MOMENTUM COUNTRY AND GLOBAL LEADERSHIP

Strategic Planning Advisors for Education and School Health in Africa: Desk Review of School Health and Nutrition in Senegal

MOMENTUM Country and Global Leadership

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Acronyms

	FRENCH	ENGLISH
CCIEF	Le cadre opérationnel de l'Accélérateur de l'éducation des filles	Coordination Framework of Interventions on Girls' Education
CFP	Point focal pays	Country Focal Point
CLM	Cellule de la lutte contre la malnutrition	Unit to Fight against Malnutrition
CMU	Couverture Maladie Universelle	Universal Health Coverage
CNDN	Comité National de Développement de la Nutrition	National Nutrition Development Committee
CNLS	Conseil National de Lutte contre le Sida	National AIDS Control Council
CPS	Chimioprevention saisonniere pour le paludisme	Chemoprevention for Seasonal Malaria
CSO	Organisation de Societe Civile	Civil Society Organization
DCaS	Division des Cantines Scolaires	School Canteens Division
DCMS	Division du Contrôle Médical Scolaire	School Medical Control Division
DHIS2	Système d'information Sanitaire de District 2	District Health Information System 2
DPRE	Direction de la Planification et de la Réforme de l'Education	Directorate of Educational Planning and Reform
DPRS	Direction de la Planification, de la Recherche et des Statistiques	Directorate of Planning, Research, and Statistics
DSME	Direction de la Santé de la Mère et de l'Enfant	Directorate of Mother and Child Health
EF	Éducation-Formation	Education – Training
EHA/WASH	Eau-Environnement-Hygiène	Water-Sanitation-Hygiene
EVF	Education à la Vie Familiale	Family Life Education [Program]
FAWE	Forum des Femmes Educatrices Africaines	Forum for African Women Educationalists
FRESH	Mobiliser les ressources pour une santé scolaire efficace	Focusing Resources on Effective School Health
GEEP	Groupe pour l'Etude et l'Enseignement de la Population	Group for the Study and Teaching of Population
GER	Brut Inscriptions à l'école	Gross Enrollment Rate
HPV	Papilloma Virus Humain	Human Papilloma Virus
IA	Inspection d'Académie	Academy Inspectorate

	FRENCH	ENGLISH
IEF	Inspection de l'Education et de la Formation	Inspectorate of Education and Training School
IME	Inspection Médicale des Ecoles	Medical Inspection
LPGS-EF	Lettre de Politique Generale Sectorielle - Education et Formation	General Policy Letter for the Education and Training Sector
M&E	Suivi et Evaluation	Monitoring and Evaluation
MEN	Ministère de l'Éducation Nationale Gestion	Ministry of National Education
MHH	de Sante Menstruelle	Menstrual Health and Hygiene
MNCH/FP/ RH	Santé maternelle néonatale et infantile/ Planification familiale/ Santé de la reproduction	Maternal, Newborn, Child Health and Family Planning and Reproductive Health
MOMENTUM	Mise à l'échelle des services de qualité en Santé maternelle néonatale et infantile,Planification familiale, Santé de la reproduction	Moving Integrated, Quality Maternal, Newborn, Child Health and Family Planning and Reproductive Health Services to Scale
MTN/NTD	Maladies Tropicales Négligées	Neglected Tropical Disease
MSAS	Ministère de la Santé et de l'Action Sociale	Ministry of Health and Social Action
NER	Total des inscriptions à l'école	Net Enrolment Rate
NI	Nutrition International	Nutrition International
ODD/SDG	Objectifs de Développement Durable	Sustainable Development Goals
OMS/WHO	Organisation Mondiale de la Santé	World Health Organization
ONG/NGO	Organisation Non Gouvernementale	Non-Governmental Organization
PAQUET	Programme d'Amélioration de la Qualité, de l'Équité et de la Transparence	Quality, Equity and Transparency Improvement Program
PAQUET-EF	Programme d'Amélioration de la Qualité, de l'Équité et de la Transparence-Education Formation	Quality, Equity and Transparency Improvement Program-Education Training
PDEF	Programme Décennal de l'Éducation et de la Formation	Ten-Year Education and Training Program
PECADOM	Prise en charge des soins à domicile	Home Care Management
PNDSS	Plan National de Développement Sanitaire et Social	National Health and Social Development Plan
PNDN	Politique Nationale de Développement de la Nutrition	National Nutrition Development Policy
PNEBJA-TIC	Programme National d'Éducation des Jeunes et des Adultes Analphabètes articulé aux Technologies de l'Information et de la Communication	National Education Program for Illiterate Youth and Adults through Information and Communication Technologies
PNLP	Programme Nationale de Lutte contre le Paludisme	National Malaria Control Program

	FRENCH	ENGLISH
PNPSO	Programme National de la Promotion de la santé oculaire	National Eye Health Promotion Program
PSO	Programme de santé oculaire	Eye Health Program
PSE	Plan Sénégal Émergent	Senegal Development Plan
PSMNS	Plan Stratégique Multisectoriel de la Nutrition au Sénégal	Multisectoral Strategic Plan for Nutrition in Senegal
SHN	Santé et Nutrition scolaires	School Health & Nutrition
SIMEN	Système d'Information du Ministère de l'Education nationale	National Education Information and Management System
SNE	Santé et Nutrition à l'Ecole qui a évolué pour devenir Santé, Nutrition, Environnement	School Health and Nutrition or Health, Nutrition, and Environment
SONATEL	Société National des télécommunications	National Telecommunications Company
SPAESHA	Conseillers en planification stratégique pour l'Education et la Santé scolaire en Afrique	Strategic Planning Advisors for Education and School Health in Africa
SR	Santé de la Reproduction	Reproductive Health
SRGBV	Violence de genre en milieu scolaire	School-Related Gender-Based Violence
SSR/SRH	Santé Sexuelle et Reproductive	Sexual and Reproductive Health
STI/IST	Infection Sexuellement Transmissible	Sexually Transmitted Infection
UIS	n/a	UNESCO Institute for Statistics
UNESCO	Organisation des Nations unies pour l'éducation, la science et la culture	United Nations Education, Sciences and Culture Organization
UNICEF	Fonds des Nations unies pour l'enfance	United Nations International Children's Emergency Fund
USAID	Agence Américaine pour le Développement internationalinternational	U.S. Agency for International Development

MOMENTUM works alongside governments, local and international private and civil society organizations, and other stakeholders to accelerate improvements in maternal, newborn, and child health services. Building on existing evidence and experience implementing global health programs and interventions, we help foster new ideas, partnerships, and approaches and strengthen the resiliency of health systems.

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Executive Summary

This desk review report takes stock of school health in Senegal by examining national policies, current practices, and challenges. Resources include research articles, government reports, technical papers, and case studies. Eight supplementary informational interviews were also conducted.

Health and nutrition challenges for school-age children in Senegal include hunger, nutritional deficiencies, infectious diseases including malaria, and neglected tropical diseases, among others. The COVID-19 pandemic and climate change add to the problem of children not healthy enough to be able to learn in school.

There is no current formalized national school health policy or coordinated strategy for Senegal. However, there are various school-based health and nutrition interventions in Senegal supported by multi-sectorial policies and guidance for sub-sectors, indicating a favorable policy environment for the development of a strategic plan for school health. School health was prominently featured in Senegal's Ten-Year Program for the Development of Education and Training (PDEF) (2000-2010). The current policy, PAQUET-EF, however, includes only limited guidance on school health. The School Medical Control Division (DCMS), under the Ministry of Education (MEN), is the implementing and coordinating structure.

Despite some recent improvements, school health in Senegal still faces challenges including the absence of an integral school health policy, the lack of school health in the education policy, the weakness of the health system, lack of funding, lack of consensus on the approaches to be adopted, and the lack of defined roles and responsibilities for key actors.

In 2019, Senegal initiated a process to inform the development of a school health policy, and in this report, preliminary recommendations are made to inform its development, strengthen the integrated nature of interventions, improve coordination among stakeholders, and support informed decision-making following data collection. These recommendations will be further refined based on findings from a field assessment MOMENTUM/SPAESHA conducted in 10 schools to collect additional qualitative data through direct observation, focus group discussions, and key informant interviews.

Introduction to Strategic Planning Advisors for Education and School Health in Africa

Moving Integrated, Quality Maternal, Newborn, Child Health and Family Planning and Reproductive Health (MNCH/FP/RH) Services to Scale (MOMENTUM) Country and Global Leadership (MOMENTUM) is a seven-year global project funded by the U.S. Agency for International Development (USAID) to provide targeted MNCH/FP/RH technical and capacity development assistance to countries to facilitate countries' journeys to self-reliance. MOMENTUM also contributes to global technical leadership and learning, and USAID's policy dialogue for achievement of global MNCH/FP/RH goals through support to globally endorsed MNCH/FP/RH initiatives, strategies, frameworks, guidelines, and action plans. Through the Strategic Planning Advisors for Education and School Health in Africa (SPAESHA) activity, MOMENTUM works with ministries of education and health, as well as global, regional, and local school health partners to strengthen school health and nutrition (SHN) systems for the health and wellbeing of school-age children.

Schools provide an extensive platform to reach children with health services that contribute to learning and being healthy throughout their lives. Contextually appropriate school health interventions will improve children's health status, increase attention and concentration, and result in improved academic performance. Schools provide a cost-effective and efficient platform to reach children at scale and are essential for creating equitable and inclusive education pathways for girls and boys to learn and reach their full potential.

Unfortunately, the continued effects of endemic diseases like malaria, outbreaks such as Ebola and COVID-19, and inadequate water, sanitation, and hygiene (WASH) in schools highlight the prolonged underinvestment in school health within education systems.[1] A recent global WHO-UNICEF Joint Monitoring Program survey found WASH coverage in sub-Saharan Africa to be generally low: 10 out of 19 countries surveyed had fewer than 50 percent of schools with sanitation coverage and 47 percent of schools across 17 countries in the region had no water service.[2] Globally, at the start of the pandemic, in the 60 countries at highest risk (40 of which were on the African continent),[3] one in two schools lacked basic water and sanitation services and three in four lacked basic handwashing services.[4] Growing evidence suggests that some of the greatest health impacts due to climate change will be on the emergence, re-emergence, and spread of infectious diseases,[5] which is already affecting the prevalence of mosquito-borne pathogens, particularly malaria and dengue.[6,7]

As school closures threaten to reverse historic education gains, the United Nations and multilateral agencies are renewing commitments to school health across varying sectors due to the essential role they play in children's health, nutrition, protection, and learning potential, disrupting intergenerational cycles of health and social inequalities. Renewed attention to health in schools offers an opportunity to leverage government commitments to school health and to strengthen the operationalization of school health policies. School health frameworks currently exist to inform policy and implementation but have been unevenly applied and monitored by ministries of education around the world and specifically in sub-Saharan Africa. Multi-sectoral collaboration and coordination between ministries of education and health will be critical to sustainable change. There has always been a need for comprehensive approaches to health policies and planning within the education sector; COVID-19 has only exacerbated the existing gaps and demonstrated the need to make the education system more resilient to future infectious disease epidemics.

While governments recognize the value of comprehensive, integrated SHN programming, the current challenge is how to make it more scalable and sustainable moving forward. The cross-sectoral nature of SHN lends itself to variations across countries regarding how it operates, where it resides within ministries, and the relevant ministries involved in policy and programming. Ministries of education, health, gender, water and environment, and social welfare often contribute their expertise and inputs into SHN via the health curricula, health services for school-age children, and the quality of

the school environment. This can also make the impact, scale, and reach of SHN initiatives less visible or difficult to measure.

Recognizing the global underinvestment and poorly targeted investment in school health, as well as its potential to foster health and education outcomes,[8] the USAID Africa Bureau and JSI/Child Health Task Force jointly commissioned a 2021 report to identify pathways for advancing SHN programming in Africa. In this 2021 report,[9] 10 African Missions were solicited to understand their contexts and optimal points of entry for optimizing existing resources. A number of strengths and opportunities were identified for better targeted investments alongside multi-sector school health coordination.[10] Kenya, Malawi, Senegal and Uganda were identified as countries well-suited for this pilot.

Kenya, Malawi, Senegal, and Uganda were selected using the following criteria:

- Existing national School Health Policies
- Links to other USAID education or health initiatives (including linkages with the Child Health Task Force school health activities) taking place in that country that affect school-age children (basic education transitions, numeracy and literacy, neglected tropical disease (NTDs), school feeding, adolescent sexual reproductive health, under 5 nutrition and health, etc.).
- MOMENTUM partner country offices' interest and capacity to engage and advocate, with strong government relationships.
- Receptiveness of the Ministry of Education, Ministry of Health, and USAID Mission to the project.
- Previous school health programming or similar work.

