Case Study:

Costa Rica’s School Child and Adolescent Food and Nutrition Programme

Programa de Alimentación y Nutrición del Escolar y del Adolescente

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Country Profile

Population in 2013: 4.703.168 (INEC, 2013)

Gross Domestic Product Per Capita in 2012 (US$): 9,391 (World Bank, 2013)

Population ages 0 to 14 years in 2012 (% of total): 24 (World Bank, 2013)

Primary School Gross Enrolment Ratio in 2011 (%): 107 (World Bank, 2013)

Life expectancy at birth in 2012: 79 years (WHO, 2014)

Chronic Malnutrition Rate in 2008: 5.6% (Ministry of Health, 2010)

Employment in agriculture (% of total employment): 14 (World Bank, 2013)

I. INTRODUCTION

Country Background

Costa Rica is a development success story in many respects. An upper middle-income country with a population of 4.7 million in 2013 (INEC, 2013), Costa Rica is known for its success in fulfilling children’s right to health and nutrition: notably, infant mortality rate was reduced to 8.7 per 1,000 live births in 2013 (INEC, 2013), and the prevalence of chronic malnutrition in children under 5 to 5.6% in 2008 (Ministry of Health, 2010).

The country has also experienced steady economic expansion over the past 25 years, primarily thanks to the implementation since the late 1980s of a strategy of export-led growth, openness to foreign investment and gradual trade liberalization. The economy grew at an annual average rate of 5% throughout the 1990s and has generally outpaced the average growth rate for the region in the current millennium. As a consequence of the global financial crisis in 2008, there was a 1.3% decline in the Gross Domestic Product (GDP) in 2009. Current projections foresee a GDP growth between 4.1 and 4.3% over the next few years (World Bank, 2014).

Costa Rica was able to reduce the poverty rate from 20.2% in 2006 to 18.5% in 2009, with support from the relatively high levels of growth and effective social transfer mechanisms. However, in 2010 and 2011 the average percentage of people living in poverty increased to 21.3 and 21.6, respectively. Extreme poverty decreased from 5.3 in 2006 to 3.5 in 2008, but it increased to 6.0 in 2010, and 6.4 in 2011. This was due to the fact that growth largely benefited skilled labour employed in the exportation sector, and secondary education presented lags, especially for the poor (World Bank, 2014). Inequality in income distribution, measured by the Gini coefficient, has risen persistently, from 0.42 in 2006 to 0.52 in 2013 (INEC, 2013). Inequality and extreme poverty reduction is one of the three pillars of the National Development Plan of the current Government of Costa Rica.

Costa Rica’s health indicators are similar to those of high income countries. The country has the highest life expectancy at birth in the region (together with Colombia and Cuba), and child malnutrition and anaemia have significantly decreased. However, overweight and obesity represent a growing public health problem. Among 5-12 year old children, overweight prevalence has reached 11.8% and obesity prevalence 9.6% (Ministry of Health, 2010). The country has a tradition of universal provision of social protection services such as health insurance, which has contributed to reducing social exclusion. Costa Ricans’ access to social insurance is one of the highest in the region – 92% of the population is covered, and 70% of active population contributes to the Costa Rican Social Security Fund (Caja Costarricense de Seguro Social - CCSS) (Narvaez, 2012).
73% of children are enrolled in pre-primary school, and access to primary education is nearly universal - 99% of children complete a full course of primary education (UIS, 2013) – even though there are concerns about the quality of public education, especially in rural areas.

School Feeding Background

School feeding started in Costa Rica in 1905 thanks to the initiative of some public schools’ directors with support from volunteers (Vargas Cárdenas. A. UNED 2011). In 1944, school foundations began to manage school canteens to improve 7-13 year old students’ wellbeing in public schools. For the next two decades, mid-morning snacks that did not require heavy infrastructure were provided. Food items were procured locally or donated by international agencies (Vargas W. 1995). 1974 was an important milestone for the expansion, consolidation and sustainability of the school canteen service: Law 5662 established the Social Development and Family Allowance Fund (Fondo de Desarrollo Social y Asignaciones Familiares -FODESASF), which provided permanent resources to school canteens, with special attention to those located in the districts with higher poverty prevalence (Asamblea Legislativa, 1974).

As a result, the programme was significantly restructured and until 1987, it was managed by the Family Allowances Control Office (Oficina de Control de Asignaciones Familiares - OCAF) in the Ministry of Labour and Social Protection, with the participation of the Ministries of Public Education and Health and Parents and Teachers Associations (Patronatos escolares -PTAs).

In 1987, the School Child and Adolescent Food and Nutrition Programme (Programa de Alimentación y Nutrición del Escolar y Adolescente – PANEA) was launched, and the responsibility for school meals and school gardens was transferred to the School Child and Adolescent Food and Nutrition Unit (Division de Alimentación y Nutrición del Escolar y Adolescente -DANEA) in the Ministry of Public Education (MEP) (Arjona N. & Hernández G, 2002). The programme, which continues to date, provides a hot lunch to targeted children in all public schools and, when resources are sufficient, a breakfast or snack in addition to lunch. In 2003 the programme was decentralised and the responsibility for fund management transferred to School Education Boards and School Administrative Boards (Juntas de Educación and Juntas Administrativas) (MEP, 2003). PANEA was further revised in 2007 with the MEP reorganization and the creation of the Department of Equity Programmes (Dirección de Programas de Equidad - DPE), which took responsibility for the programme at the central level.

