

Equity and Academic Resilience: A Narrative Review of Nepal's Mid-Day Meal Program in Community Schools

Shikchhya Yonzon¹, Shukria Rahimi², Sarmiento Acosta Carlos Roberto³

Correspondence¹: Shikchhya Yonzon

¹ORCID ID: <https://orcid.org/0009-0004-9315-4734>

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Abstract: The effective learning of children fundamentally depends on a healthy and hunger-free body. To enhance the quality of education, efficiency, and health indicators among children, Nepal introduced the Mid-Day Meal Program in 1976 AD, initially targeting 37 food-insecure and economically disadvantaged districts. Since then, the program has significantly improved school attendance and the quality of life for children from low-income, food-insecure families in community schools where it is implemented. Among various promotive factors for academic resilience, the Mid-Day Meal Program has emerged as a key contributor, particularly in government schools in rural areas. This paper employs a narrative review methodology to examine policy provisions and implementation mechanisms at the grassroots level in Nepal's government schools, based on the *Community School Mid-Day Meal Standard and Program Facilitation Book, 2019*.

Additionally, it assesses how the program promotes equity for intersectional students. Limited studies have reviewed existing Mid-Day Meal guidelines, highlighting gaps and strengths in enhancing academic resilience—particularly for students from poor, marginalized, and Indigenous communities in Nepal. The findings include that the Dropout rate reduced from 10.5% (2015) to 6.2% in 2023 due to the effective implementation of Mid- the Day Meal Program in community schools including a 12% increase in girls' enrollment in community schools. However, there is a need for implementation of existing plans and policies, particularly addressing the need for budget revision, and regular monitoring of its provisions to ensure the physical and mental well-being of the students getting benefits from the midday meal programs.

Keywords: Mid-Day Meal; Government Schools; Education; Intersectional Student.

1. INTRODUCTION

Midday meals are an important indicator of the learning environment of students. This helps in ensuring the right to basic education for all students. As the midday meal is focused on the community students, especially children from food-insecure and low-income families, it will also motivate school attendance, as nutritional food is a basic prerequisite for all. Even today, the majority of children don't receive one complete square meal in a day (Bhandari & Jinu K, 2024). Moreover, Muller (2005) stated that "Child malnutrition is one of the major causes of morbidity and mortality among children in Nepal, which has a larger impact on the long-term mental and physical development." To address the issue of malnutrition among the children, the school midday meal is formulated as stated in the School Education Sector Plan (2022-2032) and the National School Health and Nutrition Strategy.

As stated in the research, students spent about 4-5 hours at school (Paudel et al., 2014). It is the majority of the active and productive time at school; it requires a good appetite to level up the energy required throughout the day. Schooling plays an influential role in the development of physical and mental well-being concerning health and nutrition as it comes under the school's priority and programs. Moreover, as stated by Paudel et al., (2014) "Children in Nepal are required to help their parents after school either in business or agricultural activities, and the article also stated that out of 10, every 4 from the age group of 15-19 are active economically, which has emphasized the need for Mid-Day Meal to school-going students."

The government of Nepal introduced Mid-Day meals to minimize malnutrition and increase teaching-learning efficiency. The government has been providing a budget which means, each student will receive *Rs 15 per day, USD\$ 0.10* (Tripathi, 2024). This provision has also been included in the Local Government Operation Act 2017, which includes that midday meals are provided to the students from ECD to class 5 as per the respective mandate; however, with the initiation and resource management from the local government, free midday meals are also provided to students from classes 6 and 7. The Mid-Day Meal programs in community schools should intervene to increase academic resilience and motivational factors of enrollment rates and decrease the dropout rate of students (Tripathi, 2024). The Mid-Day Meal program is a successful model for not only increasing the school attendance of students but also improving the health indicators of the students. As the research stated, the Mid-Day Meal School Nutritious Plan in the United States reports that the outcomes are better or at least don't promote worse outcomes as well as the students consume a sufficient amount of nutritious diet (Bhattacharya et al., 2004). As per the guidelines of the Mid-Day Meal program in Nepal, the meal served to the students must include the proper amount of fats, carbohydrates, protein, nutrition, and all the components required for the growth of human development.

