WORKING DOCUMENT

School Meals Case Study: **Burundi**

Prepared by the Research Consortium for School Health and Nutrition, an initiative of the School Meals Coalition

Submitted by: The National Technical Committee of the Cost-Benefit Study of School Food

Authors: Mr BIGIRIMANA Liboire (National Director of School Canteens), Mr NDAYISHIME Dominique (Director General of Budget and Tax Policy), Dr SIMBOMANA Célestin (Permanent Executive Secretary of the Multisectoral Platform for Food and Nutrition Security), Mr NDAYISHIYE Nicholas (Director General, National Institute of Statistics), Mme NYANDWI Vestine (Director General of Agriculture), Dr NKEZABAHIZI Fidèle (Director of the Integrated National Food and Nutrition Program), Mr NIMUBONA Arcade (Permanent Executive Secretary of the National Council for Social Protection), Prof NTUNZWENIMANA Mélance, (Coordinator of the East African Nutritional Science Institute), Prof NDAYITWAYEKO Willy Marcel (Professor at the University of Burundi), Prof NKENGURUSTE Jacques (Professor at the University of Burundi), Mr NDEREYIMANA Serges (Permanent Executive Secretary of the CNEFPF).

November 2024

Table of Contents

Historical background

Burundi is still hard at work designing and implementing strategies and actions to develop its education system, including: Burundi's Vision, "Emerging Country in 2040 and Developed Country in 2060", Burundi National Development Plan (*Plan National de Développement du Burundi*, PND) 2018-2027, Education Sector Plan (*Plan Sectoriel de l'Education*, PSE) 2022-2030, National Social Protection Policy (2024-2032), National School Health and Nutrition Strategy (2024-2027), National School Feeding Programme (*Programme National d'Alimentation Scolaire*, PNAS) 2018-2032. The PNAS in Burundi pursues the following main objectives:

- Contribute to a significant increase in access to and retention in preschool and elementary school in rural areas, particularly for girls;
- Contribute to improving school results, especially among girls enrolled in assisted schools;
- Contribute to improving schoolchildren's attendance, concentration and performance in class by alleviating temporary hunger;
- Contribute to the development of the rural economy by creating a permanent and secure market for local products.

Despite the multi-sectoral benefits of the PNAS, the government's commitment and political willingness to implement it faces several challenges, mainly linked to insufficient funding. In addition, the lack of data on cross-sectoral costs and benefits is a factor influencing the low investment, as well as the low coverage of the PNAS, which stands at 24%. This study aims to contribute to:

- Documenting PNAS best practices;
- Knowing the value of school food and better understanding the importance of its expansion;
- Making evidence-based decisions and commitments to improve the effectiveness of the PNAS.

Country profile

Burundi is a country located between East and Central Africa. It is bordered by Rwanda to the north, the United Republic of Tanzania to the south and east, and the Democratic Republic of Congo (DRC) to the west. It is part of the Great Lakes region, with a surface area of 27,834 km^2, including 2,700 km^2 of lakes and 23,500 km^2 of potentially agricultural lands. It is mainly made up of vast plateaus with an average altitude of 1,500 to 2,000 m above sea level, with an equatorial climate and two distinct seasons: the dry season and the rainy season. Administratively, Burundi is subdivided into 17 rural provinces, the mayor's office of Bujumbura and 119 communes. This administrative division will remain in force until the 2025 elections. At the end of this period, Burundi will be subdivided into 5 provinces, 42 communes, 447 zones and 3,036 hills or districts.

Population and economics

Burundi is one of Africa's most densely populated countries, with 71 inhabitants/km^2 in 2023. Of this population, 86% lives in rural areas. According to the results of the third Burundi Demographic and Health Survey (EDSB III 2016-2017), 58.5% of the population is under 20, of which 48.7% is under 15 and 17.2% under 5. The total fertility rate averages 5.5

children per woman. Population growth is particularly reflected in the increase in the number of young people.

Table 1 : Burundian demographic and economic indicators

Total population (2022)	Total number of people aged 0-19	Total number of people employed in agricultural sector	GDP growth (annual %) (2022)	GDP per capita in 2022 (USD)	Inflation/ Consumer prices (%) in 2022
12,889,576	7,661,977	10,477,917	1.8	259.0	18.8

Source: World Bank, Overview of Burundi.

With 80% of the population employed in the agricultural sector, Burundi is a low-income economy. Since independence in 1962, the country has experienced several socio-political crises, most recently in 2015. Each of these has led to a decline in economic growth. In recent years, Burundi has experienced a difficult economic situation, marked by macroeconomic imbalances. To compensate for the loss of external resources, there has been an increase in the mobilization of domestic resources, but this has not been sufficient to meet a steadily rising social demand, driven by sustained demographic growth. Recent shocks (COVID-19, climatic hazards, war in Ukraine, etc.) have interrupted a still-fragile economic recovery and intensified macroeconomic imbalances. In 2022, economic growth had fallen to 1.8%, compared with 3.1% in 2021, due to a modest performance in industry and services. The overall inflation rate reached 18.8% in 2022 and remains high because of rising food and hydrocarbon prices on the global economy caused by the war in Ukraine.

Education

The structure of basic education (preschool and fundamental) by age group is as follows:

- non-compulsory 3-year preschool up to age 5;
- 9-year fundamental education comprising 4 classical cycles:
  - Cycle 1 (grades 1st- 2nd) from age 6,
  - Cycle 2 (grades 3rd - 4th),
  - Cycle 3 (grades 5th - 6th),
  - Cycle 4 (grades 7th - 8th - 9th).