Today, Costa Rica’s PANEA is an example of a consolidated school feeding programme mostly funded by the central government (FODESASF and MEP’s own budget) and managed at school level by School Education Boards. PANEA is part of the government’s efforts to reduce poverty and to ensure poor families’ children’s enrolment and retention within the education system.

II. METHODOLOGY

This case study is based on a comprehensive literature review including a) laws, norms and regulations, manuals, and guidelines prevailing in September 2013, that support PANEA’s implementation and funding; b) data on PANEA’s budget, beneficiaries and coverage from the FODESAF website and the Ministry of Public Education; c) data from household surveys of the National Institute of Statistics and from the World Bank; d) evaluations, studies and other reports to analyse PANEA’s results. Additional information was collected through interviews with DPE officials and primary and secondary school visits. The analysis draws on a draft report prepared by the World Bank office in Peru in 2012 as part of a technical assistance project through Ministry of Development and Social Inclusion (MIDIS) (Narvaez, 2012). The case study follows a standard format used for a number of case studies developed by the World Food Programme, the Partnership for Child Development and the World Bank and covers five dimensions of school feeding programmes: Design and Implementation, Policy and Legal Framework, Institutional Arrangements, Funding and Budgeting, and Community Participation.
### III. COUNTRY SCHOOL FEEDING PROGRAMME FACTSHEET

<table>
<thead>
<tr>
<th>Start Date</th>
<th>1974 with permanent budget from FODESAF (first school feeding programme started in 1905)</th>
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<tbody>
<tr>
<td><strong>Rational/Impact</strong></td>
<td>To promote equal education opportunities in Costa Rica by ensuring poor families’ children’s enrolment and retention within the education system. (MEP, 2012). The specific objective is to offer complementary feeding and to promote healthy eating habits among school children.</td>
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<tr>
<td><strong>Beneficiaries and types of schools targeted</strong></td>
<td>PANEA targets children ages 4-17 enrolled in public schools and includes a few adult learning centres. In 2012 PANEA attended 612,849, covering 72% of the students enrolled in public schools (DPE-FODESAF 2013). Since 2013, coverage has been universal in all pre-primary and primary schools, while the programme continues to be targeted in secondary schools according to established vulnerability criteria.</td>
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<tr>
<td><strong>Supply, Storage and Logistics</strong></td>
<td>Fully decentralised: School Education Boards plan, manage and implement the programme at the school level. Two modalities: 1. Procurement of food commodities that are cooked in the school canteen premises. 2. Procurement of prepared meals from private companies.</td>
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<tr>
<td><strong>Modality, Food Basket Details</strong></td>
<td>School canteens must offer at least a daily lunch compliant with the programme guidelines. Resources permitting, the School Education Board should in addition provide breakfast or a snack, especially to children that most need it.</td>
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<tr>
<td><strong>Food Preparation</strong></td>
<td>School meals must be prepared according to the technical criteria established in PANEA’s Regional Menu Manual.</td>
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<td><strong>Policy and Legal Frameworks Documents</strong></td>
<td>The Political Constitution, the General Health Law, the Fundamental Education Act and the Children and Adolescents Code give the legal underpinning to the national commitment to provide comprehensive care and promote children’s health and nutrition in the school environment. Funding is regulated by the legislation governing FODESAF (Law FODESAF N°5662, reformed in 2009 by Law N°8783). A number of Decrees and Guidelines regulate the programme.</td>
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| **Institutional Arrangements** | **Lead Institution** Ministry of Education, Equity Programmes Directorate (DPE)  
**Supporting Institutions** Ministry of Labour and Social Security, Ministry of Health, National Training Institute (INA), Costa Rican Social Security Institute (CCSS), Ministry of Agriculture, School Education and Administrative Boards, PTAs, School Health and Nutrition Committees, NGOs, Private sector. |
| **Finance** | **Annual Budget** 2012: US$ 86.3 million (¢ 43.875 million)  
2013: US$ 118.4 million (¢ 59.895 million)  
**Cost Per Child** 2012: US$ 140.8 / 2013: US$ 175.8 |
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<tr>
<th>Innovations/Good Practices</th>
<th>Weaknesses/Risks</th>
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<tr>
<td>• Standardized processes and norms that ensure quality</td>
<td>• PANEA’s impact has not been evaluated lately.</td>
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<td>service delivery and accountability;</td>
<td>• Absence of a food and nutrition surveillance system to measure PANEA’s</td>
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<td>• Standards for rations’ composition, food handling and</td>
<td>effects and impact on students.</td>
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<td>preparation spelled out in the Regional Menu Manual;</td>
<td>• Budgetary and human resource constraints slow infrastructure and equipment</td>
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<td>• Sustainable and predictable funding secured by law;</td>
<td>improvements are required in some schools to meet PANEA’s quality standards.</td>
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<td>• High quality standards for school canteen equipment;</td>
<td>• Lack of training for members of School Education Boards on budgeting and</td>
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<td>• School feeding fully integrated in the country school</td>
<td>accounting issues.</td>
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<td>health and nutrition framework;</td>
<td>• Limited controls due to insufficient systems and resources (human and transport).</td>
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<td>• 196 school centres have a school garden programme.</td>
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<td>• Strong community participation through the School Education</td>
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<td>Boards, health and nutrition Committees and Parents’</td>
<td></td>
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<td>associations.</td>
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IV. PANEÁ
Design and Implementation