MOMENTUM/SPAESHA will identify the major barriers to school health policy implementation in Kenya, Malawi, Senegal, and Uganda, focusing on the different elements of the school health system, processes, and platforms to create a realistic and context specific policy strengthening plans. Senegal was specifically chosen as a Francophone West African country, well-positioned to support adaptations within the sub-region. While it does not have a current school health policy, it has a favorable policy environment with existing guidance for various subsectors, and the government initiated a process to develop a comprehensive SHN policy and strategic plan in 2019, which MOMENTUM/SPAESHA will inform.

The theoretical foundation of the desk review draws from three globally accepted frameworks used to design SHN policies and programs: FRESH[11] (Focusing Resources on Effective School Health), SABER (Systems approach for better education results)[12] and, most recently, HPS (Health Promoting Schools).[13] This report builds on what we know about the Senegal school health and education context, takes a deeper dive into the policy history and the known and emerging health needs of school-age children, and will inform MOMENTUM/SPAESHA work plan activities to establish contextualized deliverables related to policy strengthening.

Country Background and Context

Senegal is in West Africa and has 14 regions: Dakar, Diourbel, Fatick, Kaffrine, Kaolack, Kedougou, Kolda, Louga, Matam, Saint-Louis, Sedhiou, Tambacounda, Thies, and Ziguinchor. The current population is estimated at 18,384,660, with diverse ethnic groups: Wolof (39.7 percent), Pular (27.5 percent), Serer (16 percent), Mandinka (4.9 percent), Jola (4.2 percent), Soninke (2.4 percent), and other (5.4 percent). Spoken languages include French (official), Wolof, Pular, Jola, Mandinka, Serer, and Soninke.[14]

Education and School Health Background

The Senegalese education system is structured in four cycles:

1. **pre-school:** one year minimum between 3 and 5 years old;
2. **elementary:** six years between 6 and 11 years old;
3. **general middle:** four years between 12 and 15 years old;
4. **general secondary:** three years between 16 and 18 years old.

The elementary and middle cycles are compulsory.

The average literacy rate in Senegal among adults 15+ years is 56.3 percent.[15] The education system is struggling with the impact of school closures due to the COVID-19 pandemic, many children out of school, and the precariousness of the infrastructure, as many schools still lack water points, electricity, latrines, and internet. The gross enrolment ratio (GER)[16] was 54 percent in 2022, (46.2 percent boys and 53.8 percent girls), based on a 2022 School Census.[17] The Net Enrolment Rate (NER)[18] for 2021 was 72.6 percent, with out-of-school children representing 27.4 percent.[19]

In addition to the formal education structure, there is the National Education Program for non-literate Youth and Adults through Information and Communication Technologies (PNEBJA-TIC) for 8- to 15-year-olds who are out of school. The policies listed in this report apply to all school structures in Senegal, including public, private, and koranic schools (*daaras*). However, these religious schools often operate outside national policies in a parallel educational system.

Gender

In Senegal, the gender inequality index remains high at 0.523, giving the country a ranking of 125 out of 162 countries in 2018. Access to education remains highly unequal in Senegal; data in 2021 show 45.4 percent of adult women have achieved at least secondary education compared to 68.4 percent of men.[20] Gendered expectations, late enrollment, early pregnancy, sexual abuse, and the taboos are all factors that continue to limit girls' access to and retention in school.[21] Many girls aged between 12-14 years are withdrawn from school at the end of the elementary cycle for arranged marriages, in violation of the legislation on compulsory schooling until age 16. Early and/or forced marriage is the biggest challenge, with nearly one in three girls being forced into child marriages.[22] According to the 2019 DHS, 32.6 percent of women between 20-49 were married before the age of 18 and 7.6 percent before the age of 15.[23]

Education curricula content provides insufficient information to prepare teachers and students to understand school-related gender-based violence (SRGBV), identify different forms of SRGBV and gendered risks or vulnerabilities, and to appropriately respond to it.[24] SRGBV is absent from initial teacher training, and has only very recently been introduced to in-service training. There is also not enough material to support a good understanding of and better responses to the SRGBV by future teachers.[25] The 2022 School Census (DPRE/MEN) reports only 9.3 percent of public and 2.9 percent of private schools formally train teachers on child protection nationally.

Methods

The Ministry of National Education (MEN) sought the support of partners of the MOMENTUM SPAESHA activity and UNESCO hired consultants to conduct the present desk review as one building block to develop a Strategic Plan for School Health. The two main entities responsible for health under the MEN, the Division du Contrôle Médical Scolaire or School Medical Control Division (DCMS) and the Directorate of Planning and Educational Reform (DPRE), were consulted via formal and informal interviews. Consultations with the Ministry of Health and Social Action (MSAS) focused on the Directorate of Mother and Child Health (DSME) and the Directorate of Planning, Research and Statistics (DPRS) exploring policies and interventions for children in two age groups: 6-11 and 12-16. The DCMS partners were engaged iteratively throughout the data gathering and the report-writing process.

Policy Audit

The first level of policy assessment utilized an online questionnaire structured by each HPS global standard. The MOMENTUM SPAESHA country focal point (CFP) read all 25 SHN-related policy documents and operational guidelines in the fields of health, education, social welfare, agriculture and food security, national economic development, and social welfare. The CFP also collected documents specific to SHN projects developed by partners. In cases where policies, strategies, and guidelines were unclear or unavailable, the CFP held informational interviews to understand policy documents and directives (Table 1).

TABLE 1. INFORMATIONAL INTERVIEWS HELD FOR DESK REVIEW AND POLICY AUDIT IN SENEGAL

No.	Name	Organization or Ministry Represented	Reason for Interview
1	**Dia, Alioune**	School Health Control Division	To better understand the expectations of the Government's school health documents.
2	**Konaté, Fodé**	UNESCO	To better understand the type of support provided by UNESCO to school health.
3	**Abdellahoui, Maïssa**	UNICEF	To understand the school training courses carried out by UNICEF with the MEN.
4	**Séne, Moussa**	School Health Control Division (Head of Evaluation Office)	To better understand the implementation system for school health.
5	**Diop, Fatou Sabel**	Nutrition/Folic Acid Iron Supplementation/HIV and AIDS Desk	To check for the existence of documents of a nutrition policy or strategy for students.
6	**Faye, Mane Hélène**	Nutrition International (NI)	To better understand NI's support to DCMS
7	**Gbuabey, Marie-Jésus**	DSME	Update on health interventions targeting students.

Rapid Literature Review

To complement the policy audit, CFPs conducted a rapid literature search to understand the health status of school-age children, and potential emerging issues. In total, the following Senegalese documents were consulted during this desk review:

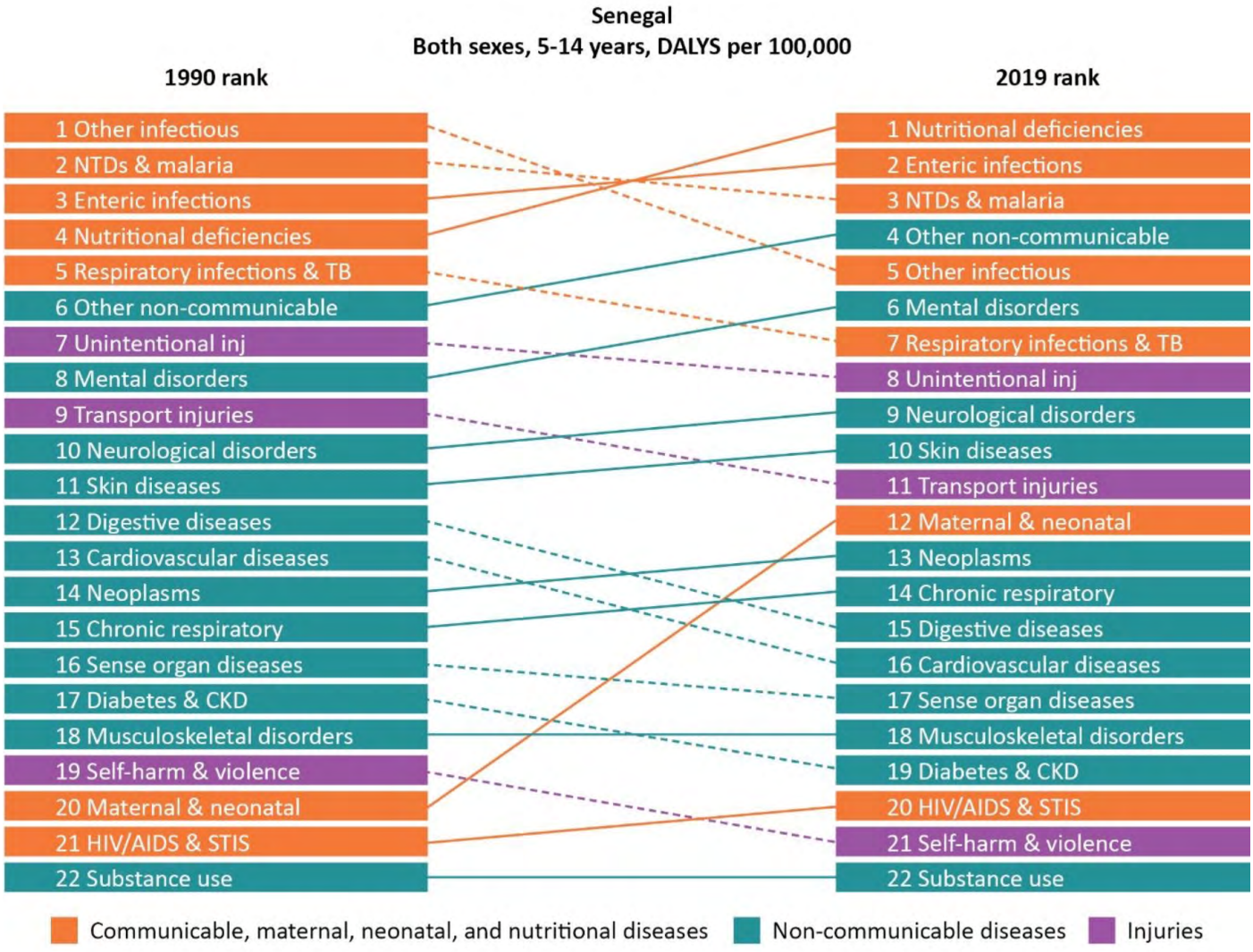
- **2** sectoral policy letters
- **18** national policy documents
- **4** national policies on health, education, and nutrition
- **9** ministerial judgments on health, education, and nutrition
- **44** publications on school health
- **13** research papers on school health

Priority Health Issues for School-Age Children

According to the Institute for Health Metrics and Evaluation[26] (see Figure 1), the top three diseases for children ages 5-14 are nutritional deficiencies, enteric infections (diarrhea), and neglected tropical diseases such as schistosomiasis, as well as malaria. These diseases are preventable and related to poverty and have been almost the same throughout the last three decades, which shows that the health system has been unable to address the chronic issues negatively affecting health of the school-age population in Senegal.

Schools are supposed to be safe for children, a place where they learn and develop. However, the reality is that there is a lot of violence and accidents in schools. According to the Institute for Health Metrics and Evaluation, in 2019, 3.5 percent of disability-adjusted life years were lost due to transport injuries for children ages 5-14 in Senegal.

FIGURE 1: RANKING OF DISABILITY ADJUSTED LIFE YEARS LOST TO SENEGALESE SCHOOL-AGED CHILDREN, 1990 AND 2019



Hunger and Nutritional Deficiencies

The 2019 Senegal Multi-dimensional Poverty Index data shows that 50.8 percent of Senegal's population is multidimensionally poor while an additional 18.2 percent are classified as vulnerable to poverty.[27] The Global Hunger Index 2021 ranks Senegal 66th out of 116 countries[28] and shows a national prevalence of global acute malnutrition in children under five years of 8.2 percent, including 2.1 percent of the severe form.[29] This shows that poverty and food security remain challenges in the country, with poverty preventing families from having access to a balanced and nutritious diet.[30] Moreover, over the past decade, there has been virtually no change in this regard. In 2013, it was estimated that 35 percent and 7 percent of girls aged 15-19 were malnourished (under- and over-weight respectively) compared to 22 percent and 21 percent for all women aged 15-49.[31] School-age children are of an age range that requires different levels of nutrients at key development stages. In the case of adolescents (10-19), girls experience significant increase in their iron needs due to the onset of menstruation, while boys experience an increase in muscle mass that necessitates an increase in iron and protein intake, all of which are supported through dietary intake.[32] While data on the nutritional status of school-age children is rare, smaller studies done in Dakar show significant rates of anemia, iron deficiency, and zinc deficiency in addition to high rates of stunting.[33] This is of critical significance as iodine and iron affect the development of the brain and cognitive functions, while zinc deficiency leads to a host of issues that can impact appetite, growth, and immunity, which can lead to increased morbidity. Regarding children under 5, the prevalence of stunting, wasting, and underweight show a slight decrease in recent years, with a prevalence of 17.9 percent stunting in 2019. But they also show a slight increase in wasting, with a prevalence of 8.1 percent in 2019.[34] These provide a baseline of the nutrition status in which learners enter primary school in Senegal and can inform strategies and interventions for the new national policy. In the same vein, while the prevalence of thinness (underweight or wasting) among school-age children (ages 5 to 19) has shown a steady decrease in recent years, thinness is still a topical issue and shows great disparities between the sexes, with boys having nearly twice the percentage of thinness as girls (12.4 percent boys; 6.3 percent girls in 2016).[35] The prevalence of anemia among women of childbearing age, specifically affecting adolescent girls and young women, steadily declined over the past decade and is projected to continue this trend.[36]

Infectious Diseases

Malaria

According to the Severe Malaria Observatory, malaria is endemic throughout Senegal, and the WHO country endemic profile indicates that 99 percent of the population is exposed.[37] The number of malaria cases decreased by 4.4 percent between 2017 and 2020, from 52 to 50 per 1,000 population at risk, while the number of malaria deaths increased slightly by 1.8 percent over the same period, from 0.24 to 0.245 per 1,000 population at risk.[38]

Neglected Tropical Diseases (NTDs)

In 2019, it was estimated that nearly 8 million children and adults were at risk and in need of medication to prevent or treat NTDs.[39]

Sexual and Reproductive Health

Young people and adolescents (10-19 years) constitute 22.5 percent of the Senegalese population, within which are orphans, adolescent mothers, adolescents with disabilities, and talibés.[40] In Senegal, common sexual and reproductive health (SRH) issues facing young people and adolescents include: early and/or unprotected sex, early and/or unwanted pregnancies, premature or difficult deliveries and their consequent sequelae, sexually transmitted infections (STIs) including HIV infection, and harmful traditional practices such as female genital mutilation and child marriage.