Passage from one grade to another within a cycle is conditional on passing the examinations organized in the lower grade. At the end of the fourth cycle of fundamental education, a national examination for certification and orientation to post-basic education is organized for candidates regularly enrolled in 9th grade. The number of learners by age and gender for the 2021-2022 school year is shown in Annex 1.

Table 2 : Breakdown of schoolchildren by gender and/or age

Total number of basic school pupils	Total number of schools	Average class size	Number of children attending school meals	Percentage of children eligible for free school meals
2,677,920	4,168	75	712,243	2,800,000

Source: Statistical Yearbook 2021-2022

Performance and internal efficiency of basic education system

A high rate of access and admission to preschool and fundamental education: Burundi has made huge progress in terms of access, enabling many children to attend preschool and

fundamental education. Indeed, the gross preschool enrolment rate, while still low, has risen from 8.0% in 2015 to 13.4% in 2021. The gross rate for fundamental education rose from 121% in 2019 to 130% in 2022, and the gross enrolment rate was estimated at 113.8% in 2021.
A school environment not conducive to learning: according to data from the State report on the education system (*Rapport d'État sur le système éducatif*, RESEN) in 2021, the majority of primary school pupils attend school in less-than-optimal conditions, characterized by a lack of basic infrastructure and equipment, which has a negative impact on teachers' performance and learners' results. In 2019, very few schools had basic amenities: 94% were without electricity, 61% without water points, 19% without hand-washing facilities, 90% without fences, 13% used borrowed classrooms and 7% had temporary classrooms and an insufficient number of lavatories sensitive to gender and menstrual care (2.2% at preschool and 5.5% at fundamental level). The 2021-2022 statistical yearbook of the Ministry of National Education and Scientific Research (*Ministère de l'Education Nationale et Recherche Scientifiqu*e, MENRS) shows that there is a persistent and widespread shortage of desk benches, with an average of 4 pupils sharing a desk bench designed for 2.
Textbook distribution in need of improvement: Burundi's education system is faced with an incomplete supply of textbooks, particularly in the public sector where priority is given to pupils in cycle 4 (grades 7^{th}-8^{th}-9^{th}) over those in cycles 1 and 2. A worrying nutritional situation linked to household poverty also weighs on children's schooling. The PNAS covers only 9 provinces for 745,000 children in 889 fundamental schools, i.e. 24% of pupils (1 child in 4, in only 19% of schools). Ultimately, inequitable and incomplete access to textbooks and other teaching materials at preschool and fundamental school levels, as well as poor coverage, contribute to these disparities.
A low completion rate: completion of fundamental education remains a thorny problem for the education system. In 2020, out of 10 children who entered this cycle, just under 5 (48.2%) had completed the first three cycles, and only 3 (27.4%) had completed the fourth cycle. This low completion is the result of the low retention of children in the system, characterized by high and rising repetition rates (25.7% in 2020) and dropout rates (14.1% in 2020). This has a negative impact on internal efficiency in fundamental education, which was estimated at 34% in 2019, compared with 44% in 2014. One of the strategies to improve the attendance, retention and success of fundamental school pupils has been the introduction of the PNAS.

Food security, nutrition and health

- **Food insecurity**: 41.2% according to the Global Analysis of Vulnerability, Food Security and Nutrition in Burundi 2023 (*Analyse Globale de la Vulnérabilité, de la Sécurité Alimentaire et de la Nutrition au Burundi,* AGVSAN 2023). According to this report, national food insecurity was 27.8% in 2008, 32% in 2014, 44.6% in 2018 and 41.2% in 2023. Of the 41.2% of people suffering from food insecurity, 32.3% (4,229,604 people) were moderately food insecure and 8.9% (1,169,081 people) were severely food insecure. Food insecurity was higher in rural areas (44.0%) than in urban areas (17.8%). Similarly, female-headed households were more affected by food insecurity (50.0%) than male-headed households (39.1%).
- **Stunted growth in children aged 5 to 19**: the prevalence of chronic malnutrition remains very high at 55.9% (AGVSAN, 2023), meaning that more than one child in two suffers from stunted growth. This prevalence remains similar to that obtained in the SMART 2022 survey, which was 55.8%. However, the prevalence of severe chronic

malnutrition has decreased slightly but not significantly, from 25.0% in 2022 to 23.4% in 2023.

- **Micronutrient deficiency in children aged 5 to 19**:- *not available.*
- **Underweight children aged 5 to 19**: 9.7% boys, 4.8% girls (GNR, 2016).
- **Overweight children aged 5 to 19**: 6.2% boys, 14.2% girls (GNR, 2016).
- **Obesity in children aged 5 to 19**: 1.1% boys, 2.4% girls (GNR, 2016).

Design and implementation of the school meal programme

Description

Following the signing of the basic agreement in October 2008 entrusting the World Food Programme (WFP) with the responsibility of supporting the government in setting up, supplying and managing school canteens, the WFP has consistently demonstrated its commitment to supporting the National School Feeding Programme.