Objectives

Costa Rica’s School Child and Adolescent Food and Nutrition Programme (PANEÁ) is framed as a tool to promote equal education opportunities in Costa Rica. It is aligned to the DPE mission – which is to offer poor, vulnerable and excluded children better opportunities in order to decrease inequalities in the education system through programmes that foster school children’s quality of life and support school retention and learning (MEP, 2012). PANEÁ’s specific objective is to offer complementary feeding to school children and to promote healthy eating habits among school children by using the school canteen to provide nutritious food and foster healthy hygiene and eating practices.

PANEÁ’s main service is the School Canteen. The programme also provides subsidies for agricultural production projects (school gardens); and didactic materials and training to run school gardens and health and nutrition education in pre-primary, primary and secondary schools (see box 1). DPE also monitored the food offered in the school cafeterias in 2012 and 2013.

Box 1- PANEÁ: an integrated approach to school health and nutrition

PANEÁ is linked to the multi-sectorial National School Health and Nutrition Programme (Programa Nacional de Salud y Nutrición Escolar - PNSNE) in which the CCSS and the ministries of Health and Education participate. Its mission is to improve the “Costa Rican population quality of life in the school environment” through three components: Health education; Healthy physical and psychological environments and Adequate and accessible services.

PANEÁ forms part of this last component. In addition to school canteens, PANEÁ provides complementary services that foster school children’s health and healthy eating habits:

The school garden programme originated in the 20s. Its objective is to stimulate agricultural production and nutrition training in schools. Fruit and vegetable production also contributes to improving the quality of school food. PANEÁ allocates funds for necessary equipment and inputs, and provides technical support and training through the MEP Regional Offices.

PANEÁ services also include support to health and nutrition education in primary schools. Implementation at the school level is guided by the PNSNE manual, “Child comprehensive care in the school environment – Services component” (Arjona Ortegon & Al., 2004).

A School Health and Nutrition Committee supports each educational establishment in the implementation of all PANEÁ components and in ensuring they function properly. They are composed of teachers, representatives of PTAs, students, local institutions, canteen staff, and for priority education schools, a representative from the social sector.

The committee elaborates and monitors the implementation of an annual action plan, informs the director and DPE of any quality and compliance issues regarding the school canteen and cafeteria, promotes partnerships in the field of nutrition and health education, ensures coordination with parents associations and ensures school children are referred to health services as required (MEP/CCSS, 2004). Committee members received initial training on these issues.

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1 School cafeterias (sodas estudiantiles) are private businesses located in the school premises. They are regulated by a Manual (MEP/CCSS/MoH, 2004) and Executive Decree No. 36910-MEP, November 22, 2011 and its reforms.
Coverage and targeting

PANEA targets mostly children aged 4-17 enrolled in public schools. It also includes a few adult learning centres. In 2012, PANEA reached 612,849 students aged 4-17, or 69% of all students attending public schools 200 days per year. Coverage (as a percentage of total students) varied depending on the education level: 90% in preschools and primary schools; 47% in secondary schools; 14% in evening primary and secondary schools; and 27% in education centers for children with special needs (MEP-FODESAF 2012).

Since 2013, coverage has been universal in all pre-primary and primary schools, while the programme continues to target secondary schools according to established vulnerability criteria. In 2013 PANEA reached 673,445 students from preschool, primary and secondary education, which represents an increase of 10% compared to 2012 (MEP-FODESAF 2014).

All public secondary schools are eligible. Coverage within each school varies depending on the type of school and its location: in schools situated in districts with poor social and economic indicators, as shown by the District Social Development Index, all students are eligible. Priority is also given to indigenous, multigrade and three shift educative centres; distance-learning secondary schools; rural high-schools; schools in marginal urban areas; and schools for children with special needs.

When PANEA funds are not sufficient to cover all children in secondary schools, the following prioritization criteria have been established to select beneficiary children at the beginning of the school year (MEP, 2012):

1. students from low income families (determined by the household income per capita; national income thresholds are defined by the National Statistics and Census Institute (Instituto Nacional de Estadística y Censos - INEC);
2. students exhibiting nutritional problems such as low weight, undernutrition, overweight, obesity, anaemia or other deficiencies;
3. disabled children and children suspected to be psycho-socially at risk – such as children exposed to violence, addiction and abuse, pregnant adolescents and single mothers.