The Government of Nepal's yearly program and budget have also prioritized mid-day meal programs in terms of "kind" and "cash." Moreover, for effective implementation at the grassroots level, "Compulsory and Free Basic Education, 2017" has also introduced quality mid-day meals and the right to food. Community Mid-Day Meal's achievement from children focusing on the development of physical and mental well-being and potential achievement is the conclusion drawn by the World Bank. The major objectives of the Mid-Day Meal are to improve the lives of low-income and food-insecure family children, as the meal will fulfil their hunger and overall development growth, which will also support social security programs. It will also help in supporting the achievement of SDG 1: No Poverty and SDG 2: Zero Hunger of the nation. Due to mid-day meal programs, it has improved the children's status education, increased the efficiency of children, increased the income of low-income families, and improved health indicators of SDG. The World's School Meal Program Cost Analysis report shows that for every, investment, there's a significant economic return of US\$3-10 in improved health, education, and productivity.

The three major objectives of the mid-day meal programs are (1) To have at least 30 % nutritious value fulfilment to children's health and nutritious status, (2) to enhance education development and (3to) to generate skills and increase the agricultural outcome development. Afridi (2011) stated that there are distinct factors for Mid-Day Meals, which are "school lunches lower the cost of education for their parents and it can also directly foster learning via better and more timely nutrition. Additionally, eating lunch at school, for both social and nutritional reasons." As per the fiscal year report FY (2022/23), over 3.5 million students have benefited from the mid-day meal program in Nepal.

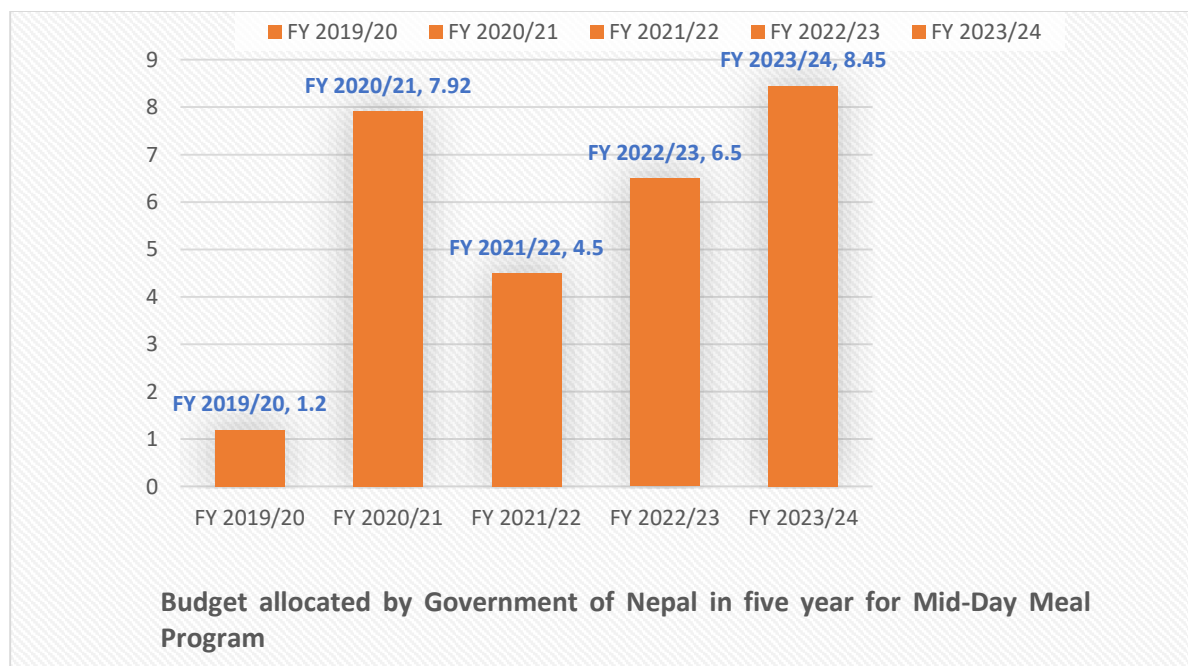


Figure 1: Record of Budget allocation by GoN in 5 years for Mid-Day Meal programs in each fiscal year.

Purpose of the Study

This narrative literature review aims to critically examine the implementation of Mid-Day Meal Program Guidelines in community schools of Nepal. This review provides an in-depth understanding of the objectives and characteristic features addressing the actual beneficiaries and the long-term and short-term vision of the guidelines.

The research aims to identify the strategy drawn from the given guidelines. This review paper will explore how the provisions align with the goal of the given guidelines, which majorly focus on increasing attendance rate, quality learning efficacy and contributing towards child health. The paper aims to identify the gaps for the proper implementation and review the challenges. It also helps in identifying the barriers that hinder the successful implementation at a local level with all the major indicators.