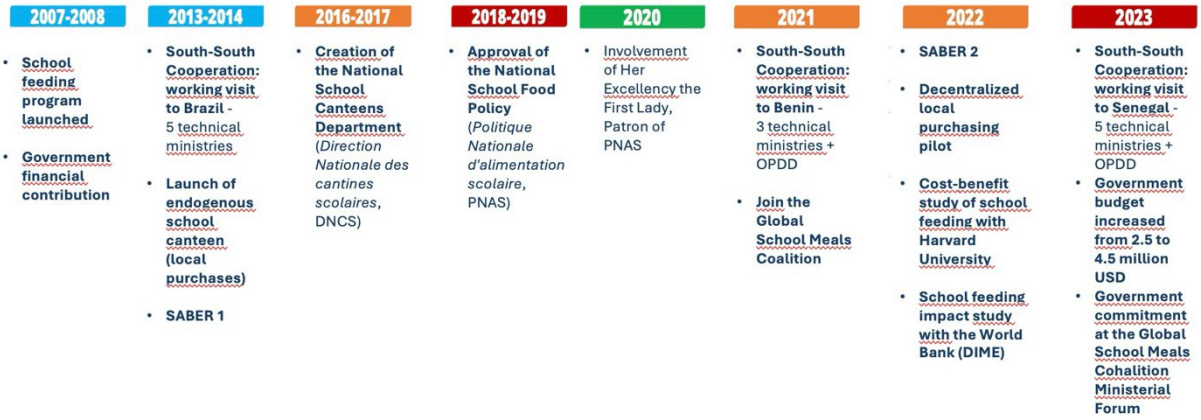

Figure 1: School feeding evolution and government commitment

This reflected in the creation of a budget line for school feeding in the Finance Act. Funding was increased from $4.5 million in 2023 to $7.5 million in 2024. The integrated, multi-sectoral approach began in 2013 with the official launch of endogenous school canteens.

In 2015, the Government set up an Intersectoral Committee for the School Feeding Programme through Endogenous School Canteens. Furthermore, in 2016, the Ministry in charge of Education set up a National School Canteens Department (*Direction Nationale des Cantines Scolaires*, DNCS) whose major role is to coordinate all activities relating to the School Feeding Programme. The education sector specifically handles the School Feeding Programme in preschool and fundamental public schools, offering schoolchildren and all students who have turned up for class a hot midday meal. In 2018, the Government validated and endorsed the National School Feeding Programme (PNAS). In the same year, the Ministry of Education committed to promoting school feeding through the Transitional Education Plan.

Objectives

The vision of the Government of Burundi, through the Ministry of Education, is to ensure that all schoolchildren enjoy good nutritional health necessary for learning, by providing a healthy

and balanced diet in schools, prepared using exclusively local products and respecting nutritional norms, so that hunger is not a barrier to education. As a result, the Ministry's mission is to promote, coordinate and implement initiatives linked to the PNAS. Based on these fundamental elements and other documents, six strategic objectives have been identified to implement the PNAS.

In the short term, two strategic objectives have been defined:

- Raise awareness and increase consumption of adequate, nutritious and locally available foods to reduce food insecurity and malnutrition, and improve school-age children's enrolment and attendance;
- Promote and provide technical support for agricultural and local community development.

Over the long term, four strategic objectives complete the plan:

- Improve school completion and equitable learning for schoolchildren;
- Establish a stable market for local foodstuffs produced by small holder farmers and their cooperatives;
- Promote partnerships and multi-sector coordination for complementary support and effective programme implementation;
- Strengthen governance and accountability in programme implementation.

Coverage

The PNAS covers 9 provinces out of 18, namely Bujumbura, Bubanza, Cibitoke, Gitega, Kirundo, Muyinga, Makamba, Ngozi and Ruyigi, for a total of 745,000 children in 899 schools, i.e. 24% coverage. The number of children by province, cycle and gender is shown in Annex 2.

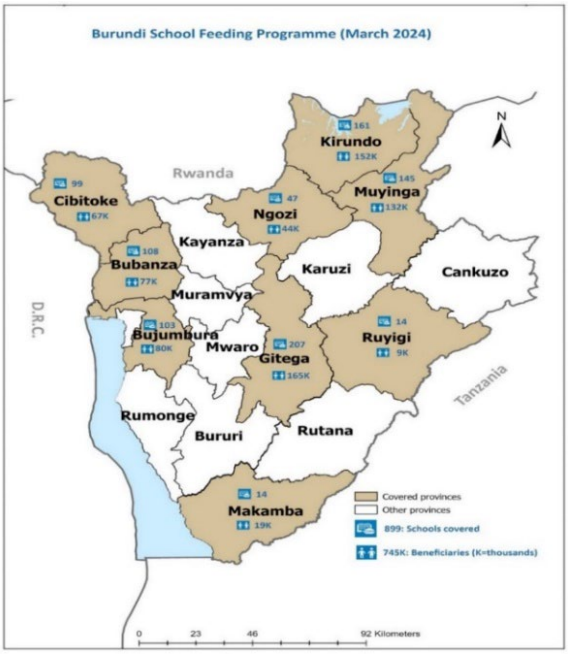

Figure 2: School canteen programme coverage (March 2024)

Targeting

Setting up and managing a canteen for the benefit of school's learners is part of a project cycle that includes a planning and implementation phase. Indeed, the need to set up a school canteen generally stems from the need to solve a specific problem or, on the contrary, from

the emergence of new possibilities. The impulse may also come from well-intentioned individuals or associations, parents' associations, or the teaching or supervisory staff of the education system. External agencies, depending on their mandate and field of expertise, play a catalytic role. These include the WFP, BDD Caritas Bubanza, World Vision International, and Welthungerhilfer.

The targeting selection criteria can be summarized as follows:

- rates of food insecurity or poverty, with repercussions on students' learning conditions;
- low school enrolment rates;
- low learner attendance rates;
- drop-out rate at fundamental level;
- drop in the level of learners linked to learning conditions;
- long distance between school and home;
- time constraints (i.e. afternoon classes mean that learners who live far away must spend the day without eating, and those who return at midday are late without having eaten).