Priority is given to school children and adolescents who meet two or three of these criteria, and then to children with only nutritional problems or only suspected to be socially at risk. School teachers, with support from the School Health and Nutrition Committee, are responsible for beneficiary selection.

Beneficiaries receive school meals free of charge. However, the school canteen service is also open to non-beneficiary children. School personnel members can take part provided they pay a contribution, eat the same meals as children, and use this moment to promote healthy eating practices (MEP, 2012). School Education Boards organise the extended service together with school personnel, canteen staff and school health and nutrition committees; they define a contribution fee and administer the resources.

For a school to enrol in the programme, the School Education Board must open a dedicated bank account for PANEA funds transfers and submit an application form to DPE with, if possible, a document from a qualified nutritionist or the Director of the relevant local primary health facility (EBAIS) certifying the nutritional status of the beneficiary population (MEP, 2012).

Modalities, food basket and nutritional norms

School canteens must offer at least a daily lunch. Fruit and salad must be provided daily with funds from the programme and schools’ own resources. Resources permitting, the School Education Board should also provide breakfast or a snack to children that most need it (given their nutritional or socio-

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2 The IDS (Indice de Desarrollo Social Distrital) is built from a set of socio-economic indicators coming mainly from Costa Rica public sector institutions statistics. Costa Rica districts and counties are classified according to their level of social development based on this index.
economic situation). The subsidy per child varies depending on the school level (pre-primary, primary, secondary school), and is established based on the national average meal preparation cost. Daily subsidies vary from €284 to €792 per day per student, depending on the IDS of the community in which the school is located (MEP, 2014)\(^3\) and the number of students. Meals are served 200 days per year.

Standards for rations’ composition, food handling and preparation are spelled out in the *Regional Menu Manual* (MEP, MoH, CCSS, 2004). Their application is mandatory. The manual was jointly developed by the Ministry of Education, the Ministry of Health and Caja Costarricense de Seguro Social, to guide the preparation of nutritive and healthy meals adapted to children’s nutritional needs and the food consumption patterns of each geographical zone. Their objective is also to increase PANEÀ’s efficiency and effectiveness by stimulating local food purchases at lower costs and reducing food wastage.

The Manual provides a standard menu that indicates the number of portions of each food group to be included in the menu for each type of meal (breakfast, lunch and snack). This serves as a basis to design tailored menus for each zone. It also includes recipes with required quantities of food ingredients per child in order to facilitate food procurement and preparation. Finally, it specifies forbidden food products, such as canned fruit, processed meats, condensed milk, or pre-fried foods – among others.

In primary school (grades 1-6), school breakfast should provide 20 to 25% of daily recommended energy and protein intake and lunch 30 to 35%. When two meals a day are provided (breakfast and lunch or lunch and snack), they provide about 50% of daily recommended nutritional intake or 1055 kilocalories per day\(^4\).

The School Education Board, together with the PTA and the school director, are in charge of elaborating on the daily menus in conformity with PANEÀ Guidelines with support from the School Health and Nutrition Committee (MEP, 2012).

*Food procurement, transportation, storage and preparation*

PANEÀ implementation is highly decentralised: the School Education Boards -together with the school directors and School Health and Nutrition Committees- organise, manage and implement the programme at school level.

School Education Boards are responsible for food procurement -from identifying the suppliers to receiving the food in schools – and for school canteens management. PANEÀ funds are directly transferred by the Ministry of finance to School Education Boards’ dedicated bank accounts. School Education Boards designate the people in charge of preparing the food purchase order and those in charge of receiving and controlling the food among school canteen staff and the PTA, SHN committee and School Education Board members.

There are two supply modalities:

- Procurement of food to be cooked at school: the School Education Board selects the suppliers and procures the food required to prepare the meals in compliance with the regional menu manual. Menus can be adapted to regionally available foods.

- Procurement of prepared meals from catering companies (or individual caterers): in multi-grade schools (less than 50 students) or any other school where the School Education Board decides this is the most suitable modality. The School Education Board selects one catering company from at least three through a tender. The company is also responsible for meal distribution, cleaning and waste disposal.

\(^3\) PANEÀ updates the subsidy amounts twice a year based on the consumer price index.

\(^4\) Sample menus were defined based on the average energy and protein daily requirements of 10-11 year old children, or 2050 Kilocalories and 42g of protein per day (INCAP, 1996).
The procurement process is controlled by Law No. 8511 on Administrative contracts (Contratación Administrativa) and its regulation, which allow direct contracting for food procurement within certain amounts. This makes it possible for the School Education Boards to procure fresh products and cereals directly from small holder farmers. The food provided must be compliant with the food specifications detailed in the programme Guidelines.

The School Education Boards also hire school canteen staff with funds allocated by FODESAF and MEP, when the food is cooked on-site. Canteen staff work is regulated by decree. They prepare and serve daily meals and are responsible for food storage, cleaning, and adequate use of cooking utensils and eating facilities. They record the food and stocks they use to control food utilization (Poder Ejecutivo-MEP, 1975). There is one canteen staff for up to 150 beneficiaries. DPE, together with the national institute for vocational training (Instituto Nacional de Aprendizaje INA) coordinates canteen and cafeteria staff training. Staff must present a valid Food Handling Card (issued by the Ministry of Health) and have taken the specific course on food handling on education premises delivered by the INA.

