmers around here,” says Acácio Schrueder, president of Coopaville Cooperative, whose 73 members supply food to schools in Joinville. At the time of the technical visit in May 2014, the offices of the cooperative were being expanded and renovated, so instead of meeting there we were taken to the Wiezbicki’s farm.

“There was a lot of paperwork at first, but the council helped us with that, and they did the same for many of our neighbours,” recalls Clyre. Every two weeks, he supplies fresh farmed fish, vegetables and bread to schools in Joinville. He is always paid within 15 days of delivery, either directly or through the cooperative. Thanks to contracts with

A photograph showing a man in a striped shirt and grey trousers working in a vegetable field. He is using a long-handled tool, possibly a hoe or rake, to tend to the plants. The field is filled with rows of various vegetables, and there are palm trees and other tropical plants in the background. The scene is set in a lush, green environment.

Council land at Horto Florestal in Brusque is used to provide vegetables to schools and Council offices.

the school feeding programme, he and many other members of the cooperative have been able to get credit from the bank to expand their activities.

“Everything you see here has been built with the profits we’ve made from selling to the schools,” explains Eva. This includes a small centre for rural tourism, an activity which is providing significant

income for many farmers around Joinville. In 2014, over 4 000 school children visited the farms involved in the Viva Ciranda Project, with the council paying BRL 7 (USD 3.20) per child. They now have a much better understanding about all aspects of food production, from growing vegetables to raising livestock, managing fish farms to using waste products as fertilizer.

While Joinville has succeeded in sourcing at least 30 percent of the food used in the school feeding programme from family farms, other councils have found this a challenge. “It is particularly difficult in some of the more remote, less-developed regions,” explains Isabel Almeida of FNDE. For example, in Amazonia there are relatively few family farmers and gaining access to their products is often difficult. “In remote areas, the cost of transporting food can be ten times the cost of the actual food,” says Isabel.

It is not just in remote regions that difficulties occur. Brusque is a prosperous little town, with a thriving metals and textiles industry, but its agricultural sector is small. At present, the council is obliged to source food from family farms beyond the municipal boundaries. However, the council is also supporting ventures to increase vegetable production within Brusque. For example, Horto Florestal, which has traditionally provided flowers

for public parks and gardens, is now producing vegetables to supply the school feeding programme and council offices. By doing this, Horto Florestal is showing local farmers that there is a market for high-quality vegetables.

SPREADING THE MESSAGE

The school feeding programmes in Joinville and Brusque are recognised as being among the best in Brazil. That was one of the reasons why the May 2014 technical visit took place there. However, Najla Veloso, FAO’s Regional Coordinator of the Strengthening of School Feeding Programmes Project, told participants not to imagine that the whole country was like this. The state of Santa Catarina is relatively prosperous, with good roads and infrastructure. Even though they have made progress in recent years, some municipalities in other parts of Brazil still suffer from poverty. Every municipality receives the same per capita allocation for school

feeding, but it is up to the local council how they manage the funds.

The success of the school feeding programmes in Joinville and Brusque, and indeed in many other parts of the country, is the result of decades of experimentation and learning, of trial and error. “Don’t be discouraged by what you see here, and think that you’ll never achieve the same sort of success in your own countries,” said Najla to the participants. “You can, but it will take time and work. Over the next few years, we are going to be with you, we are going to support you. We are all in this, learning together.”

The Strengthening of School Feeding Programmes Project is enabling other countries in Latin America and the Caribbean to benefit from the experience in Brazil and to share experiences among themselves. In seven countries, including Nicaragua and El Salvador, the initiative has helped governments to trial the institutional arrangements and activities

which are involved in creating *Escuelas Sostenibles*, or Sustainable Schools.

These include:

- close cooperation between ministries and departments responsible for health, education, agriculture, social development and finance;
- strong social participation, with teachers, parents and pupils working together to achieve a common goal;
- comprehensive food and nutritional education, involving the use of school gardens as an educational tool;
- keeping a close eye on the nutritional status of children and their development;
- improving infrastructure, such as kitchens and dining areas; and
- purchasing food directly from local family farmers.



The experience in Brazil is helping to shape school feeding policy in many other countries, including in El Salvador.