Meal type

As validated by the government in November 2018, the PNAS proposes the nature of school meals and their distribution in the form of hot, healthy and nutritious meals to prevent malnutrition, prepared using local products respecting the food preferences of the beneficiaries. Currently, practices are limited to the distribution of hot meals consisting of a daily ration of 150 g of cereals (rice, fortified maize flour), 40 g of pulses (beans, peas, lentils), 10 g of fortified vegetable oil and 3 g of iodized salt. For a nutritionally sensitive school meals, fresh vegetables (amaranth, chinese cabbage, sweet potato, etc.) are grown in school gardens and/or brought in by parents. Milk and mushrooms have also been introduced. Some pupils in the provinces of Ngozi and Gitega receive 250 ml of UHT milk a day, 2 days a week.

Biofortified beans, high-nutrition composite flours and fresh milk will be introduced in pilot form, in addition to fortified whole meal maize flour, to reinforce endogenous nutrition-sensitive school feeding. Meals are prepared by parents and eaten at school by beneficiaries. In 2024, a pilot phase of the PNAS included the distribution of a breakfast consisting of a porridge prepared with high-nutritional value wholegrain composite flour. A recipe guide for the preparation and cooking of school meals has been approved by the Ministries of Health and Education. This guide is made up of 12 basic menus and sauces presenting a wide range of meals to be made available to schoolchildren and will be used in proportion to the means available to ensure the necessary supplies.

Nutritional norms

A combination of food groups should be consumed daily to ensure a healthy diet and prevent malnutrition (Annex 3). To achieve this, the PNAS plans to provide a hot meal to all pre-school and fundamental school children on school days. The meal must be nutritionally adequate, socially appropriate and acceptable, practically feasible and sustainable.

According to the WFP/UNESCO/WHO School Feeding Manual, school meal programmes should have a **nutritional objective** and therefore include products that provide the **Recommended Dietary Allowance** (RDA) for macros and micronutrients. The RDA depends on whether meals are offered in schools in full-time or part-time, as it is assumed that children

also receive food at home outside school hours. Programmes with a nutritional objective will aim to provide higher micronutrient RDA than other programmes. In Burundi, school meals in part-time schools must cover 30-45% of the daily energy and micronutrient requirements for pre-school and fundamental school children (Table 3).

Table 3: Recommended Dietary Allowances (RDA).

	Energy (Kcal) *Estimated % of RDA to be supplied*	Micronutrient requirements for all school meals *Estimated % of RDA to be supplied*	Targeting micronutrient deficiencies *Estimated % of RDA to be supplied*
Part-time school	30-45% ECOFO: 555-830 Kcal Preschool: 390-585 Kcal	30-45%	70% minimum
Full-time school	60-75% ECOFO: 1,110-1,390 Kcal Preschool: 780-975 Kcal	60-75%	80% minimum

Source: WFP/UNESCO/WHO School Feeding Manual, 1999.

For macronutrients, requirements are aligned with intake targets according to the dietary guidelines of the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO). For micronutrients, fortification is carried out in accordance with decree nº100/68 of 2015, which specifies in article 51 "The Burundian Bureau of Standardization and Quality Control, in collaboration with the Ministry of Public Health and the Fight against AIDS, and the Ministry of Agriculture and Livestock, makes available detailed food fortification regulations".

Food procurement

The PNAS relies on different supply models, as some products are not available on the local market and must be imported (i.e. iodized salt, vegetable oils). As a result, schools obtain their supplies of commodities through both local purchases and imports.

- The classic centralized model, where the main foodstuffs are purchased on regional (Community of East African States, Uganda, Tanzania, Kenya) and/or international markets.
- The local purchasing model, where cereals (maize and rice), pulses (beans) and UHT milk are purchased locally through cooperatives of small-scale producers and/or traders. In 2023, 4,600 tons of foodstuffs (rice, beans, maize, milk) were purchased for schools canteens from cooperatives of small local producers, for a value of $5 million injected into the local economy.

Two types of local purchasing co-exist, with the following characteristics:

<u>Centralized local procurement or in kind modality</u>

The WFP buys the main foodstuffs directly from traders and small producers' cooperatives, following a restricted call for tenders to food suppliers already listed in the supply database. Food quality analysis is carried out by foreign laboratories based in Kenya. Once the quality has been checked, the foodstuffs are delivered to the cooperating partners, who distribute them to the schools, and the WFP pays the suppliers directly.

Decentralized local procurement or commodity voucher modality

In line with the PNAS long-term objective of expanding homegrown school meals based on local products and transferring ownership and management of operations to the government by 2032, since October 2022, in collaboration with the DNCS and the Provincial Departments of Education (*Directions Provinciales de l'Education*, DPEs), the WFP has initiated the "decentralized local purchasing model" pilot trial, which consists of linking schools via the DPEs to cooperatives of small local agricultural producers, creating a continuous demand to stimulate local economies. WFP-funded DPEs work with local agricultural cooperatives, which in turn deliver foodstuffs directly to schools after safety and quality control by the Burundi Bureau of Standards. Direct delivery to schools by the cooperatives and payment to the cooperatives are managed by the DPEs. In 2022-2023, this model has just been tested in the provinces of Bujumbura, Bubanza and Muyinga, for a total amount of USD 1,779,414 transferred to the DPEs for the purchase of 1,394 tons of food from 12 cooperatives of small-scale producers to serve 51 schools with around 45,000 pre-school and primary school pupils. Based on the positive results, lessons learned and recommendations, the government is committed to the gradual scaling-up of the "decentralized local procurement model". As of October 2024, 203,414 schoolchildren in 261 schools are under this model, supported by 27 cooperatives of small-scale producers. The Government's objective is to reach 50% of the 885 schools currently supported by WFP by 2027. A simplified guide describes the procurement processes for these decentralized local procurement commodity voucher.