Food storage spaces, kitchens and eating facilities are generally within school premises, and their conditions vary from model schools with modern kitchens and new refectories to schools that do not have adequate spaces to eat (particularly in remote areas out of San José), depending on the funds allocated by PANE A, the school own funds and donations from the private sector. The MEP’s Infrastructure and Equipment Department is responsible for transferring the funds for the construction and renovation of school canteens. This is one area that requires improvement.

**Policy and Legal Framework**

PANE A’s sustainability and funding are guaranteed by a strong body of laws and regulations.

The legal framework in Costa Rica makes all of the country’s institutions accountable for providing free education and health services to all children and adolescents. The Political Constitution, the General Health Law (Ley General de Salud), the Fundamental Education Act (Ley Fundamental de Educación) and the Children and Adolescents Code (Código de la Niñez y la Adolescencia) constitute the legal underpinnings for the national commitment to provide comprehensive care and promote children’s health in the school environment from the earliest age, in order to support healthy physical and mental development.

Costa Rica’s Political Constitution recognises the right to free primary education and makes the State responsible for providing food and clothing to destitute school children. However, it does not recognize the right to food yet. A revision of Article 50 of the Political Constitution is currently under review in Parliament to guarantee the fundamental rights to food and food security (Asamblea Legislativa, 2011; Asamblea Legislativa, 2012). In addition, the General Law of Child and Adolescent Food and Nutrition State Programmes (Ley General de los Programas Estatales de Alimentación y Nutrición de la Niñez y Adolescencia) is also under review (Asamblea Legislativa, 2013). The objective is to establish a legal framework to implement policies and programmes to guarantee permanently children and adolescents’ right to complementary food and to food security and nutrition. The draft law stipulates that the State shall guarantee the right to complementary feeding without any form of discrimination and shall protect children, adolescents and pregnant and lactating women in particular (Archivo, Asamblea Legislativa, June 2014).

The National Development Plan 2011-2014 includes among its objectives promoting healthy life styles and sustainable education and ensuring the right to education through equity tools that support progress towards universal coverage.
Since 1974, PANEA’s funding and financial arrangements have been regulated by the legislation governing FODESAF (Law FODESAF N°5662, reformed in 2009 by Law N°8783). This has been critical to ensure sustained, predictable and transparent funding over time.

While there is no specific policy for school feeding, a number of Decrees and Guidelines regulate the programme. The Ministry of Education’s Executive Decree N°36451 – MEP establishes the DPE as the technical entity responsible for reducing opportunity disparities in the Costa Rican education system through the comprehensive management of MEP social programmes, specifically those related to nutrition and food, transport and scholarship services (Poder Ejecutivo-MEP, 2011). At the local level, School Education Board and canteen staff activities are guided by regulations issued by Executive Decree (Poder Ejecutivo-MEP: 1975 and 2003). PANEA implementation is further guided by the PANEA Guidelines, first published by MEP in 2012 (MEP, 2012). Compliance with the guidelines is mandatory. These are complemented by a Regional Menu Manual (MEP, MoH, CCSS, 2004), a School Canteen Standards Manual (MEP–DPE, 2010), the PNSNE manual, “Child comprehensive care in the school environment – Services component” (Arjona Ortegon & Al., 2004), and the school cafeterias’ manual (Poder Ejecutivo, 2011- Decreto N°36910-MEP-S).

**Institutional Arrangements**

PANEA is an example of a highly decentralised school feeding programme: while funding comes mainly from the central government, implementation – including beneficiary selection and food supply – is managed at the school level.

Since the Ministry of Education’s comprehensive administrative reform of 2007, DPE is the institution in the charge of managing and coordinating PANEA at central level (Poder Ejecutivo-MEP, 2007). DPE is the executing body of MEP’s social programmes – including PANEA and students’ transport. Its mission is to offer more opportunities to poor, vulnerable or excluded students in order to reduce social inequalities in the education system by fostering the quality of life of students through programmes that support school retention and educational achievement. It was set up to define and manage social programmes in an integrated manner and according to unified beneficiary selection criteria. It is composed of four departments staffed with 45 officials: i) Planning and impact evaluation, ii) Oversight and control iii) Students’ transport and iv) Food and Nutrition department, which administers PANEA (MEP, 2012).

DPE has mainly a regulatory and oversight role. The Food and Nutrition department prepares the annual budget, issues the guidelines and procedures to manage, execute, monitor and evaluate PANEA, and manages the projects and studies related to food and nutrition. The department of Planning and Impact Evaluation coordinates, together with other DPE departments, the formulation of different equity programmes and strategies. In addition, it provides training to the different bodies involved at the local level, such as the School Health and Nutrition committees, the School Education Boards, and PTAs’s.

School Education Boards manage and implement the programme at the school level in collaboration with the school director, the Health and Nutrition committee and PTAs. School Education Boards are auxiliary bodies of MEP that administer all FODESAF resources allocated through DPE (among other responsibilities). MEP’s Regional Offices provide guidance to the Education Boards regarding PANEA execution and approve their annual budgets.