2. ALL CHANGE IN NICARAGUA?

Nicaragua has made good progress reducing the level of malnutrition. In 1990–92, 54.4 percent of the population was undernourished. By 2009–11, the figure had fallen to 20.3 percent, and today less than 17 percent of the country's 6 million people suffer from hunger. "In Nicaragua there is a strong political will to reduce malnutrition," says FAO representative, Fernando Soto Baquero, "and there's no doubt that the school feeding programme has played an important role in tackling the problem."

In 1994, 125 000 children living in the poorest parts of the country were given milk and a biscuit each day at school. By 1998, the figure had risen to 225 000. Between 2004 and 2006, the Ministry of Education introduced a more sophisticated programme. This involved providing some 500 000 children with meals made with a

range of foodstuffs, including rice, beans, corn and oil. In 2007, the government introduced a law making school feeding a universal right for all kindergarten and primary school children.

Most of the food bought by the government for the school feeding programme is purchased from large-scale enterprises. "These enterprises often buy staples from family farmers, or cooperatives representing farmers, but family farmers often receive relatively low prices," explains FAO-Brazil Cooperation consultant Jorge Ulises González, who provides assistance to seven Latin America countries under the Strengthening of School Feeding Programmes Project. The existing system is highly centralized, with central government controlling the purchase and distribution of food to schools.

This is beginning to change. In 2013, a Sustainable Schools activity was launched in the municipality of El Tuma La Dalia, high up in the Cordillera of Matagalpa. The two-year project is managed by Nicaraguan institutions, with technical support from the Government of Brazil and FAO. Besides improving the nutritional standard of school meals and education about food and nutrition, the project has established a system of procurement from local family farms. “Our dream is to show that it is possible to feed all the children in the municipality with food produced by our own farmers,” says Guillermo Figueroa, Head of Finance at El Tuma La Dalia Municipal Council.

The Sustainable Schools activity has helped many participating schools to set up new kitchens and dining areas, like this one at San Francisco de Peñas Blancas Primary School.

PROVIDING A HEALTHY DIET

Approximately 22 percent of children between the age of six and nine in Nicaragua are chronically malnourished, but the figure is much higher – around 47 percent – in El Tuma La Dalia. When you reach the village of San Francisco, after a long winding climb up a rough road, you see the unmistakable signs of poverty: dilapidated houses, outdoor privies, broken down fences. However, venture into San Francisco de Peñas Blancas Primary School and you are immediately struck by the sense of optimism.



During the past year and a half, the Sustainable Schools activity has brought many benefits. “Before the project, the school meals were simple and monotonous – rice, beans, tortilla and a cereal drink – and the children received the same thing every day,” explains Darling Arbel Guillen, who has three children at the school. “Now, the children are getting eggs twice a week, as well as vegetables and fruit supplied by local farmers. I think they’re much healthier and more cheerful.”

In the past, the mothers would cook school food in their homes and deliver it in large pots. There was no control over hygiene or the way the food was cooked. Now, Darling and 39 other mothers take turns cooking in a new kitchen, built in 2013, and pupils eat at wooden tables in a small dining area. There are also new basins with running water, so the children can wash their hands before eating.

Most of the schools have received grants from FAO-Brazil Cooperation, through the Sustainable Schools activity, to build

infrastructure. “The new kitchen and dining area have made an enormous difference to us,” says Lucretia Mairena Santos, the principal at Aguas Amarillas School, which is perched high up in the hills above La Dalia. “In the past, the children would eat in the classrooms, which was where we had to store food, so we frequently had problems with rats and cockroaches.”

Now sacks of non-perishable food and fresh produce are stacked in a purpose-built storeroom, and every day three mothers come to cook in a clean and airy kitchen. Not only are the children eating more nutritious food, standards of hygiene have improved, all of which is appreciated by the children. “It’s much better eating outside at the dining tables, rather than in the classrooms,” says 10-year-old Dixon Alberto Herrera. He adds that he and his friends are excited by the menu nowadays, and they have been inspired by the nutritional education they receive. “I don’t eat so much junk food now,” says Dixon, “and I’ve told



“I don’t eat so much junk food now,” says Dixon Alberto Herrera, “and I’ve told my mother I need to eat more fruit and vegetables at home.”

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Science teacher Nelson Enrique Aguirre believes the nutritional education introduced under the Sustainable Schools activity is encouraging children to think about their eating habits, and about where their food comes from. He and his

colleagues have also provided information to mothers about the importance of a balanced diet. “We’ve been very lucky to have this project, as it has benefited everyone – teachers, children, parents and local farmers,” he says.