Several years ago, the WFP introduced the construction of kitchen shelters and improved stoves, which make cooking easier and considerably reduce the use of firewood. Between 2020 and 2024, 926 improved stoves, 320 kitchen shelters, 103 rainwater harvesting systems, and 8 boreholes/water supply systems were built in schools. To date, 278 new schools are due to receive these new improved stoves in 2024, in addition to the 122 schools already assisted since 2023.

To diversify school meals, 15 schools have received hydroponic greenhouses for improved market gardening, and the construction of a further 24 greenhouses is planned over the coming years.

The PNAS also relies on private partners, cooperatives and companies to produce fortified flour, the construction of improved stoves, and the manufacture and distribution of briquettes for cooking.

Legal framework and public policy evolution

The implementation of the PNAS is in line with Sustainable Development Goals 1, 2, 3 and 4, as well as with Burundi's new vision 'emerging country 2040 and developed country 2060' in its 2nd and 3rd pillars focusing on economic efficiency and social equity. The PNAS is supported in the National Development Programme (2018-2027) in its strategic orientation 2 on human capital development.

This commitment to feeding children through school canteens is reflected in both the national strategic nutrition plan and the agricultural investment plan. The PNAS contributes directly and indirectly to the realization of the second-generation multi-sectoral strategic plan for food security and nutrition (2e *Plan Stratégique Multisectoriel de Sécurité Alimentaire et de Nutrition*, PSMSAN II). The first objective of this plan is to increase the availability of and access to healthy, diversified food. Its third objective also stipulates the promotion of practices conducive to optimal nutrition, hygiene and basic sanitation.

The PNAS is best implemented by coordinating activities involving three ministries: the Ministry of National Education and Scientific Research, the Ministry of Finance, Budget and Economic Planning and the Ministry of the Environment, Agriculture and Livestock. However, there is no legal commitment defining the framework within which the PNAS should operate. The fact that there is no specific law on school feeding means that its components are scattered across different rules and hierarchies. Provisions relating to school feeding can be found in the laws of certain entities, as well as in regulations, manuals and guidelines. This leads to difficulties in accessing a specific regulatory framework to define budgets and policy organization in annual or multi-year planning as appropriate. In addition, it leaves programmes vulnerable to the interests and priorities of individual government departments, leaving unclear the roles and responsibilities of each sector, actor or institution in the development of this important action in favor of food and nutrition security, principally the nutrition of school-age children.

Coordination is provided by the Ministry of Education, but implementation requires the involvement of several ministries, hence the need to set up an inter-ministerial committee. Implementation is decentralized at provincial, communal and school levels. The PNAS public policy is in line with the willingness of the Government of Burundi, which in 2016 created a directorate with well-defined terms of reference with institutional anchorage in the cabinet of the Ministry of National Education and Scientific Research. The directorate was institutionally anchored in the Minister's cabinet, and the executive power validated and endorsed the PNAS as a programme for strategic orientation and dialogue with development partners.

Costs of implementation

The PNAS receives contributions from the government, development partners and communities. According to the cost-benefit study of school feeding using data from the PNAS 2023 analysis report (MENRS, 2023a) carried out by the African School of Nutrition and Food Sciences (*École Africaine de Nutrition et des Sciences des Aliments*, EANSI), the cost per meal is estimated at 739 Burundian Francs (Fbu). Assuming 180 meals per year, this equates to a budget of 144,844 Fbu per year per pupil, or US$ 51 per year per pupil.

Table 4: Total costs of programme implementation

Number of children benefiting in 2024	745,000
Average cost of food (Fbu)	616
Non-food costs (Fbu) related to field activities: distribution and monitoring of foodstuffs in schools, purchase of kitchen utensils, pallets, scales, etc.	123
Cost of a school meal (Fbu)	739
Cost per child per year (Fbu)	144,844
Estimated number of school feeding days per academic year	180

Source: Analysis of data from the Ministry of National Education and Scientific Research (2023)
Fbu: Burundian franc (1 Dollar = 2,906 Fbu on October 25, 2024).

The impact evaluation of the School Feeding Programme carried out by the World Bank experts in 2023 made a comparative analysis between the decentralized local procurement commodity voucher model and the centralized in kind model. According to the final report, schools under the commodity voucher model have a higher number of meal days, averaging 13 days per month, versus 7 days in the in kind model. In addition, the commodity voucher model is less costly (US$ 40.61 per child per year), compared with US$ 46.85 in the in kind

model. A significant proportion of the cooperatives' income comes from sales to schools, demonstrating the significant economic potential for local farmers and cooperatives.

Financing

Today, PNAS is essentially funded on three levels:

- The contribution of the Government of Burundi through a budget line included in the Finance Act for each budget year;
- Contributions from development partners: the Netherlands, the Principality of Monaco, Russia, Japan, China, Kerry Group, the World Bank, the Global Partnership for Education, the French Development Agency, Education Cannot Wait, and USDA/Mac Govern Dole;
- Community contributions in kind through a variety of inputs: firewood, water and vegetables. In addition to these in-kind contributions, the communities help prepare and distribute meals to the students.

Despite the considerable efforts of the various stakeholders, difficulties persist, as demands from the field are increasing. Indeed, the PNAS targets a population of around 3 million beneficiaries, whereas current funding covers just over 730,000 schoolchildren, i.e. a quarter of potential beneficiaries.