2. RESEARCH METHODOLOGY

This paper employed a descriptive study which is based on secondary sources of data. A comprehensive literature review has been done to find out the gaps in research for the implementation and components incorporated in “Mid-Day meal guidelines” The study draws on various research articles, journals, books, and newspapers with a qualitative descriptive study.

Decentralization of power to a local-level government body

Local-level governments are the closest authority to the community at the grassroots level. The local governments are operated by the representatives elected democratically by the people for a favourable environment at the local level and to enhance free and fair public participation by adopting democracy. It is the most trusted and official organization of the government in the smallest local units (Acharya, 2018). After the promulgation of the Constitution of Nepal 2015, the governance body structure is provisioned to federal, provincial, and local levels, consisting of wards, rural municipalities, and municipalities based on the population. The constitution has granted 22 exclusive and 15 concurrent powers and responsibilities to the local unit of government, and the total number of local units in Nepal is 753, these local governments are guided by the "Local Governance Operational Act, 2017." As per the given act, management of education, including budget allocation and implementation for the mid-day meal, falls under the jurisdiction of the local level.

As per the Local Level Restructuring Commissions, it has recorded 293 urban municipalities and 460 rural municipalities in 77 districts in Nepal. Thus, local government has divided its roles and responsibilities based on the decentralized model whereby local governments are given the responsibility to operate the midday meal program based on the needs and demands of the population and geographical structures. Moreover, local governments have the role of food procurement and checking and balancing the requirements as per the Education Act, of 2019, which has addressed school lunches as a right to quality education. The local government also has a role in service delivery, nutritional intervention, and school nutrition education targeting quality, nutritional values, school gardens, etc. Including, based on the food-insecure districts, the girl students will receive 2 litres of cooking oil under the midday meal program to increase the enrollment rate of girls in school (Pant, 2020). As per the report of the Ministry of Education, Nepal (2023), 90 % of community schools in Nepal rely completely on the local government for midday meal supplies. Moreover, 72% of schools receive a budget from the local government, but in terms of “kind,” the remaining to receive it in the form of “cash.” As per the report of the Department of Education (2022), only 65 % of schools met the full criteria of maintaining hygiene and nutritional canteens, whereas only 25 % of municipalities have formed MDM committee guidelines to check the standard, nutritional values and regular monitoring and inspection. The Government of Nepal (2021) reports that “ 78 % of school’s meals are prepared by the help of mother groups which has also been included in Mid-Day Meal Guidelines and 60 % of local government has been continuously campaigning to conduct awareness campaign on the importance of intaking nutritious and healthy food”. As per the Economy Survey (2023), only 55 % of community schools had a separate kitchen, focusing on preparing mid-day meal programs. However, there is still room for improvement as only 60% of funds are allocated to specific rural municipalities of Nepal. As per the data from

World Food Programme (2023), there are irregular food supply with the data arising up to 30% and hence due to the lack of limited budget, there has been a huge quality and diversified food menu which is both healthy and hygienic.

SDG Commitments for the Mid-Day Meal Programs in Community Schools of Nepal

Nepal has aligned its Mid-Day Meal program with the United Nations Sustainable Development Goals (SDGs) for achieving the eradication of malnutrition, increasing school enrollment, and improving the nutrition status of the students. The initial target for coverage of all community students in Nepal is to receive all community school students from grades one to eight who will be given free mid-day meals with consists of nutritional value.

However, as per the data of the Ministry of Education (2023), only 3.5 million students can benefit from it whereby only 87 % of community schools have implemented the Mid-Day Meal program as per World Food Programme (2023) and 13 per cent of a community school in remote areas has no full access of mid-day meal program in Nepal as of now. As per the data from the Department of Education (2022), only 65 % of community schools meet the full nutritional standards however SDG 2.2, states that it commits to providing meals to children with 450-500 calories and at least 12-15 grams of protein per child in a day. As per the report from UNICEF (2021), the most common menu in community schools consists of Rice in 85 % of community schools, lentils in 60 % of community schools and vegetables in 45% of community schools in Nepal.