**Coordination**

PANEA is linked to the social protection sector through its funding. DPE works closely with the General Directorate of Social Development and Family Allowances (Dirección General de Desarrollo Social y

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5The Food and Nutrition Department replaces the former DANEA.
Asignaciones Familiares - DESAF) in the Ministry of Labour and Social Security, which administers FODESAF funds, the main source of funding for the programme (see Funding and Budgeting section below). Training on food safety and preparation for school canteen staff is coordinated with INA. The school garden programme implementation is coordinated with the Ministry of Agriculture and Livestock and INA, among other institutions.

The programme is also implemented in coordination with the PNSNE, which provides the framework for multisectoral planning and implementation. PNSNE is a programme of the Caja Costarricense de Seguro Social –CCSS, the Ministry of Health and MEP- and includes a number of school health and nutrition interventions grouped into three components jointly implemented by different sectors.6 At the national level, PNSNE is coordinated by the National Intersectoral Commission formed by the MoH, MEP and CCSS. At the regional and local level, Intersectoral Commissions are formed by the regional representatives of these three institutions.7

While there is no dedicated coordination mechanism for school feeding, PANEA takes part in several intersectoral committees to promote the programme’s nutrition and health objectives, such as the School Health and Nutrition Commission, the Intersectoral Commission on Food Guidance, and the Child Under-nutrition National Commission. Representatives of MEP, the Ministry of Health, CCSS, Joint Social Welfare Institute, INCIENSA, University of Costa Rica, WFP, and INCAP/OPS, among others, participate in these coordination bodies.

PANEA receives assistance from universities, institutions and international development organizations working in food security, nutrition and health, and from the private sector.

Information management, monitoring and evaluation

The DPE Oversight and Control Department supervises, monitors and controls the execution of DPE programmes. It visits schools across the country to control compliance with policies and regulations and adequate financial management. The department also oversees financial reporting and addresses complaints related to programmes. On the other hand, the DPE Planning and Evaluation Department prepares quarterly reports on the implementation of the annual operational plan, including the number of beneficiaries, financial transfers, and budget execution. It also regularly carries out beneficiary perception and other studies.

At the school level, the School Education Board is responsible for recording and reporting information related to the programme. A standard financial report must be submitted every 6 months. The accounting system is composed of four books: the School Education Board’s Minutes Book, in which adopted resolutions such as the contracting of school canteen workers and food suppliers are recorded; an inventory book of all items purchased with FODESAF funds; an accounting book - a legal document that records all the bank account financial flows; and a budget follow-up. These books are controlled by MEP’s Internal Audit division.

The school Director is responsible for monitoring the number of beneficiaries and the type of meal provided (lunch, breakfast or snack) daily. To help achieve this, teachers fill out a daily attendance sheet.

Monitoring and evaluation so far has focused on financial information. However a more comprehensive monitoring and evaluation system would be required to monitor compliance with the guidelines and measure PANEA results. DPE is advancing in this direction and has defined a set of indicators to monitor coverage (percentage of students benefiting from school feeding); completion (percentage of beneficiary students that complete the school year); achievement (percentage of beneficiary students

6 Health promotion and education (nutrition and food education, peace promotion and violence prevention); Healthy Environments (waste recycling at school and adequate spaces for physical activities); and Health Services (school canteens, school gardens and physical and psychosocial health monitoring services).

7 All three agencies have Regional Directions, but in different numbers (MEP: 20; MoH: 9 and CCSS: 7).
that achieve academic objectives); **efficiency** (percentage of budget execution) and **effectiveness** (unit cost per child) (FAO: 2013).

**Food Quality Assurance and Control**

DPE, MEP Internal Audit and the School Education Boards can request food quality controls from suppliers to ensure the quality and safety of the food provided in schools; the costs of such controls are covered by suppliers.

**Funding and Budgeting**

PANE A is funded through two main funding sources, both coming from the central government: FODESAF and funds from the MEP budget. School Education Boards and PTAs also contribute to PANE A funding with funds collected through different activities.

Law 5662 that created the FODESAF in 1974 allocated permanent resources to PANE A, and allowed its expansion and sustainability over the last 40 years. FODESAF is the most important funding source of Costa Rica’s social protection programmes, and it represents nearly 1.5% of the GDP. More than 40 programmes are funded through this mechanism– including food assistance programmes such as PANE A. FODESAF resources come from two main sources: - a surcharge of 5% of total wages and salaries paid monthly by public and private employers, and an allocation in the Republic’s budget from the collection of sales tax (DESAF, Memoria 2010-2014). The Fund is administered by the DESAF in the Ministry of Labour and Social Security. FODESAF Law stipulates that at least 5.18% of FODESAF funds should be allocated to MEP for the implementation of PANE A. The budget allocated from *FODESAF to PANE A* was US$ 83.6 million in 2013 (DESAF, Memoria Presupuesto -2013).