According to UNICEF, an estimated one in four girls under 15 have undergone female genital mutilation/cutting[41] and, in 2016, 31.5 percent of women aged 20-24 were married before the age of 18.[42] All the studies conducted among young people on sexuality show that they are having sex at an increasingly early age and that they are engaging in risky behavior. In 2018, 1,222 cases of pregnancy were recorded in Senegal among students aged 12-19. According to the 2019 DHS, the proportion of adolescent girls having children increases rapidly with age, from 1 percent at age 15 to 33 percent at age 19, at which age 26 percent of girls have already had at least one child. In 2019, 1,321 cases of pregnancy were recorded, compared to 1,075 in 2020, still in the same age group. Adolescent girls who engage in sexual activity often have early or unwanted pregnancies, and are insufficiently informed to make responsible decisions. The 2022 School Census (DPRE/MEN) reports 827 learners experienced early pregnancy and marriages, roughly 0.1 percent of students nationally. Teenage pregnancy greatly affects girls' performance; in 2015, UNFPA reported 54 percent of girls who became pregnant dropped out of school, 39 percent repeated their grades, and only 6 percent continued their studies despite being pregnant.[43,44]

Disabilities, Including Blindness

According to the 2022 School Census (DPRE/MEN), 0.5 percent of school populations nationally are made up of students with disabilities. Given that it is estimated that more than 60 percent of children with disabilities are out-of-school,[45] this figure is likely an underrepresentation of the needs of this vulnerable group. The same report notes that 7.1 percent of public schools and 1.7 percent of private schools formally train teachers on inclusive education nationally. Trachoma is the second leading cause of blindness in Senegal. The prevalence of trachoma among children ages 1-9 is less than 5 percent but higher in older groups.[46]

Oral Health

Oral diseases are still common among the school population in Senegal. The prevalence of untreated caries in permanent teeth in people 5 years and older is 38.5 percent, the prevalence of severe periodontal disease in people 15 years and older is 27.5 percent, and the prevalence of untreated caries of deciduous teeth in children ages 1-9 is 37.9 percent.[47]

Violence and Mental Health

SRGBV includes sexual, psychological, physical, or gender-based violence perpetrated against girls and boys in the school environment. A study carried out by the MEN in 2008 revealed 20 percent of sexual violence that was reported in local media involved school staff and 90 percent of violence against schoolgirls occurs either in or around school grounds.[48] According to the 2019 DHS, 2.9 percent of girls ages 15-17 were victims of sexual violence.[49] The 2022 School Census (DPRE/MEN) reports 78.7 percent of girls nationally were victims of sexual violence, including those in preschool through high school. In the same report, 62.6 percent of girls nationally were victims of other forms of violence, and this figure is also inclusive of preschool through high school.

The use of psychoactive substances, in particular cannabis, is frequent among young people and adolescents in Senegal, estimated at close to 20 percent prevalence.[50]

COVID-19 Pandemic and Climate Change

The COVID-19 crisis and the closure of educational institutions posed several major challenges to the health and education of children in Senegal. The pandemic exacerbated child poverty and vulnerability as it led to a decrease in the availability and use of public services, especially for women, children, and adolescents, who are the most affected groups. It not only affected administrative and health services, but the pandemic also produced inequitable access to distance learning mechanisms due to the digital divide between poor and better off households, as well as between households in rural and urban areas. In addition, isolation has led to greater risks of violence, abuse, and exclusion, especially for girls.[51] These include overloading of household chores, child marriage, early and unwanted pregnancies, and harassment. Children were out of school for eight months during the COVID-19 school closure period.

Not much data was collected around the learning losses post-COVID-19, however the Center for Global Development in collaboration with Centre de Recherche pour le Développement Économique et social carried out a national rapid assessment survey after schools reopened and found that most children re-enrolled, and dropout rates were not significantly different than pre-COVID-19 (1.6 percent compared to 1.9 percent).[52] This same survey found that while dropout rates did not change significantly, repetition rates nearly doubled for school-age children ages 6-18 compared to pre-COVID-19 (6.3 percent compared to 11.4 percent).[53] Both dropout and repetition rates were similar between genders. Thus, it is crucial to implement effective strategies to ensure quality education for all children, addressing these difficulties in the post-pandemic era.

Impact on Education

The interruption of in-person instruction and the continuation of learning at home affected 3.5 million enrolled students. Disadvantages were faced by those relying on health and nutrition services provided by schools and those with limited access to learning opportunities outside of school. In 2020, only 62 percent of school-age children completed primary school;[54] prolonged school closures can result in the most vulnerable students dropping out of school permanently and not returning to school when it reopens, which has intergenerational implications.

Talibés (children who attend Koranic schools) have greatly suffered from the adverse consequences of COVID-19 and restrictive measures on their physical and mental well-being. Most talibés are aware of the existence of COVID-19, as they learn about the disease mainly from their Koranic teachers, but some still deny its existence in Dakar. The restrictive measures have disrupted their daily lives, particularly their begging activities. They have been exposed to more violence, isolation, bullying, and stigmatization. Police violence during curfews and the ban on begging in markets have been particularly difficult for them.[55] The pandemic has revealed the fragility of the social and health protection system for talibés, leaving them vulnerable and deprived of freedom on the streets, affecting their psychological well-being and development.

Climate Change

The main and most visible effects of climate change in Senegal are high temperatures, air pollution, and breathing difficulties.[56] Climate change threatens to affect the socio-economic and environmental resources of Senegal.[57] According to the 2021 Children's Climate Risk Index, children living in Senegal are among the most vulnerable to the impacts of climate change, while Senegal ranks 22nd in the world in terms of vulnerability to climate change.[58] Droughts, floods, and changes in growing seasons affect harvests and reduce agricultural yields. This leads to food shortages,[59] higher prices for staple foods, and an increased risk of malnutrition among children. With increasing

drought and water shortages in some regions,[60] access to safe drinking water is compromised, increasing the risk of water-borne diseases in children. The spread of certain diseases[61] such as asthma, skin diseases, malaria, and diarrhea, which particularly affect children, has been observed. These illnesses can lead to frequent absences from school and a drop in academic performance. Storms and floods affect school infrastructures and interrupt teaching and learning.[62] In some regions of Senegal, the effects of climate change, such as coastal erosion and desertification,[63] are forcing populations to migrate.

Children are sometimes forced to miss school for short or extended periods and may be displaced temporarily or permanently, disrupting their schooling, forcing them to drop out or change schools frequently.[64] To mitigate these impacts, some initiatives educate children about climate issues.[65] A recent study shows that increasing a population's level of education leads to a large decrease in vulnerability to climate change. Conversely, people are somewhat more vulnerable if improvements in education slow down or reverse.[66]

Senegal's School Health Policies

International Commitments for SHN

In 2022, the Transforming Education Summit was convened in response to a global crisis in education, particularly around equity and inclusion, quality, and relevance.[67] The Senegalese government, with partners including UNESCO, UNICEF, World Bank, the European Union, and USAID, is seeking to expand the construction of infrastructure and schools, intensifying the hiring of teachers, and substantially improving their salaries and conditions.[68]

In preparation for this Summit, Senegal conducted a broad and inclusive national process of its education system and made the following commitments at the Summit:

1. strengthen the momentum for restoring education following the disruptions caused by COVID-19;
2. pursue the methodical transformation process of Senegal's educational system;
3. ensure the strengthening of the evolution of the education system post-COVID-19, to promote the achievement of SDG 4 targets;
4. ensure sustainable public financing of education and training.

School Health Policy Situational Analysis

In 2019, Senegal began a school health situational analysis process and review of relevant ministerial documents to inform the development of the Strategic Plan for School Health for Senegal. The first phase was led by the DCMS and USAID/Neema project in 2019, with a situational analysis in eight regions.[69]

Most recently, the DCMS and UNESCO covered another four regions in December 2022. Finally, MOMENTUM SPAESHA covered the two remaining regions in 2023. Challenges identified so far include administrative changes with the Act III of Decentralization,[70] Universal Health Coverage (CMU), the impacts of COVID-19, the emergence and re-emergence of infectious diseases, climate change, and resource scarcity.

School Health-Relevant Policies

The Government of Senegal has adopted laws and regulations to ensure the protection of children and young people and the recognition of their right to inclusion and participation.[71] Over the past two decades, Senegal has developed three Education Sector Plans covering the periods 2000-2011, 2013-2025, and 2018-2030. The Ten-Year Development Program for Education and Formation (PDEF) Program (2000-2010) was Senegal's first education reform.[72] It included an SHN program that covered all levels of education with a specific objective and set of activities integrated from the FRESH framework, with activities relating to HIV and AIDS care in schools, training, production of teaching materials, information, education, and communication, skills building, institutional support, monitoring and evaluation, as well as the creation of mutual health insurance for grassroots care.[73]

In 1986, the DCMS was set up within the MEN. Today, it is responsible for relations between the central administration and the regional school medical inspectorates (IME), particularly coordinating and providing resources.[74] While national health programs remain largely under the purview of the MSAS, the DCMS remains the authority and lead in coordinating those programs in schools. The main activities of the DCMS are to analyze the regional and national situation; support the basic biomedical examination; support preparation and testing of basic school health services; develop a collaborative MEN/MSAS policy on SHN; and to develop national management capacity.

While the MEN support policies specific to school health, many of the overarching frameworks and guidance that support the health and nutrition sector in the country are included in various policies managed by the Prime Minister's Office and the MSAS. MOMENTUM/SPAESHA reviewed the following SHN relevant policies and guidelines.

TABLE 2: LIST OF SCHOOL HEALTH AND NUTRITION-RELEVANT NATIONAL POLICIES OR GUIDANCE IN SENEGAL

Key:

Bolded titles – indicates policy documents which are described in detail in this report.

N/A – Not Applicable indicates policies that do not have sufficiently detailed budget information to assess whether or not SHN is included

NR	Area	Policy Name	Acronym	Start	End	Does this fund SHN initiatives?
1	**Education**	General Policy Letter for the Education and Training Sector	LPGS-EF	2018	2030	N/A
2		Quality, Equity, and Transparency Improvement Program-Education Training	PAQUET-EF	2018	2030	Yes
3	**Health**	Student Universal Health Coverage	CMU Eleve	2017	N/A	Yes
4		MSAS Decree No. 2014-867 of July 22, 2014		2014	N/A	Yes
5		National strategic plan to combat neglected tropical diseases		2022	2025	Yes
6		National Strategic Plan to Combat Malaria in Senegal		2021	2025	Yes
7		National AIDS Strategic Plan		2018	2022	N/A
8		Ministry of Education's Response Plan to the COVID-19 pandemic		2020	2021	N/A
9		National Health and Social Development Plan	PNDSS	2019	2028	Yes
10		Strategic Plan for Adolescent Sexual and Reproductive Health		2014	2018	N/A
11		Adolescent and Youth Reproductive Health and Child Survival Services – Policy, Standards, and Protocols	PNP	2018	N/A	Yes
12		National Community Health Policy	PNSC	2014	N/A	N/A
13	**Agriculture/ Livestock/ Food Security**	National Food Security and Resilience Strategy	SNSAR	2015	2035	Yes
14		Sectoral Policy Letter of Agricultural Development	LPSDA	2019	2023	N/A
15		Livestock Development Policy Letter	LPDE	2017	2021	N/A
16		National Livestock Development Plan	PNDE	2016	N/A	Yes
17		Priorities Resilience Country-Senegal	PRP-SN	2016	2025	Yes
18	**Social Protection**	National Policy Document on Integrated Early Childhood Development in Senegal	PNDIPE	2007	N/A	N/A
19		Senegal's National Social Protection Strategy	SNPS	2015	2035	N/A
20	**Nutrition**	National Policy for the Development of Nutrition	PNDN	2015	2025	N/A
21		Senegal's Multisectoral Nutrition Strategic Plan	PSMNS	2018	2022	Yes
22		Nutrition Policy Letter	LPN	2001	N/A	N/A
23		Strategic Plan for the Fortification of Micronutrient Foods in Senegal	PS-COSFAM	2006	2011	Yes
24	**Cross-cutting**	Plan Senegal Emergent	PSE	2014	2035	N/A
25		Plan Senegal Emergent - Priority Action Plan	PSE-PAP	2019	2023	Yes

In the following paragraphs, we describe some of the more general or multi-sectorial policy documents. Specific policy documents are described under their thematic heading.