Table-1: List of SDG commitments related to Mid-Day Meal Programs

SDG Indicator and Goal	SDG Goal	Vision
SDG-2	Zero Hunger	Ending malnutrition among school children
SDG- 3	Good Health & Well-being	Improving children's nutritional status
SDG -4	Quality Education	Increasing school enrollment and retention
SDG-4.5 & 5	Gender Equality	Increase girls' schooling attendance through Mid- Day Meal

As per the report of the World Bank (2022), the girl's enrollment has increased by 12 % in the mid-day meal program. As per SDG-12, the mid-day meal program is committed to endorsing the local farmers' production by 30 % however, as per the report of the World Food Program (2023), only 15 % of community schools currently endorse locally sourced food in Nepal. The government of Nepal has committed to increasing the budget by 0.5 % of the total Gross Domestic Product (GDP) of the nation by 2030. However, as per the data of the Economic Survey (2023), the nation has only been utilizing 0.2% of the total GDP. The major challenge faced is the gap in funding and its implementation as only 60 % of the required funds are allocated although, even 100 % of funds is not enough for the proper functioning of midday meal programs at grassroots levels. As per the report from the Department of Education (2023), there almost 45% of the community lacks proper kitchens including hygiene, safe drinking water and quality of food. The major loop loopholes are no strong and regular monitoring to track the nutritional values and fair and equal distribution of resources. There are primarily five goals that are interrelated to Midday meal programs for food insecure, economically deprived students representations from community schools which are SDG 2,3, 4,5 and 12 to meet the target and commitment for the fulfilment of SDG 2030. For the remaining years, the nation should focus on the increment of budget for the ideal meal, support and endorse local food and proper and effective tracking of its implementation with the proper monitoring indicators and structural committee for the effective implementation and fulfilment of its objectives.

Table-2: Cost-benefit analysis data of implementation of mid-day meal

Midday Meal Implementation Indicators	Allocated Resources	Latest source available
Implementation of School Mid-day Meal	Implemented in 23,000 Schools	Ministry of Education (2023)
Allocation of budget from local-level government	5-10 lakhs in every school	Fiscal Report (2022), Local Government
% of community schools with regular	87%	Ministry of Education (2022)
Increased school attendance after Mid-day meal program interventions	Increased by 15-20 %	UNICEF (2023)
Involvement of Parents in School mid-day meal interventions	72%	Department of Education (2023)

Constitution of Nepal, 2015 and Nepal's Mid-day Initiatives

The Mid-Day Meal Program in Nepal is a community school initiative for enhancing school attendance, increasing children's health by enhancing nutritious and balanced diet food in their meals, encouraging girls' attendance in school and reducing the overall dropout rates of the children in community schools in Nepal. The Constitution of Nepal (2015) addresses the right to food and education as a fundamental right of the students which also inter-relate with the midday meal program in Nepal.

The Constitution of Nepal (2015) grants Article 31 and Article 38 related to the Right to Education and Right to Food which includes all citizens have rights to right to food and free and compulsory education for the implementation of these fundamental rights, Mid-Day Meals is also one of the criteria for its effective implementations to ensure all the children get favourable environment for right to education and right to food, especially targeting to vulnerable, poor, food-insecure, disadvantaged and deprived children of their families.

Some of the provisions of the Constitutions of Nepal (2015) which support the Mid-day Meal provisions are as follows:

Table-3 Act and its provisions directing to Mid-Day Meal in Constitution of Nepal (2015)

Articles	Provision of Article	Policy Provisions
Article 38	Right to Food	Every citizen has the right to food sovereignty.
Article 31	Right to Education	Free and compulsory basic education for children, with provisions for nutritional support to enhance school attendance.

The Mid-day Meal program was officially implemented in 1967 AD but its actual implementation only started from the School Sector Reform Plan (2009- 2015). This scheme is targeted to over 2.5 million students of community schools from Grade 1 to Grade 8. As of now, it has been implemented in all the 77 districts however more emphasis has been given to food-insecure and geographically difficult areas of Nepal. The major fund is allocated by the Government of Nepal, around 4-5 billion annually moreover, the program is supported by the World Food Programme (WFP) and other inter-governmental and local NGOs working in their specific working districts. The Ministry of Education has also launched The School Meal Program Guidelines (2013) to check and monitor the implementation mechanism. Moreover, Multi- Sectorial Nutrition Plan (2022-2030) also includes the school mid-day meal as a key intervention. The recent Economic Survey (2023) has also highlighted the role of mid-day meals to improve the health condition and well-being of child nutrition.

The major Impacts of the Implementation of Mid-Day Meal Programs are as follows:

- Increased school attendance including new admission by 15-20% in community schools.**
- Reduced dropout rates and encouraging girls' attendance by 10-12%.**
- Improved student attendance and enrollment for better learning outcomes**
- Added Rice, lentils, and vegetable oils in as a source of balanced diet in the food.**
- Increased farmers production to encourage organic fooding habits**

Challenges to the implementation of the Mid-Day Meal Program in Nepal

Inconsistent funding in some municipalities is the major concern of proper and effective implementation of the mid-day meal program. Moreover, there are also issues related to the transport of food supplies in geographically difficult places. There are monitoring and evaluation guidelines and committees however, what is lacking is better implementation at grassroot levels to monitor the food quality and kitchen environment.