Once FODESAF has approved the ceiling budget for PANE A, the DPE Food and Nutrition Department prepares an annual budget for PANE A, which is approved by MEP and FODESAF. A fixed amount per student is determined every year to provide a daily lunch compliant with the Regional Menu Manual. PANE A funds cover costs related to food procurement, school canteen staff salaries (including social security contributions, unemployment insurance and paid leave), kitchen utensils, equipment and maintenance, and school gardens. Canteen staff have the same social protection benefits as any public servant. On the contrary, many countries rely on community volunteer work for food preparation and distribution to school children - a hidden cost difficult to estimate. Food procured with FODESAF funds is distributed exclusively to beneficiary students.

As shown in Table No. 1, the total budget allocated from FODESAF and MEP to PANE A in 2012 was US$ 86.3 million for 612,849 pre-school, primary and secondary school students. The estimated cost per child per year was US$ 140.82. In 2013 the budget rose by 37% to US$ 118.4 million, with an estimated cost per child per year of US$ 175.81.

<table>
<thead>
<tr>
<th>Year</th>
<th>Executed Budget (MEP- FODESAF) In million US$</th>
<th>No. of Beneficiaries</th>
<th>Estimated cost per beneficiary in US $</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>86.3</td>
<td>612,849</td>
<td>140.82</td>
</tr>
<tr>
<td>2013</td>
<td>118.4</td>
<td>673,445</td>
<td>175.81</td>
</tr>
</tbody>
</table>

*Source: Authors, with information from MEP, Memoria Institucional 2006-2014 and PANE A indicators 2012 and 2013 available on FODESAF webpage fodesaf.go.cr (accessed on 16 June 2014).*

8 US$ 1 = 505.89 colones – Annual average Exchange rate on the last day of each month of 2013. Banco Central de Costa Rica (BCCR).
In 2012, 80% of funds were allocated to food, 13.6% to canteen staff, 5.7% to equipment and maintenance and 0.7% to school gardens (table 2). In 2013, resources allocated to food rose to 83.5% of the total budget, due to universal coverage in pre-primary and primary schools.

Table 2: PANEA -Annual budget executed by destination

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Budget</th>
<th>Food</th>
<th>School Canteen Staff</th>
<th>Equipment</th>
<th>School Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>86.3</td>
<td>69</td>
<td>11.7</td>
<td>5.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>80%</td>
<td>13.6%</td>
<td>5.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>2013</td>
<td>118.4</td>
<td>98.8</td>
<td>14</td>
<td>4.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>83.5%</td>
<td>11.8%</td>
<td>4.1%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Source: MEP, Memoria Institucional 2006-2014, San José, Costa Rica

In the past few years, financial efforts have been made to equip participating schools with dining rooms compliant with MoH standards and the School Canteens Standards Manual. However, additional funding is required to replace kitchenware and equip schools in rural and urban areas.

The allocation of funds for each school is done at the central level by DPE, based on the targeting and priority criteria (see Programme Design and Implementation), the number of beneficiaries and the established amount per child. DPE submits the financial requirements for each school to the MEP School Education Boards Management Directorate, who requests the disbursement to the Ministry of Finance. Funds are directly transferred to School Education Boards’ bank accounts (since 2008, they must have an account dedicated to PANEA funds). Each School Education Board must have legal status and be registered in the Public Registry to open a bank account.

School Education Boards with the schools’ Directors prepare and approve a draft budget for the use of DPE resources. The budget is approved by the Regional Directorate of Education.

PANEA funds are complemented by local resources generated by the School Education Board, for instance from PTA activities; school gardens; school cafeteria concessions; non-beneficiary children, teachers and school personnel canteen contributions; and Non-Governmental Organization and private sector donations. These funds are used to procure additional equipment and complement the food procured with PANEA funds. The School Education Board is also accountable for and must report on the use of these additional resources. A FAO study estimated that the contribution of School Education Boards and PTAs is 5% of PANEA’s total budget. (FAO: 2013).

Community Participation

Communities play a central role in PANEA implementation, mostly through the School Education Boards, and also through other structures including the School Food and Nutrition Committees (see box 1) and PTAs.

School Education Boards have been regulated by Decree since 2003 (Poder Ejecutivo, 2003). They are both Municipal council delegations and auxiliary bodies of MEP that ensure the integration of communities and educational centres. They are composed of members of the community nominated by Municipal councils, in consultation with education authorities and high school Directors for High School Education Boards. Each School Education Board has its own rules of operation and meets once or twice per month. The school director participates in the discussions but does not have decision power.

School Education Boards, in coordination with each Director, PTA and School Food and Nutrition Committees, are in charge of overall PANEA management, including procuring the food and managing the food supply, hiring and managing the canteen’s staff, organising the food distribution, and quality control. They are responsible for keeping accounting books and are accountable to DPE for fund
management. Finally, they should promote the active participation of community members in the workings of the school canteen.

**Evidence of Programme Impact**

The PANE A operation was evaluated three times between 1987 and 2000. These assessments were important because they set the basis for modernizing PANE A.