NATIONAL DEVELOPMENT PLAN – PLAN SENEGAL EMERGENT

In February 2014, Senegal adopted a new development model through a strategy known as the Plan Senegal Emergent (PSE).[75] Its objectives are reflected in three strategic axes to accelerate economic growth, reduce poverty, and improve living conditions for the population. Education and school health are considered essential pillars of human development and human capital and are considered in Strategic Axis II.4.2 of the PSE. The Plan focuses on improving the quality of education at all levels, from pre-school through higher education. It is intended to strengthen school infrastructures, train and recruit more qualified teachers, reform curricula, and promote access to quality education for all children, including girls and children from disadvantaged backgrounds. The PSE also focuses on improving the state of health and nutrition of the entire population of Senegal. The implementation and coordination of the PSE fall under the authority of the Ministry of Economy, Planning, and Cooperation.

NATIONAL EDUCATION SECTOR POLICY - QUALITY, EQUITY, AND TRANSPARENCY IMPROVEMENT PROGRAM IN EDUCATION AND TRAINING

Senegal's education sector program is defined in the PAQUET-EF for the period 2013-2025, aligned with Sustainable Development Goal (SDG) 4 – Quality Education strategy for 2030. Regarding school health, the PAQUET-EF recognizes the importance of ensuring healthy living conditions conducive to children's learning. It focuses on health promotion, disease prevention, and the provision of basic health services in schools. This includes setting up vaccination programs, disease screening, reproductive health services, hygiene and sanitation, and raising awareness of nutrition and physical activity. It is foreseen that this agreement will be evaluated annually, with a view to improvement. The revised PAQUET-EF, which serves as the reference framework for school policy in Senegal, clearly indicates that health, nutrition, and a favorable environment are major inputs for quality of learning and student success because they promote children's well-being and full development.

GENERAL POLICY LETTER FOR THE EDUCATION AND TRAINING SECTOR (LPGS-EF)

In 2013, a General Policy Letter (2013-2025)[76] for the Education and Training Sector was drawn up to define the priority areas of government involvement in the sector and the associated implementation budget. It allowed for the creation and implementation of the Quality, Equity, and Transparency Improvement Program (PAQUET) from 2013 to 2025, which replaced the PDEF and is the current Education Sector Plan and Framework. The LPGS-EF recognizes the importance of health in the school environment and incorporates measures to take account of this dimension.

A few key points concerning the LPGS-EF's consideration of health in the school environment include:

1. health promotion to improve students' well-being and foster their educational success;
2. disease prevention by raising students' awareness of hygiene practices, preventing infectious diseases, and promoting healthy behaviors;
3. vaccination in schools to prevent the spread of disease;
4. access to health services to ensure equitable access to health services in the school environment by setting up health structures within schools, collaborating with local health services, and promoting partnerships between education and health to guarantee adequate medical follow-up for learners;
5. training of school staff in school health;
6. intersectoral coordination between the various players involved in school health, notably the education and health sectors. This coordination aims to ensure a holistic approach to school health, integrating educational, health, and social dimensions.

MISSION OF THE MINISTRY OF HEALTH AND SOCIAL ACTION

The decree No. 2014-867 of July 22, 2014, sets out the mission of the MSAS, with an objective of disease prevention in all schools and its inclusion in school education curricula, through teaching, awareness-raising, and collaboration with partners in order to promote the health and well-being of learners.

NATIONAL HEALTH AND SOCIAL DEVELOPMENT PROGRAM

The National Health and Social Development Program (PNDSS 2019-2028) will move Senegal toward Universal Health Coverage, in line with Sustainable Development Goal 3 (SDG 3).

The school target is integrated into Strategic Axis No. 2 of the 2019-2028 PNDSS. Expected actions include:

1. integrating health programs in schools to promote healthy behaviors and prevent disease;
2. strengthening health services in schools by improving health infrastructures, increasing the number of health professionals in schools, and providing adequate medical equipment and supplies;
3. training teachers, school nurses and other actors involved in the delivery of school health services to better meet the health needs of students.

The PNDSS emphasizes the need for close collaboration between the Ministries of Health and Education, and to mobilize resources to improve student health.

Disability and Inclusive Education

The National Education Orientation Law 91-22 of 30 January 1991 stipulated that national education must adapt its content, objectives, and methods to the specific needs of learners, according to age, stage of education, and stream. Senegal's Initial Report under Article 35 of the Convention on the Rights of Persons with Disabilities stipulates that assistance provided to learners with disabilities should be free of charge whenever possible, given the often limited financial resources of parents and guardians. Where the severity of the disability prevents the individual from benefiting from a mainstream educational institution, he or she is referred to a specialized institution by the Departmental Technical Commission for Special Education. The PAQUET-EF, the framework for the operationalization of the education policy for the period 2018-2030, envisages providing learning opportunities adapted to the specific needs of people with disabilities through the compliance of schools and the training of teachers in inclusive pedagogy.[77] There are some links between the different bodies working together to ensure inclusive education for the more vulnerable groups. For example, the "equal opportunities card" is issued by the MSAS. This card allows students with disabilities to benefit from reduced school fees and scholarships.

The main actors working to implement and develop inclusive education are:

1. Ministry of Education through the Directorate of Elementary Education;
2. RAP project and the Ministry of Women, Family, and Children through the National Agency for Early Childhood and the Case des Tout-Petits;
3. Directorate for the Rights and Protection of Children and Vulnerable Groups.

Political Landscape for Gender Equality

By signing international agreements such as the Convention on the Rights of the Child (CRC) and the African Charter on the Rights and Welfare of the Child (ACRWC), the Senegalese government committed to putting in place a multisectoral mechanism for the prevention of and response to gender-based violence. In 2021, the Government of Senegal took measures to systematize the monitoring and detection of violence through the education and health systems.[78] The MEN works in partnership with UNESCO, UNICEF, and Plan International, funded by the Ministry of Europe and Foreign Affairs in France, in a continued effort to end gender inequality and gender-based violence in its schools, but a cultural change has not happened to support these programs and policies.[79]

In 2006, the Government of Senegal set up the Coordination Framework of Interventions on Girl's Education (CCIEF) to keep girls in school. It also developed the National Strategy for Equity and Gender Equality (2009-2015), under the Ministry of Women, Family, and Social Development. The strategy had two main objectives: to establish an environment conducive for institutional, socio-cultural, legal, and economic gender equality and to affect the integration of gender across development interventions in all sectors.[80] It was updated in 2016 and aligned with the PSE.

Key partners in this work include:

1. **MEN** – National Teacher Committee for the Promotion of Girl's Education,

2. **NGOs** – Forum for African Women Educationalists (FAWE); Paul Gerin-Lajoie Foundation with Canadian International Development Agency (ACDI); Save the Children; Kinkeliba;

3. **Multi-lateral and bilateral donors** – USAID/SONATEL; UNICEF/SCOFI; Luxembourg Cooperation; International Program for the Elimination of Child Labor.

MEN initiated the Girl's Education Development Plan in Senegal (2009-2011) and provided a policy framework for the CCIEF to coordinate girl's retention in schools. The work is further planned through the PAQUET-EF from 2013-2025. The gender units and offices set up in the Inspections d'Académie (IAs) and Inspectorates of Education and Training (IEFs) are branches of the gender unit at central level. These structures are responsible for the implementation of MEN programs to ensure that children (girls and boys) from the most vulnerable populations have access to quality education and training. The gender units contribute to protection through the prevention, reporting, and management of violence in schools, and the fight against early pregnancy, early marriage, and the worst forms of child labor.

The gender units of the IAs and the gender offices of the IEF manage to prevent some cases of early marriage. Additionally, girls' education is often supported through short-cycled projects funded from external partners.

It is important to note that Senegal does not have a minimum age of sexual consent, which is a critical piece of legislation missing in the fight against SRGBV.[81] Furthermore, Senegal lacks a formalized Code of Conduct that outlines the obligations of teachers, school officials, and other education actors toward their students, which is another critical piece of legislation that could support the prevention of SRGBV.[82]

Senegal's School Health Programs

School Nutrition

National Nutrition Development Policy and Multisectoral Strategic Plan for Nutrition in Senegal

The National Nutrition Development Policy (PNDN 2015-2025)[83] as well as the Multisectoral Strategic Plan for Nutrition in Senegal (PSMNS) in both 2017-2021[84] and 2018-2022[85] versions mention "adolescents" as target groups but focus mainly on children under five and women of reproductive age. Both are issued by the Prime Minister's office.

The education sector is committed to the following strategic areas:[86]

1. combating micronutrient deficiencies;
2. training, research, and innovation;
3. prevention of malnutrition and food-borne noncommunicable diseases (NCDs).

The education sector's interventions focus on the integration and inclusion of nutrition education in schools and other educational settings, and the revitalization of school gardens in pre-school, elementary, and daara schools. Training teachers in the minimum physical practices to improve physical well-being and other complementary teaching and training areas can support in combating childhood obesity in the long term. Regarding the fight against anemia, iron and folic acid supplementation activities are planned under current MSAS policies for learners, particularly adolescent girls.[87] While nutrition interventions exist, they are not scaled up to a national level. They are generally supported by partners and last for the duration of a project.

School Meals

The Government of Senegal, in recognition of the impact of food on the education system and with the help of its partners, seeks to increase access to functional school feeding programs through the implementation of the Home-Grown School Feeding strategy by 2025. The Government works across ministries to support school feeding, including ministries supporting agriculture, health, education, gender, and social protection.

Senegal created a School Canteens Division within the MEN in April 2009. The School Canteens Division (DCaS) collaborates with the DCMS on issues relating to food hygiene, nutrition, and food selection. According to its "guideline for setting up a school canteen,"[88] all actors should be included: education directors, local authorities, school inspectors and departmental inspectors, school heads, and the school community including teachers, parents, student representatives, and social partners.[89]

The main external partners supporting the Government of Senegal in their school feeding program are FAO, WFP, and Counterpart International (receiving funding from United States Department of Agriculture).

Senegal has established a decentralized model of their school feeding program, enabling local communities an opportunity to play a significant role in the operationalization of the school canteens, supporting sustainability and ownership.[90]

In 2022, WFP supported 75 percent of school feeding interventions in rural primary schools, and overall supported 11 out of 14 regions. Despite the efforts of the government and their partners, coverage is only 20 percent.[91] According to the 2022 School Census (DPRE/MEN), nationally 90.3 percent of elementary schools receive some benefit of school feeding, though collectively across all school levels only 25.9 percent have school canteens. In the medium and long term, the intent is to develop canteen models that are less dependent on external resources and more focused on the consumption of locally produced food. This option should eventually lead to school canteens becoming an opportunity to sell and promote local production. The drafting of a School Food Policy Document in April 2010 is a response to implement this vision.

Infectious Disease Control in Schools

Malaria

NATIONAL STRATEGIC PLAN FOR MALARIA CONTROL IN SENEGAL (2021 - 2025)[92]

Senegal formulated its 2021-2025 strategic plan with a strong commitment to accelerate and intensify malaria elimination efforts. The vision of the plan is to achieve an emerging and sustainable malaria-free Senegal. The plan is intended to reduce malaria incidence and mortality by at least 75 percent compared to 2019 and to interrupt local transmission in at least 80 percent of eligible districts by 2019. To accomplish this, the school strategy will be enhanced in partnership with the MEN employing student-focused approaches (e.g., Roll Back Malaria days and competitions on malaria-themed poems or drawings) and in integration with other interventions such as PECADOM at schools in areas of high incidence.[93] It contains a variety of malaria control interventions through support from the U.S. Government via the President's Malaria Initiative and the Global Fund.[94] The national malaria control strategic plan includes improving healthcare access and quality, controlling mosquitoes through the distribution and promotion of Long-Acting Insecticidal Mosquito Nets, Indoor Residual Insecticide Spraying, and larval control. Other measures include providing intermittent preventive treatment to pregnant women and administering chemoprevention for seasonal malaria (CPS) in children aged 3 to 120 months. The CPS takes the form of a campaign lasting 3 to 4 months, depending on the region. Health providers go out into the community to find the children. Schools are among the sites where these health providers are deployed to administer doses to children. Additionally, advocacy, communication, and community mobilization play a crucial role.