Given that school meals lies at the intersection of several sectors, key stakeholders such as the Ministries of Health, Agriculture and Livestock, Finance and Social Protection should have the funding to support school meals, even to the extent of providing funding for their deconcentrated structures. The current programme requires a total annual budget of USD 40 million, but confirmed and projected contributions for the 2024/2025 school year are estimated at USD 17.5 million. The total budget required for universal coverage of 3 million children with a quality programme is estimated at USD 150 million per year. The PNAS must adopt a financing strategy detailed in the lessons learned.

Monitoring and evaluation

Monitoring and evaluation of the PNAS are key aspects of the work of the DNCS, which acts as an interface between the government and partners, and as a monitoring and coordinating body for all interventions. Implementation of the PNAS is monitored and evaluated through annual reviews in each of the intervention provinces, and an annual national review organized by the DNCS on school feeding. All school feeding stakeholders, communities, leaners representatives, NGOs, sectoral ministries and development partners take part in these reviews. In addition to these reviews, school missions are systematically organized by DNCS on a regular basis and, where appropriate, joint field missions between DNCS and partners are organized to:

- Provide updates on strategy implementation, identify weaknesses and enable corrective actions;
- Provide comments on the progress made in achieving the objectives stated in this document and for the socio-economic development targets indicated;
- Inform decision-making and guide investment and resource allocation for PNAS initiatives;
- Report to the public and the Government on progress made in implementing the PNAS.

Other stakeholders also have responsibilities in programme monitoring and evaluation. Their specific roles are detailed in Annex 4.

Lessons learned and best practices

Through the PNAS, the government aims to have a positive impact on improving school indicators, the lives of producers by improving their incomes, and the social protection and health of its inhabitants.

In 2021, an impact study commissioned by the Ministry of Education and carried out by EANSI on school indicators and the incomes of cooperatives and production associations explicitly reviews the impact of the PNAS in many respects. The evaluation of the school canteens was based on a survey of households, school principals and the management committee, and finally of the heads of cooperatives benefiting from purchases made by the WFP under the "*Purchase For Progress*" project.

Within the framework of the PNAS, beneficiary households affirm that the direct and indirect interventions of the school canteen programme have contributed significantly to improving household living conditions and reducing food expenditure.

However, the project has led to **overcrowding in the beneficiary schools**. There is a general tendency for pupils to migrate to schools with school canteens to take advantage of the ration offered at school, which means that teachers are overloaded in schools with school canteens. PNAS-supported schools have high average enrolments and success rates, compared with schools without canteens, which have higher drop-out rates.

Despite low national coverage, the multi-sectoral impact of the PNAS on school results, social protection and local economy remains positive. According to the report "Cost-benefit study on school meals in Burundi", carried out in 2023 by the Ministry of Education in collaboration with Harvard University, the success rate is 5.1% higher, the drop-out rate is 3.6% lower and the repetition rate is 1.5% lower in schools benefiting from school meals compared with schools without canteens.

School food accounts for 8% of total expenditure and 14% of household food expenditure. The cost-benefit ratio also shows that every dollar invested in school feeding yields a return of $5.8.

<u>Several lessons have been learned from the PNAS in relation to decentralized local purchasing</u>:

- Existence of well-organized cooperatives of small producers facilitates aggregation
- Involvement of multidisciplinary provincial committees in requirements planning, call for tenders, selection of cooperatives, reception, delivery and payment
- Capacity-building for local players (provincial and district authorities) and practical experience in managing food procurement operations
- Establishing traceability between small producers and institutional demand from schools guarantees timely payment
- The number of meal days in the commodity voucher model is significantly higher (almost 76% more) than in the centralized model, reaching almost 100% of school days in March and June 2023,
- The duration of the food quality analysis process by national laboratories is shorter (8-15 days) than in the centralized model implemented abroad (4-6 weeks)

- Payment terms to cooperatives have been considerably reduced to a maximum of 15 days, compared with 45 days in the commodity voucher model
- The time taken for cooperatives to deliver food to schools has been reduced from 4 months to 1 month, compared with the traditional classic in ink WFP model
- Risk mitigation through involvement, validation/confirmation of deliveries by the provincial multidisciplinary committee

Challenges

Strategic challenges

- Low level of coverage (24%) due to insufficient funding for universal coverage; for example, there is a funding gap of USD 20 million for the 2024-2025 school year
- Lack of data on the nutritional status of schoolchildren limits the evidence of the impact of PNAS on nutrition
- Weak agricultural production and local food quality limit the PNAS's ability to supply commodities
- Delays in the process of verifying the quality of imported foodstuffs from outside the country, combined with the length of time it takes to obtain food import permits and the insufficient capacity of national analysis laboratories
- Low capacity of private maize, milk and composite flour processing units due to untimely power cuts
- High post-harvest losses
- Food inflation affects tonnages to be purchased
- Weak ownership of school feeding by communities and local authorities

Operational challenges

- Lack of access to water in schools with canteens (only 42% of schools have access)
- 95% of schools require firewood
- Damage to certain infrastructures (improved stoves, kitchen shelters) due to bad weather and wear and tear caused by misuse and lack of ownership
- Fuel availability affecting school food delivery and distribution
- Withdrawal of some cooperatives for better-priced contracts

Numerous perspectives and solutions are being considered at government level for future planning, improvement and sustainability of programmes. These are detailed in Annex 5.