The soil in the school grounds at Aguas Amarillas is low in organic matter, so

Nelson has had difficulty establishing productive gardens. The teachers at San Francisco de Peñas Blancas Primary School have had more success. Neribeth Blandón Gutiérrez benefited from advice provided by FAO consultant, Edilene Costa Santos, who came from Brazil to share her experience of establishing school gardens as an educational tool. “We had a school garden before, but it’s much improved now,” says Neribeth. “The training offered by the project means that we’re making much better educational use of the gardens, and all the children are now involved.”

Lilian Torres Rodríguez, FAO focal point for the school feeding programme in Nicaragua, believes the project has strengthened community involvement in schools. With better facilities, mothers are more willing to cook meals; they are also more inclined to contribute fresh food. “Many parents are now supplying additional fresh vegetables to the schools instead of keeping them for themselves, and they’re doing it free of charge,” says Lilian.



Children regularly perform plays about the importance of good nutrition. “You’re sick,” says the doctor in the white coat, “because you’ve been eating too much junk food.”

When the project began, local staff from the Ministry of Health weighed and measured children in the pilot schools; they also took blood samples and carried out parasite tests. According to Juan Carlos Maluterez, director of the local Department of Health, it is too early to make any definitive claims about the impact of the pilot project on children’s health. “We don’t have sufficient data at the moment,” he says, “but I think – in fact, I’m sure – that their health has improved. The teachers are reporting that there is less anaemia and less pneumonia, and children are suffering from fewer stomach problems.”

FINDING THE FARMERS

Day-to-day management of the Sustainable Schools activities is in the hands of the local school feeding committee, which meets regularly at City Hall in El Tuma. The committee consists of representatives from the departments of education, health, finance and family farming, as well as local communities, schools and FAO.

One of the key players has been the Ministry of Family, Community, Cooperative and Associate Economy (MEFCCA), which was established two years ago to further the interests of family farmers, who produce 90 percent of the country's domestic food supply. MEFCCA's local staff carried out a survey when the Sustainable Schools activity was launched to establish which farmers and cooperatives were capable of supplying beans, corn, vegetables, eggs and so forth to the schools. Before the tendering process began, cooperatives and farmers received training on how to register with the council, how to fill in forms and how to submit tenders.

The local school feeding committee then sent letters to all those identified as possible suppliers by MEFCCA, inviting them to tender for specific quantities of a range of products, to be delivered on specific dates to specific schools. By September 2014, there had been five rounds of purchases. During the first nine months of 2014 alone, 11 cooperatives, representing over 1 200 farmers, and two individual farmers were paid USD 78 000 to supply the 15 project schools with all the ingredients they needed to make school meals, with the exception of cooking oil, which the council imports from elsewhere.

FROM FARM TO TABLE

Bernardino Martinez owns about 10 hectares of fertile land near San Francisco, where his four children go to school. Approximately half the organic corn and beans he grows is sold through his local cooperative; the rest goes to the school feeding project. "My farm is doing much better now than it was

a few years ago,” he says as he leads us up a steep hillside where two of his workers are sowing beans by hand. He attributes his change in fortunes partly to the training he received from an FAO programme, which helped him to increase his yields and improve his farming practices. He also credits better marketing and the school feeding project.

We ask whether the schools are paying him higher prices. “No,” he says, after some reflection. “I could probably get a bit more for my corn if I sold it directly to seed merchants, but I’m happy to supply the school feeding project. It gives me great satisfaction to know that local children are now being served healthy meals, and that I’m helping to provide them.”

This is a familiar refrain, according to Jacsemkym Mendonza Montoya, a MEFCCA agronomist in El Tuma. “I’ve talked to dozens of farmers over the past year about why they like the project, and nearly all of them talk about their sense of satisfaction,” he says. “Many of them



Bernardino Martinez is now supplying corn and beans to the school feeding programme in El Tuma La Dalia municipality.

are making more money as well, but they all want to help the community.”

Donaldo Hernandez Rodriguez, a farmer from the neighbouring municipality of Rancho Grande, is one of many farmers whose incomes have risen. “I’m getting a better price for my beans and corn,” he says, “but there are other benefits, too. I’ve had to improve the quality of my crops, and clean the beans and corn before I deliver for the school feeding project.” Even if he was no longer supplying the schools, he says he could now command a higher price for his crops when selling to other buyers as he is providing better quality products.