The National Malaria Control Program and the DCMS have a collaborative school strategy. Teachers are trained in all 14 regions on malaria prevention and the promotion of healthy behavior. There is a teacher training guide on malaria and in the basic (elementary) education curriculum, the Middle School Guide to Malaria.[95] Practical sessions on the use of mosquito nets, environmental sanitation, and early treatment are organized in schools at their discretion. During the celebration of the World Malaria Day, health authorities rely heavily on learners and teachers for social mobilization and awareness-raising activities. The 2016-2025 Strategic Plan for the Fight against Malaria, in partnership with the MEN, will strengthen the school strategy with approaches that put learners at the center (Roll Back Malaria days, poem or drawing competitions on malaria) and integration with other interventions such as PECADOM School, especially in high-incidence areas.[96] PECADOM (*Prise en charge du paludisme à domicile*) helps recognize malaria early enough and intervene rapidly and effectively at home and in the community, particularly in children under five, to reduce morbidity and mortality from severe malaria.

Neglected Tropical Diseases (including Deworming)

Since 2007, Senegal has implemented three strategic plans to combat neglected tropical diseases (NTDs). The fight against NTDs has been prioritized in the National Development Plan for 2019-2028, with the goal of a NTD-free Senegal for sustainable development.

NEGLECTED TROPICAL DISEASES (2022-2025)

The current policy is the "National strategic plan to combat neglected tropical diseases 2022 – 2025."[97] Five are priorities for the MSAS and are treated in mass drug administration campaigns, including bilharzia, soil-transmitted helminthiasis, trachoma, onchocerciasis (river blindness), and lymphatic filariasis (elephantiasis).[98,99] The plan is based on three pillars: accelerating programmatic action, integrating interventions into the health system, and strengthening country ownership for a change in operating model and culture. It focuses on prevention, elimination, and eradication of these diseases. Schools play a vital role in educating students about diseases and prevention methods. The plan was developed through a multi-sectoral approach involving various stakeholders such as government departments, namely health, education, livestock, hydraulics, sanitation, local governance, and spatial planning. Some of the notable external partners supporting this work include the WHO, USAID, the Bill and Melinda Gates Foundation, UNICEF, and the World Bank.

The plan is based on three pillars: accelerating programmatic action, integrating interventions into the health system, and strengthening country ownership for a change in operating model and culture.

Additional plans have been carried out in support of the fight against NTDs, including:

a. sustainability plan 2021-2023;

b. advocacy plan for NTDs 2019-2021;

c. establishment of a National Committee for the Fight against NTDs (CNLMTN) by ministerial decree N° 019513 of 07 June 2021;

d. Development of the Morbidity Management and Disability Prevention Plan (PGMPI); d) commitment of local elected officials and civil society in the fight against NTDs 01 June 2021; and

e. Presidential directives from the ministerial council of 03 February 2021 relating to the process of repeal of Law 76-03 of 25 March 1976 (law establishing the villages social rehabilitation).

The DCMS leads a program focused on deworming and medical monitoring in rural public schools. Deworming is usually conducted by DCMS in collaboration with UNICEF, providing students with mebendazole or albendazole tablets every six months along with vitamin A supplementation.[100] The 2022 School Census (DPRE/MEN) reports 12 percent of preschools received deworming medication and 16.9 percent received vitamin A supplementation. In addition to the administration of drugs, school programs include health lessons in their teaching/learning to improve their knowledge of the diseases and their prevention methods, as both target and vector.[101]

Immunization

Senegal has a set of comprehensive vaccination programs for the country.

Through its national immunization program, it provides the following vaccinations:[102]

1. Bacillus Calmette-Guerin tuberculosis;
2. Diphtheria-Pertussis-Tetanus;
3. Measles;
4. Polio (oral and injectable);
5. Yellow Fever;
6. Hepatitis B;
7. Haemophilus influenzae type b;
8. Rubella;
9. Rotavirus;
10. Pneumococcal conjugate;
11. Human Papilloma Virus (HPV).

Vaccinations are delivered through health facilities, schools, and outreach sites in accordance with the national routine delivery strategy.[103] The 2017 DHS report shows a prevalence of complete immunization coverage of 63 percent, below the national target of greater than 80 percent coverage.[104] Senegal is the first Global Alliance for Vaccine and Immunization-supported country in West Africa to introduce the HPV vaccine (in 2017) into its routine immunization program.[105] In 2019, 86 percent of eligible girls (estimated among nine-year-old girls) received the first dose of the HPV vaccine, but in 2021, HPV vaccination coverage was very low: 39 percent for the first contact (HPV1) and 21 percent for the second (HPV2).[106]

COVID-19 Response Plan

The MEN developed a COVID-19 Response Plan[107] consistent with the national strategy led by the MSAS. This response plan mitigates the effects of the pandemic on education in Senegal. It ensures the continuity of educational services, reinforces the resilience of the system, and achieves the objectives of the SDG 4.

It comprises four strategic axes:

1. support for vulnerable children;
2. continuity of learning;
3. preparation for recovery;
4. post-COVID resilience.

The plan had support from UNICEF, Save the Children, and others' focusing on school administration, teaching and learning continuity, reopening preparations, and communication, health, and nutrition actions.

Once schools reopened, the major challenge was to how to implement hygiene and social distancing measures effectively and consistently in schools without water points, latrines, and hand-washing stations, and with large density of students and staff in schools, especially in urban areas. As a precaution, the Minister of National Education instructed academy inspectors to provide COVID-19 lessons and reinforce hygiene measures in schools and daaras. A Monitoring Committee chaired by the MEN was activated to coordinate the MEN's response consisting of representatives from the various MEN departments, and representatives of parents' organizations, teachers' unions, koranic school associations, students, and the international donor and NGO community. This committee still exists but is inactive.

The MEN launched the "Learning at Home" initiative[108] to provide widely accessible learning through a multi-sectoral approach, with online resources and through media partnerships. A dedicated channel for streaming educational programs was granted to the MEN. The MEN implemented additional exam sessions and automatic promotion of students. UNICEF and other partners influenced these measures to minimize repetition and dropout rates.[109]

However, post-COVID those initiatives have not been sustained. Examples include hand-washing facilities that are no longer visible in many of the schools visited; the television channel created for distance education that no longer broadcasts; the non-existence of a platform that considers the health data of learners; and the absence of a national health education program.

Water, Sanitation, and Hygiene

Although there have been improvements in recent years, 13 percent of the population at the community level still lacks access to safe drinking water, 57 percent of the population still does not have access to hand-washing facilities, and 76 percent of Senegalese families do not have access to sanitation services.[110,111]

WASH is the foundation on which school environment improvement programs are based. The first target of SDG 6 on safe drinking water and sanitation is to ensure equitable access to adequate sanitation and hygiene for all by 2030 and to end open defecation, with particular attention to the needs of women and girls and people in vulnerable situations.[112] With this target in mind, UNICEF, a critical partner supporting WASH at the national level, is paying particular attention to the situation in schools.

To increase access to WASH in schools, here are just a few examples of programs and projects, in partnership with national and international organizations:

- **USAID/PEPAM project** – supporting Community-Led Total Sanitation[113]
- **Project for Access to Water in School Environments (PAEMS) project** – supporting WASH in Schools[114]
- **USAID/Senegal WASH (SENWASH) program** – supports national WASH programming[115]
- **ECOLES SANTÉ" program** – supports health, nutrition, and WASH interventions in schools and in their communities[116]

According to UNICEF, these programs have improved access to drinking water and sanitation facilities, with data showing 76 percent of elementary schools in Senegal had access to a source of drinking water in 2019, and 58 percent of elementary school in Senegal had functional latrines in 2019. However, it is important to note that access to drinking water can vary according to geographical location and available infrastructure, with some schools still facing problems of inadequate sanitary infrastructure, particularly in rural areas. While these figures are promising, national statistics from UIS still show less than 1 percent of schools have a separate toilet for girls,[117] which can increase the challenge of attendance in schools for both groups, especially young girls.

The literature review highlights the general observation that schools in Senegal have low availability of toilets that meet minimum sanitary standards, and the direct consequence of this is a high prevalence and incidence of communicable diseases in schools: diarrhea, eye infections, and skin infections.[118] According to the national School Census 2022-DPRE/MEN, nationally 88 percent of schools have water points, 82.9 percent have latrines, and 89.6 percent have hand-washing stations. While these numbers are promising, the quality and sanitation of these facilities varies greatly across the country. Furthermore, the number of facilities to allow access to toilets for people with disabilities are also generally absent.

The COVID-19 pandemic created an opportunity for closer collaborations between the water, health, and education sectors, which can be seen in various health/WASH-related projects, such as the USAID/Senegal School Water Integrated Solutions for Health, which supports school hygiene education coupled with improved access to water for schools in the Matam region. The innovative approach of using solar pumps to bring in water to this arid area serves as an example of climate resilience in education, demonstrating Senegal's proactive approach to account for climate change in its work. While in areas that have benefited from specific WASH projects in schools there is a relative availability and accessibility of toilet blocks,[119] the situation is far from being equal across the country.

Menstrual Health Management

In Senegal, menstrual health management (MHM) is still considered a taboo subject. Menstruation is often perceived as impure or "dirty." For this reason, it is often not discussed between mothers and daughters, girls and their friends, or taught in schools, despite its integration into the national curricula. By the time girls reach puberty, they have very little knowledge about the subject and are often afraid and ashamed of what is happening to their bodies. For example, only 21 percent of girls practice the recommended hygiene measures during menstruation.[120]

There are many reasons for these shortcomings:

- The persistence of taboos and socio-cultural beliefs that limit knowledge exchange initiatives and the adoption of desired sexual and reproductive health behavior;
- Lack of access to appropriate sanitary protection;
- The virtual absence of school-based facilities for adolescents to receive, listen to, inform, and carry out sex education activities;
- Inadequate sanitation facilities: only 1 percent of schools in Senegal have separate toilets for girls and boys;
- Inadequate provision of user-friendly SRH services at community health facilities, characterized by a lack of availability of information and services for Adolescent Sexual and Reproductive Health;
- Insufficient menstrual health management strategies by the government and its partners.

As a participant in the Joint "Gender, Hygiene, and Sanitation" program supported by UN Women and Water Supply and Sanitation Collaborative Council, Senegal used their multi-sectoral approach to establish coordination mechanisms such as the inter-ministerial platform under the leadership of the Ministry of Water and Sanitation to create a multi-sectoral task force to specifically support MHH.[121] As a result, Senegal was able to operationalize a joint training of government officials working in different key ministries on MHH. In addition, the Gender Unit of the MSAS, in close collaboration with the DCMS, initiated a module for teacher training on MHM that is being developed. The process is still ongoing, with the intended outcome that it will be integrated into the national education curriculum in Senegal.

While there is no formal MHM strategy with well-defined guidelines and state support in the education sector, there are initiatives at the school level to provide girls with sanitary towels, to teach teachers and girls how to make sanitary towels, and usually provide separate toilets from those of boys with access to water.[122] Some schools at the local level partner with women's groups that make washable sanitary towels to distribute them to students. Still, the infrastructure to support MHM often does not account for the specific needs of young girls, including a lack of trash bins for the disposal of sanitary towels (14.29 percent), washbasins (23.83 percent), and shelves to put bags on in latrines (0 percent).[123]

Sexual and Reproductive Health in Schools

NATIONAL AIDS STRATEGIC PLAN (2018-2022)

Senegal's government, supported by sectors, communities, and partners, has made significant efforts to combat AIDS since 1986. The new strategic plan is intended to provide universal access to prevention, treatment, care, and support services by 2030. Developed through extensive consultation with stakeholders, it serves as a framework for all players in the fight against AIDS, promoting harmonization and alignment. Key strategies for school-age children include comprehensive sexuality education, peer education, outreach activities for out-of-school youth, capacity-building, and the integration of services in counseling centers. The plan also emphasizes the use of new media and community self-testing.[124]

STRATEGIC PLAN FOR ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH (2014-2018)

The vision of the National Strategic Plan for Adolescent and Youth Reproductive Health, led by MSAS,[125] is that all adolescents and youth in Senegal have the ability of full participation to their rights to universal and equitable access to quality, evidence-based health services that respect the cultural values and beliefs of the country.[126] Updated from the 2005 National Strategy, it ensures quality services aligned with standards for adolescents and youth. The vision is universal access to evidence-based SRH services, respecting cultural values, and considering social, environmental, and economic determinants for sustainable development. A multi-disciplinary and multi-sectoral approach has been adopted.