References

1. ISTEEBU, 2013. Rapport des projections démographiques 2008-2030. Bujumbura. 20 pages
2. Ntakimazi P., 2001. Table ronde sur l'éducation au Burundi. Bujumbura. 17 Pages
3. GNR, 2016. Global Nutrition Report. Burundi. Consulté le 17 Juin 2024 : https://globalnutritionreport.org/resources/nutrition-profiles/africa/eastern-africa/burundi/
4. Jackson T., 2000. L'égalité d'accès à l'éduction – Un impératif pour la paix au Burundi. 53 pages.
5. UNESCO, 2002. Rapport mondial de suivi Education pour tous. Le monde est-il sur la bonne voie

6. UNESCO, 2018. La question enseignante au Burundi. Mise à jour de l'étude de 2012 orientée par l'Agenda 2030. 179 pages.
7. Programme National d'Alimentation Scolaire (PNAS) Novembre 2018.32 pages
8. Etude de l'impact du Programme National d'alimentation scolaire sur l'amélioration des indicateurs scolaires des revenus des coopératives et associations de production.82 pages
9. Analyse Globale de la Vulnérabilité, de la Sécurité Alimentaire et de la Nutrition au Burundi (AGVSAN 2023)

Corresponding author

Mr. Liboire Bigirimana
Chairman, National Technical Committee for the Cost-Benefit Study of School Food (*Comité Technique National de l'Etude Couts Bénéfices de l'Alimentation Scolaire*)
National Director of School Canteens
bigirimanaliboire@gmail.com

Required citation

Liboire, Bigirimana; Ndayishime, Dominique; Simbomana, Celestin; Ndayishiye, Nicholas; Nyandwi, Vestine; Nkezabahizi, Fidele; Nimubona, Arcade; Ntunzwenimana, Melance; Ndayitwayeko, Willy Marcel; Nkenguruste, Jacques; Ndereyimana, Serges; (2024) School Meals Case Study: Burundi *[Etude de cas sur l'alimentation scolaire: Burundi]*. Working Paper of the Research Consortium for School Health and Nutrition. London School of Hygiene & Tropical Medicine, London. DOI: https://doi.org/10.17037/PUBS.04672331

Annexes

Annex 1 - Breakdown of students by age group and gender

Age range	Girls	Boys	Total
< 6 years old	6,400	6,290	12,690
6 years old	92,138	89,606	181,744
7 years old	162,386	163,683	326,069
8 years old	165,938	163,287	329,225
9 years old	156,055	148,513	304,568
10 years old	156,418	151,166	307,584
11 years old	140,418	133,721	274,139
12 years old	135,356	130,817	266,173
13 years old	123,373	118,028	241,401
14 years old	92,286	87,199	179,485
15 years old	63,425	58,866	122,291
Total	**1,294,193**	**1,251,176**	**2,545,369**

Source: Statistical Yearbook 2021-2022, T2, p.137

Annex 2- Provinces benefiting from the school meals programme: breakdown of enrolments by cycle and gender

Provinces	Preschool		Primary		Total
	Girls	Boys	Girls	Boys	
Bubanza	245	236	37,879	36,258	74,618
Bujumbura	921	927	35,803	35,660	73,311
Cibitoke	343	319	31,802	30,339	62,803
Gitega	3,274	3,282	75,060	70,073	151,689
Kirundo	2,512	2,721	68,174	73,855	147,262
Muyinga	2,667	2,889	60,575	65,622	131,753
Ngozi	472	512	20,464	22,341	43,789
Makamba	314	252	9,167	8,803	18,536
Ruyigui	101	105	4144	4132	8482
Annual total	10,849	11,243	343,068	278,010	712,243

Annex 3 - School feeding in Burundi: food basket composition by food group

Table 5. The food group

Group	Description	Examples
Cereals and by-products	Cereals are the staple food and main source of energy in most parts of the world. They also contain proteins, B vitamins and iron.	Wheat, sorghum, maize, rice, enriched cereal flours, processed cereals.
Pulses and oilseeds	Dried pulses contain around 20% protein and are rich in B-complex vitamins and iron. Protein from pulses complements that from cereals. Oilseeds and nuts contain fewer toxins and more high-quality proteins than most pulses.	Beans, peas, lentils, peanuts, soybeans, sesame seeds, sunflower seeds.
Tubers and roots	Tubers and roots provide mainly carbohydrates. Their protein content is usually low.	Cassava, sweet potato, potato.
Vegetables and fruits	Fruits and vegetables are an excellent source of vitamins A, B and C, iron and calcium. The darker the color, whether green, yellow or orange, the higher the vitamin A content.	Wide range of fruits available, leafy greens, tomatoes, cabbage and broccoli.
Animal products	These products provide high-quality proteins.	Meat, eggs, poultry, fish, milk and dairy products (canned meat, fish and cheese, powdered milk).
Fats and oils	Oils and fats improve the palatability of food and provide a concentrated source of dietary energy. Milk fat is a rich source of vitamins A and D. Vegetable oils and fats enriched with vitamins A and D are a good option.	