Before the project arrived, farmers belonging to the Servicios Multiplos Flor de Dalia Cooperative would send their rice by road to Matagalpa, about an hour's drive away, to be de-husked at the mills there. "That took time and cost the farmers money," says Julio Cesar Hernandez, who is responsible for rice sales at the cooperative. "When the school feeding project began, many of our farmers realized there was a market here for their rice, and they put pressure on the cooperative to acquire a rice mill." Now, they are getting a better price for their rice, and they have a guaranteed market.

When you ask children in the Sustainable Schools what they like about the new menu, most will mention eggs as well as fresh vegetables and fruit. In the past, they never had eggs at school; now they have two a week, either boiled or scrambled. The main supplier in El Tuma La Dalia is Vera Patricia Ibarra.

When Vera lost her job in a bank in Matagalpa some 15 years ago she

decided to return to El Tuma La Dalia, restore the abandoned family house and set up a small business. She started with 200 laying hens. Before long she had built up the flock to 3 500 birds. When she heard about the Sustainable Schools activity, she immediately sensed an opportunity to expand her business. She now has 7 000 layers and a contract to supply just under 8 000 eggs to schools every 15 days.

Vera has hired three full-time employees to help manage her expanded business and bought a small truck to transport the eggs. In the past, she used to go to markets by taxi or bus. "I'm now better off, and I have a guaranteed market, but that's not the only reason why I love the project," she says. "One of the beautiful things about it is the way it is improving the health of the children. That's particularly important, as this is a coffee-growing zone with lots of poverty, and many children go to school without getting breakfast at home."



In the past, the children never had eggs at school; now they have two a week. The main supplier in El Tuma La Dalia is Vera Patricia Ibarra.

FOOD FOR THOUGHT

FAO representative Fernando Soto Baquero is particularly proud of the fact that everything that has happened on the ground has been achieved by Nicaraguan institutions. “It’s amazing to see the level of cooperation between so many different sectors happening at the local level,” he says.

He stresses that the project is not an end in itself; rather, it has sought to provide a new approach to school feeding, using the experience in Brazil as a reference. One of the main objectives of the project has been to influence public policy. “We firmly believe that a decentralized purchasing policy, similar to that piloted in El Tuma La

Dalia, is one of the best ways of providing support to family farmers,” he says.

Every year, the central government spends some USD 25 million supplying food to 10 000 schools in Nicaragua.

The allocation for each pupil works out at USD 0.22 per day. “With the Sustainable Schools activity, we’ve been providing meals for USD 0.21 per child per day, so that’s one cent less than the national school feeding programme,” says El Tuma La Dalia Director of Finance, Guillermo Figueroa. “But we are not just saving one cent per child per day, we’re providing children with better quality products – often organic – and a greater variety, including eggs at least twice a week. The project has also increased the incomes of family farmers and provided a boost to the local economy. I believe we have made the case for local food procurement.”

Midway through 2014, the local committee and the project coordinator decided to extend the Sustainable Schools activity to three other

municipalities in different regions. Over 10 000 students are now receiving one highly nutritious meal a day, cooked with ingredients supplied by many hundreds of family farmers.

Those involved in the Strengthening of the School Feeding Programmes Project believe this is the future, and they hope that one day all Nicaraguan pupils will be served school meals made with products grown by local farmers, and that they will receive food and nutrition education through the school gardens.

The youngest children eat first at meal times.



3. LINKING SCHOOLS TO FAMILY FARMERS IN EL SALVADOR

El Salvador's school feeding programme began in a modest way in 1984, providing a basic meal for 100 000 of the poorest pre- and primary school children in 33 municipalities. By the mid-1990s, the programme had been extended to 160 municipalities, and 10 years later to the whole of the country. This was good news for the country's schoolchildren, but not necessarily for local farmers.

During this period, when the programme was managed by the World Food Programme, beans, corn, rice, dried milk and other products were imported from as far afield as Australasia, China and West Africa. Frequently, children were offered food they were not used to eating. "There was a lot of waste in those days," says Leonardo Quiroa, who manages El Salvador's school feeding programme for the Ministry of Education. "For example,

schools were provided with canned tuna, which many children didn't like and wouldn't eat."