ADOLESCENT AND YOUTH REPRODUCTIVE HEALTH AND CHILD SURVIVAL SERVICES – POLICY, STANDARDS, AND PROTOCOLS

The goal of the present document[127] is to improve young people's health and well-being, reducing preventable deaths and diseases. Measures include raising awareness, providing suitable services, involving parents and communities, promoting a favorable environment, coordinating interventions, and advocating for youth health in Senegal. This includes concrete actions against child sexual abuse in learning environments (schools and daaras), improving access to and availability of care, and improving and adapting reproductive health services that respect the values promoted in Senegalese society and schools.[128,129]

Two key NGO-led SRH projects are the Yeesal Health Project, implemented by Yeesal Agir pour la Santé des Femmes and Marie Stopes International Reproductive Choices Mobile School Health Clinics. The Yeesal Health Project is improving young people's access to SRH services by organizing sex education sessions in schools, and providing STI testing and treatment, and counselling and support to young people. Marie Stopes International Reproductive Choices' Mobile School Health Clinics consist of moving a team of health professionals to certain schools in Senegal offering students integrated health services, including SRH counselling and services related to SRH.

HIV AND AIDS

The MEN's National Council to Fight AIDS (CNLS) brings together the education directorates responsible for the definition, coordination, implementation, monitoring, and evaluation of education policies as well as the technical support services responsible for planning reforms, innovations, development of training and sensitization activities, and teaching materials of HIV/AIDS control in the education system.[130] Since 2001, all these activities have been coordinated within the framework of the SHN sub-component of the PDEF. The CNLS decided to focus on the fight against HIV and AIDS in the school environment through preventive education. Unfortunately, it remains difficult to obtain accurate data to measure the impact of HIV and AIDS on the education system.

Health Education

Under the DCMS, health education expanded to a variety of topics covering hygiene, nutrition, and reproductive health, all of which are systematized into school curricula and extracurricular clubs in Senegal.[131] Information for these topics is covered in their respective thematic sub-sections below. Note that while road traffic incidents are high in Senegal, it is not listed in the variety of topics covered under health education and is recommended to be included.

HEALTH-NUTRITION-ENVIRONMENT GUIDE

The Health-Nutrition-Environment Guide equips primary school teachers with comprehensive resources for designing their lessons on health, nutrition, and the environment. It consists of three key sections: a theoretical portion that emphasizes a skills-based approach, a practical segment focusing on lesson planning, and a documentation section offering insights on diseases, nutrition, and the environment. This guide seamlessly integrates into the core curriculum of basic education, covering a wide range of topics related to population, health, and environmental concerns. By delving deeper into specific themes concerning health, nutrition, and the environment, this guide aligns perfectly with the objectives of the PAQUET. Monitoring and evaluation (M&E) by a Monitoring Committee chaired by the MEN accompanies its implementation, and a Performance Measurement Framework assesses progress toward SDG 4 goals.

Other health education programs are the Family Life Education and Population Education project,[132] the Family and Social Education program, and the Life Skills Training program.[133] Implementation of these programs can vary from region to region and from school to school.

INTEGRAL SEXUALITY EDUCATION

The MEN, in collaboration with the MSAS, develops educational programs to raise learners' awareness of sexual and reproductive health issues. School-based sexuality education programs address topics such as puberty, contraception, STIs including HIV and AIDS, healthy relationships, consent, and sexual and reproductive rights. Teacher training programs are being put in place to strengthen teachers' knowledge and skills in reproductive health.[134] These programs are implemented at different school levels, depending on the age of the learners, and are adapted to meet the specific needs of adolescents. In addition, associations and NGOs are also working in partnership with schools to provide complementary reproductive health education. These initiatives often include workshops, awareness-raising sessions, counselling, and the distribution of condoms and other contraceptives. Initiatives include the EVF (Family Life Education) program that was integrated into the Basic Education Curriculum (2010) and national curriculum documents for the Family Economics program and the Life and Earth Sciences program (2008), led by the MEN with support from UNESCO.[135] The EVF clubs in secondary schools are led by the Group for the Study and Teaching of Population (GEEP) in partnership with UNFPA and the MEN, and while flexible, it has challenges with national scale up and influence on the topics in the formalized curricula.[136]

Beyond these initiatives, the MEN, together with UNFPA, set up a program entitled Comprehensive Sexuality Education Programme to provide holistic sexuality education to students and covers topics such as puberty, contraception, STIs, healthy relationships, consent, and sexual and reproductive rights. A new curriculum on

sexual and reproductive health has been developed, but with a restricted use of more taboo topics covered in the curriculum in more conservative communities. The Curriculum Renewal Support Project is an example of a good opportunity to integrate reproductive health education into school curricula as it was created to define the exit profiles (necessary skills) of the different cycles of education and define the competences in each subject area, which includes socially current issues.[137]

Some of the challenges include restrictive social and cultural norms, language barriers, non-standardization of training and communication materials, fragmented geographical coverage, lack of resources and insufficient teacher training. The root of the resistance lies in the fear that the discussion of sexuality and contraception would encourage sexual activity. Even the use of the term reproductive health, a more accepted concept and denomination, instead of sexual health was chosen intentionally by national leaders to mitigate the resistance.[138]

Other Health Services for School-Age Children

Universal Health Coverage for School-Age Children

The MEN and Universal Health Coverage Agency, which is in responsible the National Programme for Universal Health Coverage, have signed a decree for the Student CMU[139] or Couverture Maladie Universelle, an insurance scheme covering 80 percent of students' (public, private, or daara students, and out of school children/youth) health expenses. Based on mutual health insurance companies, each learner contributes 1,000 CFA francs per year and the government adds another CFA 3,500. The child is therefore entitled to all the services offered at the health posts and centers. At the hospital, they are entitled to consultations and generic medicines. For medicines bought in private pharmacies, the mutual health insurance company will pay half the cost and the child pays the other half. However, implementation remains very difficult because of problems related to the adherence of students to the reimbursement of the government's share (80 percent) to the structures that offer health services and medicines to students. The government's debt has become a burden for the health care structures and this is why they refuse to offer services to students who present themselves with the CMU learner card. They are obliged to pay the full rate for services and medicines.

First Aid

First aid training prepares teachers and students to treat injuries that may be caused by safety violations or accidents. Trained learners and teachers can become excellent first aiders and also train people in their surroundings such as their families and neighbors. However, a UNESCO-funded study shows an alarming lack of health care provision in schools, which rarely have an infirmary (1 case out of 21 schools visited), or teaching staff and Administrative Staff and maintenance staff trained in first aid (23.81 percent). Moreover, almost all students (97.62 percent) were unaware of the existence of the IME itself, and therefore unaware of the services offered.[140]

Red Cross initiatives exist to train students and teachers in first aid and ensure that each school has a first aid kit, and the IAs and the IEFs write circular letters to schools to remind them of the need to have a first aid kit. This kit can include: 60 or 90° alcohol, betadine, cotton wool, compresses, sticky tape, paracetamol, sanitary towels. Part of the health insurance contribution (200 CFA francs) is used to make these purchases. However, there is no policy document that structures and harmonizes first aid interventions. A multisectoral approach, for example bringing in the MSAS, the Fire Brigade, and the academic authorities could be set up to provide sustainable solutions.

Eye Health

Senegal has a National Program for the Promotion of Eye Health (PNPSO) 2021-2025, which integrates the fight against trachoma and includes partners from SightSavers, FHI360, Speak Up Africa, World Vision, and Deloitte. This program is housed at the MSAS, but it seems to exist only in name. The project does not cover the national territory and is unsustainable. The activities carried out stopped with the withdrawal of the partners and there is no viable source of funding in place.

In 2014, the MEN, in collaboration with the NGO SightSavers, initiated a pilot project of inclusive education for visually impaired children. The project involved adapting school facilities, translating teaching materials into braille, vision screening and care through the Programme National de la Promotion de la santé oculaire or National Eye Health Promotion Program (PNPSO), and conducted trainings of teachers and parents about inclusive education for visually impaired and blind children in three ordinary schools located in the IEFs of Guédiawaye, Thiaroye, and Rufisque communes in the Dakar suburbs. Learnings from this program were shared with the MEN to conduct a multi-sectoral scale-up.

The project "Correction of refractive errors" (2016-2022) brings together the DCMS of the MEN and the PNPSO of the MSAS in partnership with the NGO Sightsavers. A teacher training module is being developed to train teachers to detect learners with vision problems. Students are then referred to health facilities to receive the necessary care to regain good vision. The effectiveness of the collaboration between the two ministries is an opportunity to establish a multisectoral and multidisciplinary approach that would address the issue of eye health in school-aged children, from prevention to treatment.

Oral Health

There is no national oral health policy, strategy, or action plan to address this issue in schools or for school-age children, despite the existence of dedicated staff for oral health work at the MSAS.

Mental Health

The MSAS' School Mental Health Office's objectives include promote the creation and strengthening of learning centers adapted to children and youth with learning disabilities, integrate mental health into teacher training, and promote good stress management in schools.[141] Currently there are no specialized staff (psychiatrist or psychologist) in schools. It is therefore necessary to establish a well-structured collaboration between the MSAS and the MEN on the issue of mental health.

Dissemination, Coordination, and Collaboration

While the MEN holds responsibility for SHN, the development and implementation of these initiatives involve collaboration with other ministries, partners, NGOs, local authorities, and communities. Various strategic policies and plans across different line ministries provide the foundation for these interventions within the school environment; some of these are described in the following section.

Policy Dissemination

While there is no formalized national SHN Policy, health programs are disseminated vertically between the DCMS and the school inspectorates. Implementation of these programs at the peripheral level is carried out by the IME in collaboration with school principals. The Health and Nutrition focal point in the IAs and IEFs acts as a relay for the IME in implementing school health activities. School health is managed on a decentralized basis, with the DCMS at central level and the IME at the level of the IA. The IME is considered a public health structure. As there is no single health policy, the strategies and activities implemented are disseminated throughout the various hierarchies mentioned above. Periodic meetings, administrative memos, or training sessions are all used as methods of dissemination.

Collaboration with the MSAS

A memorandum of understanding[142] was first signed in 2002 between the MSAS and the MEN. The agreement outlines the responsibilities of each party in planning, implementing, monitoring, and evaluating school health programs, particularly focusing on the PDEF and FRESH program, later updated in the PAQUET-EF. These responsibilities include training teachers in prevention, providing hygiene, sanitation, nutrition, and reproductive health education to students, and offering quality care and referral services. In July 2015, this memorandum was revised,[143] but it is yet to be signed. It led to the drafting of the National Health and Social Development Plan (PNDSS 2018-2019), which defined the lines of action to fulfil the country's commitments in terms of health for the most vulnerable groups, in particular the school population.[144]

Coordinating Entities

The MEN and the MSAS work in close collaboration with other partner ministries, including Ministry of the Economy, Finance, and Planning; Ministry of Women, the Family, and Childhood; Ministry of Local Governance, Development, and Regional Planning; Ministry of Water and Sanitation; Ministry of the Environment and Sustainable Development; Ministry of Higher Education and Research; Ministry of Vocational Training, Apprenticeship, and Crafts; Ministry of Youth, Employment ,and Citizen Construction; and others.

In general, because Senegal does not have one integral school health policy, coordinating entities are sectoral. The School Health Steering Committee is responsible for drawing up the school health policy document and its strategic plan. It was set up by the MEN in July 2021, and brings together the various branches of the MEN, the MSAS, parent organizations, and technical and financial partners. The DCMS serves as the coordinating and implementing body for implementation in schools.

The Comité National de Développement de la Nutrition (CNDN, formerly CLM), created in 2001 by the Senegalese government, is the nutrition policy's coordination and M&E body. The multisectoral approach involves the Prime Minister's Office, the MSAS, and the MEN. The CNDN is made up of representatives of key nutrition ministries who each play a role in the implementation of the policy,

such as the Food and Nutrition Division, the Child Survival Division, the Adolescent/Youth Health Division, and the Community Health Unit within the MSAS, the Ministry of Agriculture and Rural Equipment, the DCMS, the School Canteens Division from the MEN, representatives of the Association of Mayors and the Association of Rural Councilors, and civil society. It promotes a multi-sectoral approach to nutrition, involving all relevant players. Reporting to the Prime Minister, it provides technical assistance in defining and implementing national nutrition policy.[145] A CNDN technical committee includes additional representatives from the Laboratory for Research in Nutrition and Human Diet at the Université Cheikh Anta Diop, and nutrition partners (Helen Keller International, UNICEF, NI).