Annex 4 - Responsibilities and roles of different stakeholder in programme monitoring and evaluation

Cooperating partners

- Ensure that meal preparation activities for elementary school pupils in the identified areas are carried out every day
- Guaranteeing the quality and timeliness of reports
- Ensure that receipt slips are properly completed and signed by school principals or their representatives, and keep them in a safe place as proof of payment to food suppliers
- Produce progress reports
- Support schools in setting up/renewing school canteen management committees made up of at least 50% women
- Contribute to the assessment of gaps in implementation capacity
- Monitoring the daily distribution of hot, nutritious meals to pre-school and primary school children in schools
- Monitoring and support for the implementation of initiatives in schools (kitchen gardens, vegetable gardens, livestock farming, etc.) and the appropriate use of institutional improved stoves, rainwater collection systems, drinking water points and storage facilities
- Monitoring the construction and management of improved stoves in schools with canteens and SCEP (rain water harvesting)
- Within the framework of decentralized local purchasing, reconcile the food delivered to schools with the quantities stipulated in the DPE-Cooperative contract and verify the funds paid by the DPEs, in collaboration with the Field Offices

Communal Education Departments (DCE), Provincial Education Departments (DPE)

- Visit at least 100% of the province's canteen schools every term

- Report irregularities (theft, late meals, etc.)
- Check that stock registers are filled in correctly and regularly, and ensure that distribution report forms are submitted on time
- Collect monthly distribution reports and send a report to DPEs
- Ensure that schools collect monthly statistics by gender on enrolment, absenteeism, attendance and dropout rates
- Analyze this data to produce monthly reports for the Provincial Inspector

School Canteen Management Committee

- Receive food supplies at the beginning of each month
- Stock management (record keeping, reporting defects and losses)
- Monitor stock movements, prepare the distribution report validated by the manager
- Organize rotating teams of parents involved in cooking and daily meal distribution

Administrative authorities and parents of pupils

- Collect water and firewood for cooking
- Bring vegetables to supplement children's rations
- Ensure compliance with individual rations by measuring the quantities of foodstuffs required for meal preparation daily, based on the day's attendance lists
- Take turns preparing the children's meals, and distribute them to the schoolchildren
- Supervise children during mealtime
- Ensure compliance with hygiene rules in kitchen areas

Annex 5 - Perspectives and solutions

Based on the lessons learned and the government's commitments to the global School Meals Coalition, several avenues can be explored in greater depth:

Implement a clear, guiding public policy on school food to:

- Establish a well-defined regulation and mandate for the stakeholders involved, to ensure efficient and effective delivery of the expected services
- Strengthen good governance, partnership and, above all, ensure good multi-sector coordination through a platform facilitating multi-sector interactions
- Define requirements to meet the budget and the sustainability of the interventions carried out within the framework of the PNAS
- Define the roles and responsibilities of stakeholders and players at all levels

To this end, Burundi is invited to draw up three documents to ensure the success of the PNAS: a roadmap, a strategy and a national school food policy.

Updating the PNAS. To continue building the Government's capacities towards universal coverage of the PNAS in 2032 and national ownership, particularly in its scaling-up phase (2023-2027), several prerequisites are essential:

- The PNAS update to better meet the ever-growing needs and the many national challenges affecting its performance
- The transfer of skills to the DNCS and DPEs for centralized management on the one hand (DNCS) and decentralized management on the other (DPEs) for symbiotic synergy in terms of field operations
- The need to provide the programme with a transition plan that will enable the government to manage the PNAS itself, as well as a resource mobilization plan
- Operationalization of the Intersectoral Committee on School Feeding and a roadmap for implementing the global Coalition's commitments

Revitalizing the Intersectoral Committee

- Operationalization of the Intersectoral Committee on School Nutrition
- The roadmap for implementing the CMRS commitments
- The development of a transition plan that will enable the government to manage itself the school feeding programme

Ongoing high-level political commitment and opportunities for PNAS

The vision of HE. President of the Republic, "*Every mouth has food, every pocket has money*", and the First Lady's commitment to the Malnutrition Zero Campaign, are powerful declarations that only need to be amplified via:

- aligning PNAS with the 2040-2060 vision;
- investment in production potential (arable lands, agricultural potential, food production) high in most provinces (IFPRI Report, 2022);
- the vision of universal coverage of endogenous school feeding by 2032;
- Burundi's membership of the global School Meals Coalition;
- lessors' interest in local purchasing.

Financing strategy

The PNAS requires a financing strategy and financial planning as an annex to the official document. To ensure its sustainability and move towards universal coverage, the PNAS must be accompanied by a coherent resource mobilization strategy to ensure sustainable, regular funding. Thus, the PNAS provides for several types of financing:

- At national level: develop stable and dedicated funding within the government budget. This can be achieved through a combination of government resources and complementary funding. For example, the existing annual budget allocation made available to the DNCS by the Government of Burundi should be regularly increased in line with needs, with the long-term aim of reducing dependence on external funding.
- At local level: districts should support school meals through activities included in their Commununal Development Plans (*Plans Communaux de Développement Communautaire*, PCDC). For example, consider earmarking a percentage of the resources allocated to communes by FONIC exclusively for the PNAS to contribute to the government's policy of decentralization and support for community development.
- At community level: additional resources can be mobilized from parents or parents' associations through multi-faceted support for the PNAS. Community participation is a guiding principle of this policy, and its role can go beyond resource mobilization to actively engage the community in the implementation, design, monitoring and evaluation of PNAS initiatives. Community involvement brings several benefits, including improving the impact of education on health and nutrition, a closer link with small-scale farmers, functional follow-up and monitoring of implementation, and an overall improvement in the cost-effectiveness of school meal interventions. School canteen management committees should therefore be set up in all schools in Burundi, with varying compositions according to the roles assigned to them in the community.
- The private sector, the diaspora: the private sector plays an important role through the potential support it can provide for school feeding (e.g. the development of agriculture through the processing of agricultural and livestock products for school feeding).

Sourcing

- Signature of long-term agreements (2 years-4 agricultural seasons) with cooperatives
- Strengthening partnerships to increase agricultural production/productivity