Significant change came after the election of the Farabundo Martí National Liberation Front (FMNL) in 2009. The government, which has taken over the financing and management of the programme, introduced a law which stipulated that children should be given liquid milk, purchased from farmers in El Salvador. Greater efforts have been made to source food from within the country, and the government gradually increased the budget for school feeding, which now stands at USD 22 million a year.

Today, 1.4 million children benefit from the programme, which supplies six basic products: rice, beans, milk, sugar, flour and oil. As in Nicaragua, the Ministry of

Education manages a highly centralized purchasing system, with most of the food being supplied by large wholesale enterprises. Leonardo estimates that approximately half comes from family farmers in El Salvador via large enterprises which sell to the Ministry of Education; none, until recently, was directly delivered from family farms to schools.

In 2013, El Salvador launched a Sustainable Schools activity. In terms of its objectives – improving nutrition and linking family farmers to the school feeding programme – it is similar to the Nicaraguan activity described in the previous chapter. However, it differs in one significant way: it is entirely funded by the government. “One of the impressive things about this school feeding project is the strong political will shown by the government,” says FAO representative Alan González Figueroa.

The Sustainable School activity focuses on 20 schools in three municipalities.



Today, 1.4 million children benefit from the school feeding programme, which supplies six basic products: rice, beans, milk, sugar, flour and oil.

The schools continue to receive the allocation of the six basic food products from central government, at a cost of USD 0.15 per child per day. However, the Ministry of Education gives each school an extra USD 0.10 per child per day. The schools, rather than the Ministry, decide how to spend the grant. “They all use the funds to purchase fresh fruit and vegetables from local farmers, but some have also allocated money to improve their kitchens and purchase new fridges,” explains FAO consultant Ana Yanira Calderón.

A NEW WAY OF DOING THINGS

Every Monday morning, long before dawn, three farmers belonging to the Asociación Cooperativa de Producción Agropecuaria Tecuma (ACOPATE) load up a small truck with fresh fruit and vegetables – tomatoes, courgettes, beans, sweet potatoes, radishes, cucumbers, bananas, citrus fruit and whatever else is in season – and make their way to Cantón Las Lajas School, in the municipality of Izalco.

By the time they reach the school gates, the children have begun to arrive. Boxes of vegetables and fruits are unloaded and carefully weighed. A teacher and the head cook check the produce for quality and make sure the farmers have delivered everything agreed in the contract. The principal then writes a cheque for the delivery and hands it to the farmers before they leave.

In some schools, teachers take charge of the delivery; in others, pupils on the school purchasing committee are responsible for weighing the deliveries



Farmers from ACOPATE delivering fresh fruit and vegetables to Cantón Las Lajas School.

and checking quality. “We’ve now got a really good relationship with ACOPATE,” explains Gladys Isabel Rey, who recently retired as principal of Cantón Las Lajas school, but remains a teacher there. “If we see something that isn’t good quality, we tell the farmers and they’ll make sure they improve the quality for the next delivery.”

During her 11 years as headmistress, Gladys became increasingly frustrated about the monotony of school meals. “I was always writing reports to the Ministry of Education explaining that the children were tired of eating the same things,” she recalls, “and I pleaded for them to

help us set up a school garden, both to provide food and as a teaching resource. I was so happy when the Ministry of Education and FAO came to tell us that we would be part of the Sustainable Schools activity.”

“We love the food. There’s a lot more variety and it tastes much better than the meals we used to get,” says 15-year-old pupil Jennifer Rosas. She says that many children are now more enthusiastic about coming to school, as they know that they will get a decent meal. It is a similar story at nearby Cantón San Isidro School. Daniela Garay is one of two pupils on the school purchasing committee. She promotes healthy eating to other pupils, and she also provides feedback from the pupils to the committee. “This project has made an enormous difference,” she says. “Getting fruit and vegetables on a regular basis is appreciated by everybody.”

The principal, José Manuel Guerrero, reckons that 85 percent of the children in his school come from families who

are too poor to provide a balanced diet. “It’s particularly difficult for the children who can’t catch the school bus and have to walk to school, some from as far as 10 kilometres away,” he says. Providing a nutritious meal once a day is one of the best ways of ensuring that children attend school.

Preparing food in Cantón Las Lajas School. The Sustainable Schools activity has helped to reduce rates of absenteeism.