For adolescent SRH, a Coalition for Adolescent and Youth Reproductive Health was formed in 2012, which supports the MEN in integrating relationships and sexual education into school curricula and ministry systems. It unites key stakeholders including the MEN, UN agencies (UNESCO and UNFPA), civil society organizations (ASBEF, ONEWORLD, GEEP, RAES, AMREF, OXFAM, Save the Children, FENAPES, and FAWE), and youth organizations. Since 2015, the MSAS set up a consultation framework on adolescent and youth reproductive health that includes numerous partners such as USAID, UNFPA, WHO, AMREF, DCMS, ASBEF, GEEP, the Ministry of Youth, YWA, Marie Stopes, the Ministry of the Interior, and the Ministry of the Family. This framework is not yet fully functional and needs strengthening to improve its effectiveness.

For HIV/AIDS, the MEN established the CNLS, which brings together the education departments responsible for coordinating, implementing, and monitoring education policies, as well as the technical support services responsible for planning reforms, innovations, developing teaching materials, and evaluating the education system. The committee's objectives include coordinating training and awareness activities, developing teaching materials, and promoting awareness frameworks in decentralized structures and schools. The strategies employed are training, awareness-raising, and the creation of educational materials.

Resource Allocation for SHN

The desk review made it possible to draw up a map of the potential sources of funding for school health interventions. This is funding from domestic resources made up of the State budget, including local authorities and contributions from the private sector through public-private partnership and corporate funding within the framework of corporate social responsibility.[146] Added to this is funding from technical and financial partners. Figure 2 shows the evolution of the expenditure of the ministries in charge of general education and training.

FIGURE 2: EVOLUTION OF THE EXPENDITURE OF THE MINISTRIES IN CHARGE OF EDUCATION AND TRAINING[147]

The adoption of program budgets and the development of Sector Development Policy Letters emanating from the directives of the harmonized financial framework within the West African Economic and Monetary Union offers an opportunity to register a specific budget line at the level of the Ministry of Education for school health. Thus, from the State budget, funding opportunities are identified on one hand through the budget of the Ministry of National Education, and on the other that of health.

The PAQUET-EF 2018-2030, in which school health occupies an important place, identifies several sources of funding: the State Budget excluding debt service, the budget of local authorities, the contribution of households, the financing of private companies, the financing of technical and financial partners, and the financing generated by institutions (excluding household payments).

For example, nearly 88 percent of education expenditure over the 2018-2022 period is covered by the State Budget (excluding debt service), 3.9 percent on average by local authorities, 1.5 percent on average by households, 0.8 percent on average by private companies, 6.1 percent on average by technical and financial partners, and 0.7 percent on average by resources generated by institutions, excluding household payments.

This is reflected in absolute value by an increase in total financing from CFA 749 billion in 2018 to 2,747 billion in 2030 (see Table 3).

TABLE 3: BREAKDOWN OF THE PAQUET BUDGET (IN BILLION CFA)

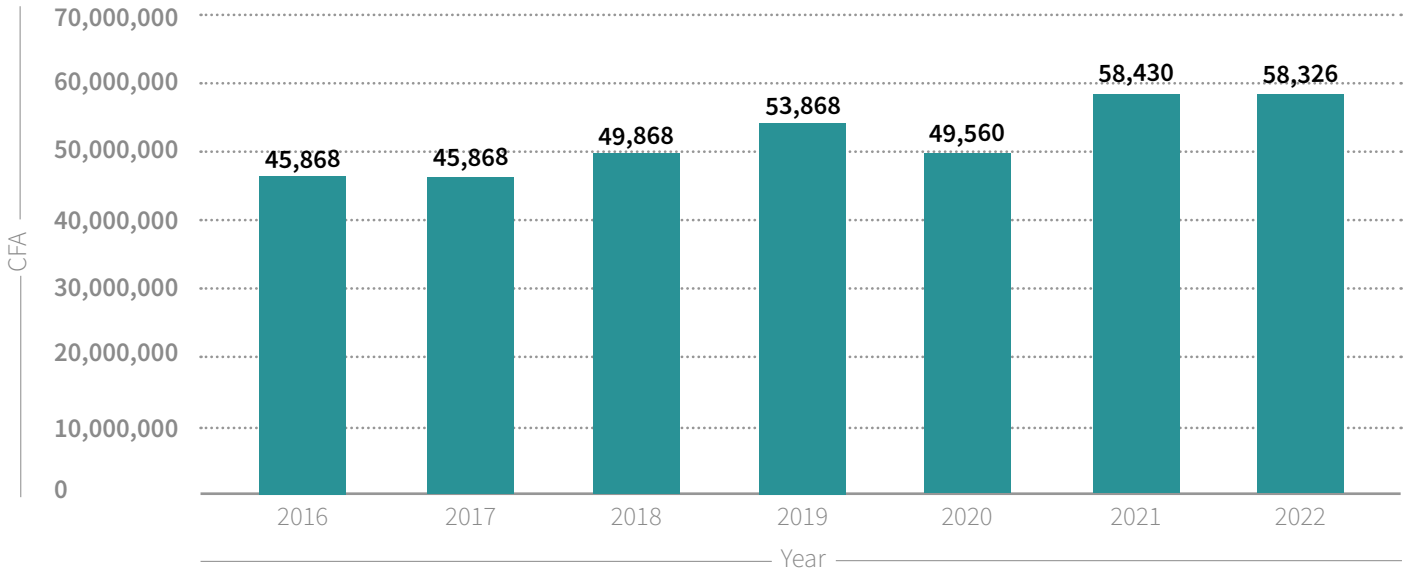
	2018	2022	2030
State budget excluding debt service	631	1,016	2,601
Local authorities	26	48	47
Households	13	15	24
Private companies	6	8	3
Technical and financial partners	68	52	59
Resources generated by institution, excluding household payments	5	7	13
Total	**749**	**1,146**	**2,747**

Source: Strategic Plan for School Health in Senegal (2023-2027) – Draft Report

SHN Financing under the Ministry of National Education

Modest resources are allocated from the Ministry of Foreign Affairs to cover the operating costs of the DCMS and the Inspection Médicale (IME) des écoles, including the regional level. Figure 3 shows the evolution of the MEN's budget allocation to school health.

FIGURE 3: EVOLUTION OF THE MEN BUDGET ALLOCATED TO SCHOOL HEALTH



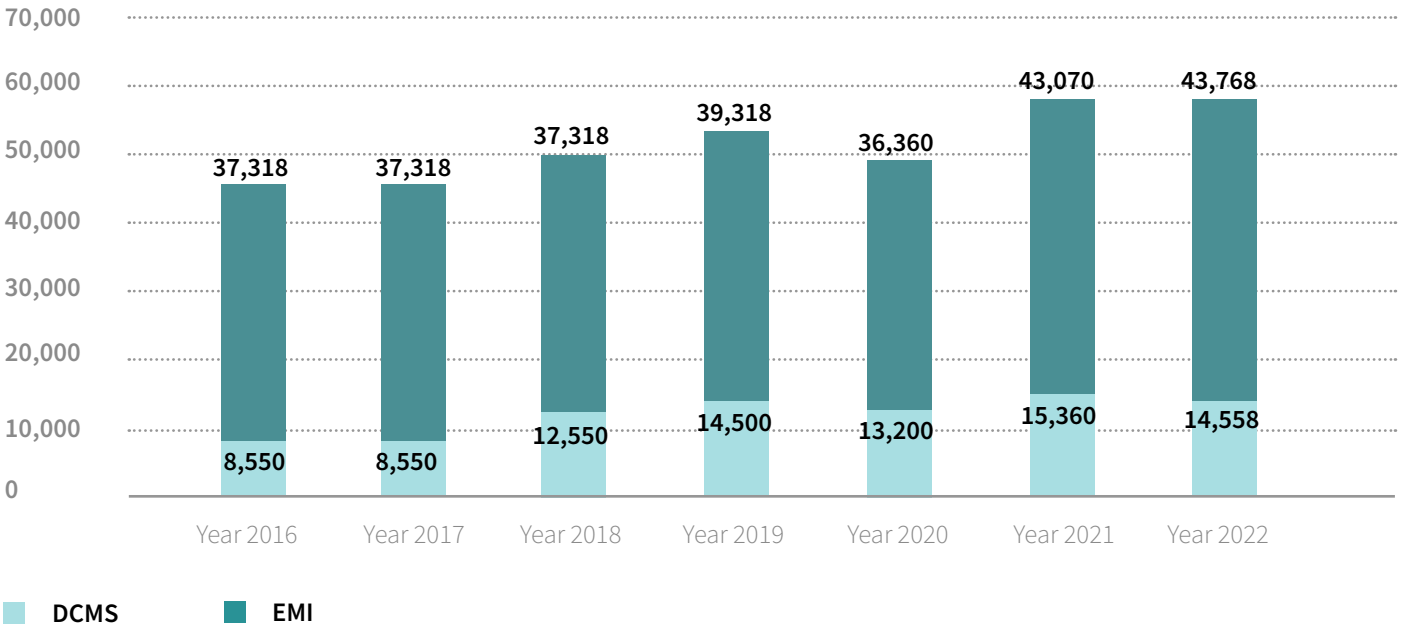
Source: MEN budget (2016-2022)

Over the last seven years, the average budget allocated to school health by the MEN is around CFA 51 million, with annual budgets varying between 45.8 million and 58.4 million. This situation shows the modest resources allocated to school health by the MEN despite the efforts made in recent years with an increase of 27 percent in 2022 compared to 2016. The nature of the expenditure exclusively concerns the administrative functioning bodies, notably the medical-school support. This state of affairs shows the significant gaps to be covered by domestic resources in relation to school health. Table 4 and Figure 4 show the budget distribution by institution.

TABLE 4: EVOLUTION OF THE MEN BUDGET ALLOCATED TO SCHOOL HEALTH AND BY INSTITUTION (IN THOUSANDS OF CFA)

Structures	2016	2017	2018	2019	2020	2021	2022
School Medical Control Division	8,550	8,550	12,550	14,500	13,200	15,360	14,557,820
Medical Inspection of Dakar Schools	5,158	5,158	5,158	5,158	4,758	7,758	8,458
Medical Inspection of Schools in Kolda	2,359	2,359	2,359	2,359	2,359	2,359	2,359
Medical Inspection of Schools in Kaffrine	1,420	1,420	1,420	1,420	1,420	1,420	1,420
Medical Inspection of Schools in Kédougou	1,172	1,172	1,172	1,172	1,172	1,172	1,172
Medical Inspection of Schools of Sédhiou	2,084	2,084	2,084	2,084	2,084	2,084	2,084
Medical Inspection of the Schools of Diourbel	2,193	2,193	2,193	2,193	2,193	2,193	2,193
Medical Inspection of Schools in Fatick	2,508	2,508	2,508	3,008	3,008	3,008	3,008
Kaolack School Medical Inspection	3,210	3,210	3,210	3,710	3,710	3,710	3,710
Medical Inspection of Schools in Louga	2,485	2,485	2,485	2,685	2,685	2,685	2,685
Medical Inspection of St Louis Schools	2,985	2,985	2,985	2,985	2,985	2,985	2,985
Medical Inspection of Schools in Tambacounda	1,751	1,751	1,751	2,051	2,051	2,051	2,051
Medical Inspection of Schools in Thies	5,419	5,419	5,419	5,419	5,419	5,419	5,419
School Medical Inspection of Ziguinchor	2,516	2,516	2,516	2,516	2,516	2,516	2,516
Medical Inspection of Schools in Matam	2,058	2,058	2,058	2,058	-	3,710	3,710
Budget of the School Medical Inspections	37,318	37,318	37,318	39,318	36 ,60	43,070	43,768,32
ANNUAL TOTAL	**45,868**	**45,868**	**49,868**	**53,818**	**49,560**	**58,430**	**58,326,14**

FIGURE 4: BUDGET ALLOCATION BETWEEN DCMS AND IMES



SHN Financing under the Ministry of Health

The financial resources from the MEN dedicated to school health are complemented by those from the MSAS (see Figure 5 and Table 5). These financial resources, allocated in general to health, did not allow us to identify those specifically dedicated to school health. However, interviews with the heads of the IME (Inspection médicale des Ecoles) made it possible to identify resources from the MSAS without being able to quantify them.