The first evaluation was conducted in 1987 in the context of the change from the School Meals Programme (PROCE) to PANE A and the transfer of school feeding management responsibility to the Ministry of Education, which involved a comprehensive technical and administrative assessment of the programme. The second evaluation, called “Operational Research on Food Based Programmes” was done in 1990 with technical assistance from INCAP/OPS and USAID funding (INCAP/IOPAG, 1990). The objectives were to document management processes and to identify problems and possible solutions to improve management and coordination, and consequently implementation efficiency (Vargas. A, 2011). The last evaluation was conducted by UNDP between 1998 and 2000 in the context of its Equity in Education project. The evaluation covered a set of social programmes in support of teaching and learning. Regarding PANE A, the evaluation recommended, among others, to move the programme under the responsibility of the new DPE; to review the beneficiary selection criteria with the participation of school staff, to consider how PANE A complemented other school-based social programmes such as scholarships to maximise impact; to consolidate the information management system to link impact evaluation with beneficiary tracking; to systematically implement hygiene norms and regulations; to review and improve the norms for pre-packed, processed foods; to develop implementation guidelines and training packages; and to estimate the actual cost of the programme. Most of these recommendations were progressively implemented, as shown in this case study (Céspedes R. Edgar, 2000). Most of these recommendations were gradually implemented, as shown in this case study.

More recently, in 2007 the University of Costa Rica evaluated PANE A’s impacts regarding its three main objectives: improve school children’s nutrition, school attendance and performance. The evaluation highlighted the difficulty in assessing nutrition impacts in the absence of a nutrition surveillance system in schools, and recommended systematic monitoring of the programme’s nutrition results. Beneficiaries agreed that the programme had positive effects on school attendance and achievement, and 74% of them thought it was an essential contribution to family well-being (Universidad de Costa Rica: 2007). In addition, 77% of respondent mothers had a positive opinion of the food quality and service frequency. The evaluation found a high rate of budget execution (95% of funds allocated to School Education Boards), and recommended improving the monitoring and evaluation system at the central level, the infrastructure and kitchen equipment and allocating funds to do so.

**Discussion and Conclusions**

One of the oldest programmes in the continent, Costa Rica’s PANE A is a sustainable programme backed by strong political support and a consolidated policy framework. Its funding is secured by law, and programme operation is regulated by a number of decrees and guidelines; this has ensured quality and consistent service delivery over time.

Since it began, school feeding in Costa Rica has developed within the framework of social protection and school health and nutrition. From 1976 on, it has been funded through FODESAF, the main social protection funding mechanism. It is linked to the country multisectoral School Health and Nutrition
Programme, which has provided the basis for strong multisectoral linkages in its management, design and implementation. PANEA should also contribute in the future to the national efforts to prevent, reduce and control the growing prevalence of overweight and obesity.

PANEA is a targeted social programme based on vulnerability criteria; however, coverage has expanded over time and by 2013 was universal in pre-primary and primary education. The beneficiary selection process in secondary schools will be reviewed in 2014 with the objective of simplifying the task at the school level. FODESAF is a stable and reliable funding source for the programme, which has contributed to its sustainability over time. Since 2009, the fund also has played an important role in the strengthening of information management systems and in programme evaluation.

While the programme’s impact has never been evaluated, process evaluations indicate that PANEA contributes to improving school-children attendance and achievement. DPE has developed a set of indicators to monitor coverage, students’ completion and achievement and programme efficiency and effectiveness, which should inform decision making in the future. An important next step could be to introduce a nutrition surveillance system to measure the programme’s impact on school children’s nutritional status.

DPE seeks to continually improve school canteens to guarantee the quality of services provided to school children. Some model schools have high quality school canteen equipment and infrastructure; however, some schools have inadequate eating spaces that do not meet PANEA quality standards, especially in isolated rural areas, and this is a priority area of improvement for the coming years.

Costa Rica is also exemplary due to its level of decentralisation and community participation. School Education Boards are the main actor at the school level. Care has been taken to standardize processes and develop national guidelines to guide implementation and assure quality and consistent service delivery. PANEA, through the INA, trains the canteen workers in food handling and preparation. School Education Board and School Food and Nutrition Committee members are also trained on healthy food and nutrition. However, School directors and School Education Boards would require additional training in management and financial skills to fulfil their functions. It would also be important to strengthen strategies for social participation in PANEA’s management oversight and to increase DPE monitoring visits to closely monitor transparent food procurement and management processes. The example of Costa Rica shows that a highly decentralised programme requires significant management training at the local level and a high level of community participation.

Abbreviations and Acronyms

CCSS: Costa Rican Social Security Fund (Caja Costarricense de Seguro Social)

DESAF: General Directorate of Social Development and Family Allowances (Dirección General de Desarrollo Social y Asignaciones Familiares)

DPE: Department of Equity Programmes (Dirección de Programas de Equidad)

FODESAF: Social Development and Family Allowance Fund (Fondo de Desarrollo Social y Asignaciones Familiares)

INA: National institute for vocational training (Instituto Nacional de Aprendizaje)

INCAP/OPS: Instituto de Nutrición de Centroamérica y Panamá

MEP: Ministry of Public Education (Ministerio de Educación Pública)

MoH: Ministry of Health (Ministerio de Salud)
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