The increase in attendance in some schools has been remarkable. “From our point of view, the project has been a great success,” explains school principal Rhina Magdakna Chile when we meet for a working lunch with the mayor. “Since we began providing fresh fruit and vegetables, and changing the menus regularly, attendance has increased from around 50 percent to 80 percent.”

The municipality suffers from many problems: a disease which has ravaged coffee gardens has led to the loss of jobs; recent droughts have depressed crop yields; and there is widespread poverty, with many agricultural workers earning less than USD 5 a day. “This makes it all the more important that schools provide children with good nutrition,” says the mayor of Izalco, Alfonso Guevara. Six of the 45 schools in the municipality are benefiting from the Sustainable Schools activity.

HELPING FAMILY FARMERS FLOURISH

Several years before the Sustainable Schools activity was launched, the Centro Nacional de Tecnología Agropecuaria y Florestal (CENTA), the national extension agency in El Salvador, helped 18 farmers to establish ACOPATE. “It started as a sort of farm school, with CENTA providing horticultural training,” explains Andrés Menjivar. “They then advised us how to set up a cooperative and look for markets.”

Members of the cooperative Asociación Tapalchucut Norte working in the fields in Izalco municipality. The cooperative is supplying several schools with fresh produce.



In late 2013, ACOPATE won a contract to supply several schools with fresh vegetables and fruit, harvested from a two-hectare plot of land which is collectively managed by the members of the cooperative. If the cooperative does not have enough of any particular fruit and vegetable to meet the school contracts, members supply whatever is missing from their individual landholdings.

The cooperative's income has risen by about 20 percent since it began supplying the schools. Some of this is reinvested – tomatoes and other crops are now grown in a recently constructed greenhouse – and the remaining profits are shared between members. However, this is about more than making money, according to Andrés. “All of us get a lot of satisfaction knowing we are helping to improve the children's diets,” he says. “CENTA is always stressing the importance of good quality as the food is eaten by children, so we're now taking greater care about how we produce and harvest crops.”



Alejandro Melgar is president of the Asociación Cooperativa de Producción Agropecuaria Cuarda Tecuma (ACOPATE), which is supplying schools involved with the Sustainable Schools project. Profits have been used to build this greenhouse.

Some of the most successful farmers to benefit from the project belong to Cooperativa Las Bromas in Atiquizaya municipality. Over half of the 45 members are women, and between them they farm approximately 90 hectares of fertile land. “We've dramatically increased our production since we won contracts to supply seven schools in the area,” explains Blanca del Carmen.

Besides growing vegetables, which she sells through the cooperative, Blanca



“Since we began supplying the schools my income has increased by about 75 percent,” says Blanca del Carmen Perdomo.

works at the cooperative headquarters, where she makes bread which is sold in the surrounding area. “I’m working much harder than I used to, and since we began supplying the schools my income has increased by about 75 percent,” she says. She has two boys, and most of the extra money she makes is invested in their welfare and education.

Several of Blanca’s old school friends are members of the cooperative. Marlene Noemi Agilar, who left school when she was nine, is now earning enough to pay fees for her son’s agronomy studies at a local college. “This is what motivates us to keep on improving our production,” says Marlene.

The profits from the sale of fresh produce to the schools are divided among the members, according to their contribution, with a portion being ploughed back into the cooperative. At present, the Las Bromas cooperative rents trucks to transport fruit and vegetables to the schools. Before long it hopes it will have made enough money to buy a vehicle.

Ana Luisa Rodríguez de González, who is currently serving her fourth term as mayor of Atiquizaya, believes that the Sustainable Schools activity has been one of the best things that has happened in recent years, both for local farmers and for children in the three schools in the municipality that are benefiting from the activity. “I’d love the project to continue and for more schools to benefit,” she says. Inspired by what she has seen, she is now thinking about establishing a new project. This would involve the poorest families being trained to grow vegetables, which they could then sell to the schools.

BEHIND THE SCENES

In September 2013, the National Technical Committee for Monitoring the School Feeding and Health Programme was established with the support of FAO-Brazil Cooperation under the Strengthening of School Feeding Programmes Project. It is an indication of the importance attached to the committee that it is coordinated by the President's Technical Secretariat.