FIGURE 5: DISTRIBUTION OF THE MEN BUDGET ALLOCATED TO SCHOOL HEALTH (BY BENEFICIARY STRUCTURES)

Nutrition-Sensitive Intervention Programs within MEN Budget by Percentage

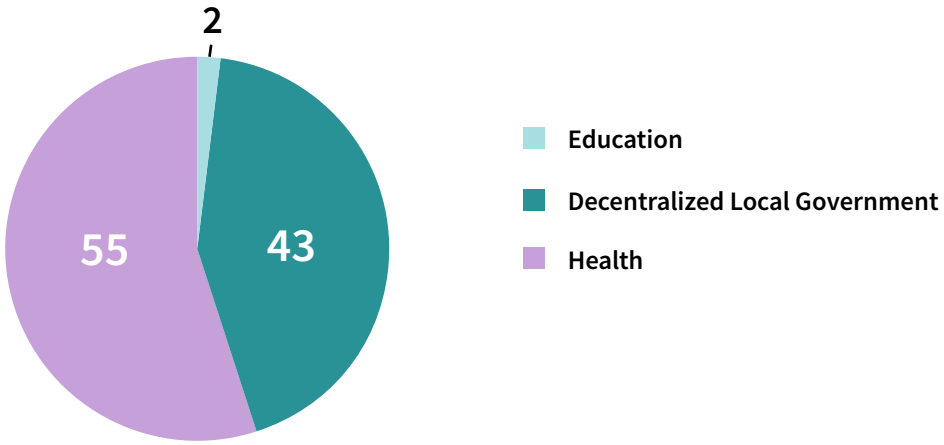


TABLE 5: BREAKDOWN OF MULTISECTORAL NUTRITION PLAN FOR NUTRITION (PSMN)

Section	Budget millions (in CFA)	Budget (in percent)
Prevention and management of malnutrition and food-borne non- communicable diseases	148,556	72
Strengthening the availability of diversified, healthy, and nutritious foods	30 101	14
Fight against micronutrient deficiencies	25,297	12
Training, research, and innovation	2,064	1
Nutrition governance	10	-
Total	**206,031**	**100**

Other SHN Funding

As defined in the National Health and Social Development Plan, the PAQUET, and the national health financing strategy, the implementation of school health interventions is also supported by technical and financial partners. However, their financial contribution is not recorded and documented. This situation should be improved through the establishment of a database.

As for local authorities, Act III of Decentralization also offers funding opportunities. In 2013, Senegal opted for a third territorial and administrative reform: Act III of Decentralization, which transfers nine areas of competence to local authorities, including education and public health. They provide financial support for school health in a fragmented and unstructured way. Thus, it is essential in order to take charge of school health in a holistic and sustainable way, that local authorities systematize support for schools and EMIs in the area of school health. Funding based on partnerships should be initiated for school health care. Thus, advocacy actions will make it possible to mobilize resources from local authorities for the financing of school health. This domestic funding is supplemented by funding from the private sector and households through student fees.

Data on financing from the private sector and civil society organizations (CSOs) is lacking, despite their participation in school health. For example, the SONATEL Foundation supports certain schools in the area of school health, particularly with regard to the living environment, and other CSOs have formed partnerships with schools to provide sanitary towels for girls.

Moreover, learners and parents, through registration fees and support from parents, also contribute to the financing of school health. Indeed, between CFA 200 and CFA 150, depending on the type of school, are paid to the EMI. However, better supervision and allocative guidance could have a better impact on school health.

The decisions taken by the government in November 2022 regarding free and/or reduced fees will have an impact on the amount of funding for school health from fees. Thus, funding mechanisms to fill this funding gap will need to be considered to fill the gap.

In response to universal health coverage, attempts to join school health insurance schemes have been noted in some schools. These initiatives have not borne fruit because of the quality of care, particularly with regard to the availability of medicines in the health facilities. This state of affairs has resulted in a decrease in contributions due to the non-renewal of members' contributions.

Monitoring and Evaluation of SHN

The Government of Senegal has set up M&E systems at the MEN and the MSAS to collect and analyze information on health and education. These systems collect data from schools and health establishments at community and regional level before compilation at national level.

M&E SYSTEMS UNDER THE MEN

The National Report on the State of Education is published annually by the MEN, under the heading of "Improved Quality." It should be noted that this report monitors the various PAQUET strategies, and that school health could also be an element that improves the quality of education. The DPRE has led the financial modeling, M&E, planning, and reporting for the education sector for more than a decade. While data is available, it is often fragmented, heavily reliant on various reports, studies, and evaluations from various sources, and is identified as an opportunity for improvement.[148] The National Education Information and Management System (SIMEN) was set up by the MEN in July 2016. Its objectives include the modernization and optimization of infrastructure resources (virtualization) and human resources (skills); the introduction of digital educational resources accessible online to the entire educational community; the provision and sharing of information, by improving collaborative work; and bring public education services closer to citizens. SIMEN is intended to integrate and improve the interface between other Education Management Information Systems such as MIRADOR,[149] StatEduc,[150] SYSGAR,[151] and PLANETE[152] to ensure accessible information on all aspects of school and student performance in one interface.[153] However, not all the systems are accessible throughout the levels of the education sector, for example, the PLANETE platform does not yet include school health indicators, and is not yet accessible to IMEs. This represents a major gap in school health monitoring.

At the level of the MEN, the DCMS does not have a strategy or M&E tools for collecting data on these indicators. It should be noted that there is a IME in each region, which are often managed by social action agents or teachers. This inspectorate should be responsible for collecting data on school health in each region and sending them to the central level, in particular the Monitoring and Evaluation Office at the DCMS.

M&E SYSTEMS UNDER THE MSAS

As part of the monitoring of health data, MSAS has set up a computerized data collection system (DHIS 2). Data is collected in collaboration with the health structures, considering the health pyramid. The health data is recorded by the health posts and centers with a quality control system at the level of the health districts and medical regions. The health data collected at the national level also includes data on children but does not focus on health data in schools.

Conclusions and Recommendations

School health is a national priority, given its alignment with various national policies, including socio-economic development plans, national health plans, national nutrition plans, and national education plans. While there are several national policies and plans that support SHN interventions in Senegal, the lack of a coordinating policy limits the effectiveness and efficiency of these interventions. In general, and despite several significant advances, including Senegal's ratification of several international conventions that guarantee access to education and health for children, school health is still marked by a certain weakness, both quantitatively and qualitatively, in its coverage, strategies, and means. Historically, after several reforms since the colonial era, the introduction of the concept of Education For All,[154] and the advent of programs and projects (PDEF, PAQUET, FRESH, etc.), a new vision should allow school health to renew its mission in an environment marked by new public health challenges, including environmental influences and climate change on health, pandemics, non-communicable diseases, and use of psychotropic substances, as well as a renewed push for gender equality, for social inclusion, and for children's mental health and well-being.

Based on this desk review the following is recommended for consideration within the framework of the development of the School Health Strategic Plan.

Recommendations

1. Develop a school health policy. It is essential to create an official document that defines objectives, guiding principles, and concrete measures to promote student health, improve quality, and increase equity in the education system.

2. Establish an operational document for implementing school health. It is necessary to develop a document that specifies the procedures, responsibilities, and resources needed to implement school health programs effectively.

3. Establish a strategic framework for intervention in school health, with an action plan integrating all sub-sectors and a view to rationalizing the initiatives of the various players.

4. Strengthen coordination and governance, Formalizing the Terms of Collaboration between MEN, MSAS, and other ministries that support school health interventions that was initiated in 2015 (see Coordinating Entities section for more details). As with the Memorandum of Understanding with the MSAS, the MEN must establish strong partnerships with other ministerial departments such as those that oversee hydraulics, youth, family, and with NGOs such as GEEP, and with parents' associations. Consider the reactivation of the Monitoring Committee that was established during COVID-19 for better coordination and discussion amongst the various education actors. This includes linkages to national programs that support inclusive education for people with disabilities in ways to integrate them into the newly developed policy and coordinating committees.

5. Create a coordinating body for donors and technical partners involved in school health. This body will harmonize donor programs and pool funding to achieve the objectives of the school health action plan.

6. Establish a core health education curriculum that includes age-appropriate subjects and topics, including emerging topics such as road safety. Based on the list of priority health issues for school-age children, it is important that this list includes comprehensive health education including WASH, nutrition, reproductive health, vision and oral health, sexual health, gender-based violence prevention, prevention of infectious diseases including malaria, HIV and AIDS, and the 14 relevant NTDs in Senegal, mental health, and emerging topics such as road safety and climate change and their contributions to their increased health risks.

7. Advocate for the establishment of a minimum age of sexual consent, which would be supported in the newly drafted School Health Policy.

8. Mobilize adequate resources. In terms of financing key programs, such as school feeding/canteens, there needs to be strategic transition planning to reduce the reliance on external funding to support national programs. It is crucial to allocate sufficient financial, human, and organizational resources to support school health. This will make it possible to build the capacities of the players involved, improve school health infrastructures, and guarantee adequate access to healthcare for learners.

9. Institutional strengthening of the DCMS. A strong body with a clear roadmap, high-quality multidisciplinary staff, a substantial budget line and branches throughout the country.

10. Revise the texts defining the organization and operation of School Medical Inspection (SMI)EMIS, focusing on their functioning, structures, and attributes.

11. Establish devolved structures. It is recommended that deconcentrated structures be set up at local level to facilitate the dissemination of school health strategies and interventions. These structures could be responsible for coordinating school health activities at regional or local level.

12. Improve school infrastructure. Particular attention needs to be paid to improving sanitary conditions in schools, notably by providing adequate access to drinking water, installing hand-washing facilities, and ensuring that toilets are functional and hygienic, as well as gender-disaggregated, with appropriate facilities for MHM. It is vital to guarantee a safe and secure environment for students. This can include measures such as securing school infrastructures and raising safety awareness for physical dangers.

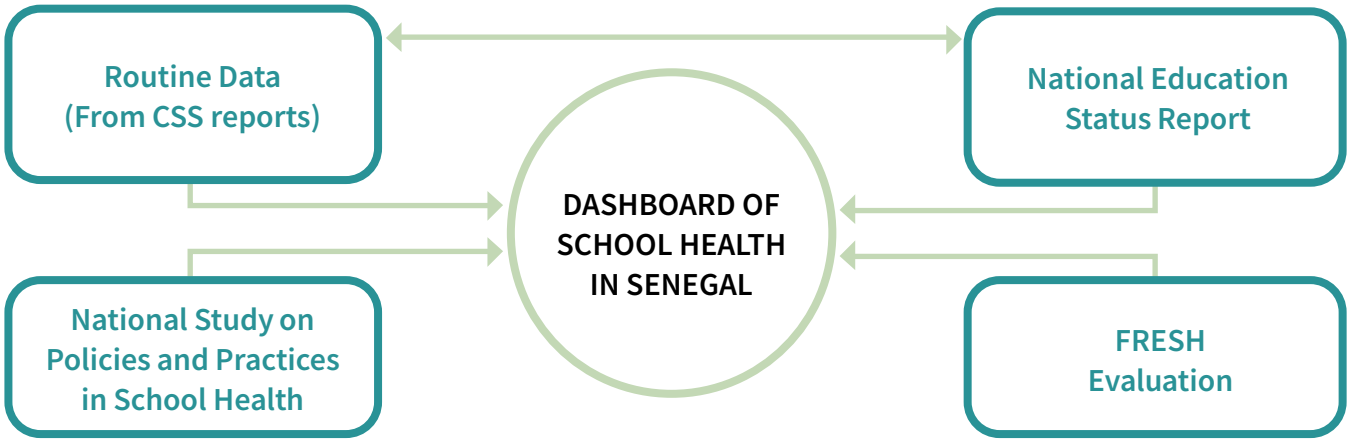
13. For children's psychosocial health, increase teacher accountability; establish school and class codes of conduct; raise awareness on children's rights and the emotional damage of corporal punishment and humiliating language; and train and support teachers on positive discipline and class management.

14. For monitoring and evaluation:

- Include in the PLANETE platform school health indicators and develop data collection tools and strategy to monitor school health indicators.
- Support DCMS to develop a strategy or M&E and standardized tools for collecting data on school health indicators.
- Train IME staff in using data collection tools developed by DCMS and support them to enter data in the PLANETE platform.
- Develop tools to collect the different indicators of the school health performance framework.
- Establish a system of supervision and coordination of data collection at the regional level for better monitoring of data collection.

- Implement a data quality control system.
- Implement a computerized school health data collection system, following the example of DHIS2.
- Integrate some of the FRESH indicators into the school health policy monitoring system.
- Adapt the SHPPS tools and use them in school health surveys to be conducted at national level.
- The main M&E modalities should feed into a dashboard.

FIGURE 6: CONCEPT DIAGRAM ON EMIS AND SHN M&E



Short-Term Recommendations

- Develop a school health policy document.
- Improve school infrastructure.
- Enhance student safety.
- Include school health indicators in the PLANETE platform, and develop data collection tools and strategy to monitor school health indicators.
- Support DCMS to develop a strategy or M&E and standardized tools for collecting data on school health indicators.
- Train IME staff in using data collection tools developed by DCMS and support them to enter data in the PLANETE platform.
- Specifically for MSAS, develop tools to collect the different indicators of the school health performance framework.

Long-Term Recommendations

- Establish an operational document for implementing school health and nutrition.
- Institutional strengthening of the DCMS.
- Establish a strong, multi-sectoral entity to deal with school health and nutrition.
- Create substantial budget lines for the financing of school health throughout the country.
- Areas to be explored in the field assessment as a follow-up of this desk review:
- The state of WASH facilities in schools.
- Health services offered by MEN in schools, including staff and infrastructure.
- Student access to health care in the community.
- The safety offered to students in their school environment, including the existing of programs to prevent and address corporal punishment, sexual abuse, and bullying.

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