The major challenges are as follows:

As per the report of the Ministry of Education (2022), the government only covers 20-30 % of the total cost of midday meals while the other funds are dependent on other non-governmental and inter-governmental donor agencies. Moreover, as per the report of UNICEF (2021); (Yonzon et al., 2024) there is a funding gap thus only 37% of community schools provide daily meals while the remaining schools only provide partial or no program due to insufficient funds that deprived students of granting fundamental rights.

Furthermore, only 45% of community schools where the midday meal program has launched have separate kitchens for the preparation of meals, and only 30% have proper storage facilities and have maintained hygiene as per the report of the Department of Education (2023). Likewise, in remote Himalayan districts such as Humla, Rolpa, Dolpa, Mustang etc. food delivery delays due to geographical difficulties that leads to regular providing of foods to the students. In addition, as per the report of the World Food Programme (2022), there is a common food meal and the consistency of the meal consists of rice, lentils and vegetables but doesn't have the full proteins and vitamins required for the children although there is a severe malnutrition and health issues due to lack of balanced diet food in the meal as stated by National Demographic and Health Survey (2022). The major concerning issues are lack of transparency and budget irregularities which have created misuse of funds by almost 15% as per the report of the Office of the Auditor General, Nepal. Less than half, only 40% of schools maintain proper records of food distributions and plans. During midday meal serving, discrimination still prevails especially in the Terai region, and children from Dalit marginalized communities due to the stereotype belief system such as Untouchability, caste-based discrimination, etc. as stated by the report of the National Human Rights Commission, 2020. As per the national report of UNICEF (2021), there is still gender discrimination and boys are likely to receive full meals more than girls by 10 %. Due to ongoing inflation, the prices of food and budget allocated differ as per World Bank (2023),

3. RECOMMENDATIONS

For the effective implementation of midday meals in community schools in Nepal. The following steps should be effectively implemented for its proper implementation. Increase the Government Budget and reduce the dependency on donor funds, to take a good example, Midday meal in India is fully funded by their government and Nepal should also plan for the exact model. Proper monitoring and effective implementation by maintaining the kitchen system by increasing the number of kitchens in community schools from 45% to 70 %. Nepal Government Initiatives of "One School, One Garden" should be adopted which promote local farming and organic food. Meals served should be full of protein and fortified food, the research suggested that fortified rice in Bangladesh reduced anemia by 15%).

The audit and monitoring process should be adopted by the community including the parents of the students studying in the same schools. There should be no discrimination and strict rules and penalties should be charged for any caste-based discrimination during serving midday meals which has also been incorporated in Nepal's Education Act, 2023. We should also adopt the good practices from other countries as in Ethiopia, Gender a gender-sensitive meal plan is prepared into consideration for adolescent girls, as they need more nutrition during the time of menstruation.

4. CONCLUSION

Nepal's MDM program has improved enrollment (up by 12% since 2015) but faces funding gaps, malnutrition, and governance issues. By increasing budgets, improving nutrition, and ensuring transparency, Nepal can make the program more effective—like India's 98% school coverage under MDM. The Mid-Day Meal Program in Nepal has the potential to significantly improve education and nutrition outcomes. However, addressing financial, logistical, and governance challenges is crucial. By strengthening policies, increasing investment, and ensuring community participation, Nepal can make the program more effective and sustainable. The Mid-Day Meal Program in Nepal is constitutionally supported and has shown positive impacts on education and nutrition. However, sustainability and expansion remain key challenges.

As per the various research and data, the concept of the Mid-Day the Meal Program in Nepal has been a great strategy to increase academic resilience by enhancing the quality of education, increasing school attendance improving the health and nutrition of the students given the situations, especially addressing the issues of marginalized, economically low and disadvantaged communities of Nepal especially in the rural areas. This program has not only impacted community school-going students but also created significant progress in the effective implementation of the Constitution of Nepal, 2015 and its fundamental rights and duties and Nepal is also a commitment maker of SDG-1 & 2. However, there are pertaining challenges in the effective implementation of the guidelines and policies including strict monitoring and evaluation. To achieve better outcomes, the government of Nepal should also prioritize the effective execution of implemented plans and endorse sustainable policies so that the people who are targeted will benefit and the program will be the best model.

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