"I think one of the great achievements of this project has been the way in which different sectors are now working together," says Leonardo Quiroa, Director of El Salvador's School Feeding Programme. "Before the Sustainable Schools activity, there were just two ministries involved in school feeding – my own, the Ministry of Education, and the Ministry of Health." Today, the Ministry of Agriculture, the Ministry of Finance and CENTA all play a key role in guiding national school feeding policy, and all are represented on the National Technical Committee.

Among other things, the committee has helped to develop a new School Feeding Law – at the time of writing, it was still being considered by parliamentarians – and produced purchasing guidelines which encourage closer links with family farmers. The committee has also conducted a number of studies – for example, on how to reduce the sale of junk food at school kiosks – and provided guidance on school feeding for the whole country.

Members of the National Technical Committee are quick to acknowledge the support from the Strengthening of School Feeding Programmes Project. "It would be impossible to exaggerate how important the support from FAO-Brazil Cooperation has been," says Leonardo Quiroa. "They have consistently helped to guide our activities. It's not that we've copied the Brazilian experience, but we've adapted it to suit the local needs and culture."

4. LOOKING TO THE FUTURE

Knowledge sharing has been a major component of the Strengthening of Schools Feeding Programmes Project and a key to its success. This has involved a wide variety of different activities. The technical visit to Joinville and Brusque, described in the first chapter of this booklet, was one of several technical visits that have enabled teachers, civil servants and others involved in school feeding programmes in Latin America and the Caribbean to gain first-hand experience of Brazil's school feeding activities. Study tours, both within and between countries, seminars and policy dialogues have also benefited many hundreds of people, as have a variety of training exercises.

School feeding programmes have provided a new lease of life for many family farmers.

Oralia Robles Salvador, who works with the Ministry of Education's School Feeding Programme in El Salvador, has had first-hand experience of a number of knowledge-sharing activities. In May 2014, she attended the technical visit to Joinville and Brusque. "As a government department, we feel we've been well-supported by FAO-Brazil Cooperation, and my visit to Brazil helped to shape my ideas about how we need to develop the school feeding programme here," she says. She was particularly impressed by



Spreading the message.

the way municipalities in Brazil organized the purchasing, storage and distribution of food.

Oralia is one of approximately 1 500 people who have participated in training courses – these are partly web-based, but also include workshops – managed by FAO-Brazil Cooperation. The courses provide a thorough grounding in everything related to food and nutritional security, the human right to food, the educational use of school gardens and family farming and school feeding, with particular reference to the experience in Brazil. The first training courses were held in five countries in 2011. Since then, the courses have become increasingly popular. In 2012, training courses were held in eleven Latin American countries; and in 2014 they were offered to eight Latin American countries and three Caribbean countries.

FAO-Brazil Cooperation consultant Jorge Ulises González has been closely involved with the seven countries that



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are implementing the Sustainable Schools activity. He has been impressed by the progress made during a relatively short period of time. “It’s always good to see children getting more nutritious food, but more importantly, we want countries to change their policies so that school feeding programmes are explicitly linked to sourcing food from local family farmers, so that they strengthen local economies,” says Ulises. “That’s what we’re now seeing in countries like El Salvador and Nicaragua.”

During recent years, many countries in Latin America and the Caribbean have made great progress in reducing malnutrition. Brazil, Ecuador, Guatemala, Nicaragua, Honduras, Uruguay and Venezuela have all adopted laws for



Eating in the new dining area at San Francisco de Peñas Blancas School in the municipality of El Tuma La Dalia. Two decades ago over half the population in Nicaragua was hungry; now, less than one in six suffers from malnutrition.

food and nutritional security, based on the human right to food. Other countries are in the process of doing the same. Between the periods 1990–92 and 2012–14, the proportion of the population in Latin America and the Caribbean suffering from hunger fell from 15.3 percent to 6.1 percent. In Brazil, the number of hungry dropped from 14.8 percent of the population to less than 2 percent. Two decades ago over half the population in Nicaragua was hungry; now, less than one in six suffers from malnutrition.

A variety of activities and a range of factors have helped to reduce malnutrition. Undoubtedly, one of the most significant has been the introduction of school feeding programmes linked to family farms. They have helped to improve the nutrition status of many millions of children and provided a guaranteed market for growing numbers of family farmers. Brazil has taken the lead, and now many other countries are rapidly developing sustainable school feeding programmes. This is one of the great success stories of our time.



Find out more

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