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**School Feeding as a Pathway to Resilience:  
Designing a Community-Based School Canteen Project  
in Conflict-Affected Mali**

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## Abstract

Mali ranks 188th out of 193 countries on the 2023 Human Development Index and has been affected by protracted armed conflict since 2012. The Mopti region concentrates some of the highest levels of food insecurity and educational disruption in the country, computed by the rapid territorial expansion of the al-Qaeda-affiliated group JNIM throughout 2025 and the temporary suspension of WFP field operations in April 2026.

School feeding programmes have long been recognised as a dual-purpose humanitarian tool, addressing nutritional needs while incentivising school attendance. Yet in the most conflict-affected communities, existing large-scale programmes — including Mali's Programme National de Cantines Scolaires (PNCS) — consistently fail to guarantee operational continuity, due to supply chain fragility, limited community engagement, and the dependence on external funding.

This project proposes a community-based school canteen pilot intervention in a conflict-affected rural area in the Mopti region, more specifically, the school relocated from Guelel to Guarni because of security deterioration. The intervention is designed not as a replacement for existing programmes but as a complementary model centred on a Community Feeding Committee (CFC) — composed of elected mothers, teachers, and a community representative — with local food procurement and paper-based monitoring adapted to the area's severe connectivity constraints.

The project draws on the human security framework (UNDP, 1994) and Sen's Capability Approach (1999) to conceptualise access to nutrition and education as fundamental human capabilities. The diagnostic integrates secondary literature, real-time food price data from FEWS NET and USDA (2024–2025), a qualitative interview with a local school contact in central Mali, and an exploratory survey with mothers in the country.

The budget, constructed from current Mopti market prices rather than generic Sahelian averages, estimates an annual cost of €33,705 for 200 children — approximately €168.50 per child per year, compared to the global low-income programme average of \$110 per child (Center for Global Development, 2025). The higher cost reflects both the pilot scale and a food price environment in which cereals are 40 to 80 percent above five-year averages due to conflict-driven market disruption.

The project concludes that the proposed model's value lies not in cost efficiency but in its potential to generate evidence about community co-management in contexts where standardised humanitarian approaches have repeatedly failed to reach the last mile.

*Keywords (English): school feeding, food insecurity, Mali, community-based intervention, human security, resilience, Mopti, localisation of aid*

*Paraules clau (Català): alimentació escolar, inseguretat alimentària, Mali, intervenció comunitària, seguretat humana, resiliència, localització de l'ajuda humanitària*

*Palabras clave (Castellano): alimentación escolar, inseguridad alimentaria, Mali, intervención comunitaria, seguridad humana, resiliencia, localización de la ayuda*

**Word count:** 6661 words.

## 1. Introduction

The case of Mali presents multiple intersecting crises. After the Tuareg rebellion and ensuing jihadist insurgencies that occurred in 2012, military coups and a prolonged humanitarian crisis have followed, displacing hundreds of thousands of people and leading to the disruption of service delivery throughout the country's central and northern regions (OECD, 2022). In terms of impacts, food insecurity and limited access to education are among the clearest effects, especially for children living in remote rural areas (WFP, 2026).

School feeding programmes are known to be effective tools, as they serve both nutritional purposes as well as an incentive for participation in the learning process (WFP, 2024). Internationally, agencies such as WFP, UNICEF, and the World Bank have funded school feeding programmes in Mali for years (WFP, 2023). Nevertheless, based on field experience and institutional reviews, these programmes suffer from numerous structural weaknesses in implementation, especially when applied in regions experiencing active insecurity, a weak state presence, and supply chain issues (Frontiers in Sustainable Food Systems, 2024).

The origin of the proposed project lies in the professional placement undertaken with the NGO “CC Ajuda al Desenvolupament”, which allowed for communication with actors involved in schooling and feeding activities in schools located in the central part of Mali. The insights obtained from these interactions formed the diagnostic and the design foundation for the proposed intervention.

The core proposition of the proposed project is that while school feeding programmes remain vital, they are not always designed properly with respect to the context in which they are implemented. The development of a community-based pilot feeding programme that would engage local actors as managers instead of passive beneficiaries may serve to address these challenges, building trust and evidence for humanitarian practices.

This project seeks to answer the following research question: *“How can community co-management improve the implementation and sustainability of school feeding programmes in conflict-affected areas of Mali?”*

This work is structured as follows. Section 2 establishes the theoretical and conceptual framework. Section 3 presents the diagnostic analysis. Section 4 defines the project objectives and theory of change. Section 5 details the operational design. Section 6 addresses the legal and governance framework. Section 7 presents the budget and comparative cost

analysis. Section 8 sets out the evaluation framework. Section 9 discusses the findings and concludes.

## **2. Theoretical and Conceptual Framework**

### **2.1 Human Security and Structural Vulnerability in Fragile States**

The analytical foundation of this project is the human security framework, developed in the 1994 UNDP Human Development Report. The concept of human security shifts the focus of security from the state to the individual. It identifies threats not only in relation to physical violence but also restricted access to food, health, education, and guaranteed economic opportunity (UNDP, 1994). Mali ranks 188th out of 193 countries on the 2023 Human Development Index (UNDP, 2024). When an armed conflict breaks out, people are forced to leave their homes. Armed conflicts also disrupt markets, disrupt supply chains, destroy public services, marginalizing the already vulnerable sections (OECD, 2022). Food crises in Mopti do not just arise because of poverty or failure of agriculture. The conflict can lead to the displacement of people, which further brings the disruption of agricultural production, insecurity limiting access to markets and mobility, and breaking of the social support system leaving the households without their usual strategies for managing shocks (WFP, 2026). As reported by GIEWS (2024), most markets in Mali have seen a surge in wholesale prices of locally produced millet by 50 to 75 percent between January and August 2024 due to conflict-related market disruption in major producing areas and flooding. Children in these contexts suffer serious vulnerabilities as a result of being deprived of nutrition, education and being recruited (UNICEF, 2024).

### **2.2 The Capability Approach and Educational Deprivation**

Sen's Capability Approach offers the normative framework for the design of the intervention (Sen, 1999). Sen explains that development should be understood as the expansion of substantive freedoms the real capabilities that people have to lead the kinds of lives that they value (Sen, 1999). In this context, child malnutrition and exclusion from education are not simply technical problems that can be solved by more resources, but rather, they are fundamental capability deprivations that reproduce intergenerational poverty and constrain agency. A school feeding programme, as interpreted through this lens, is not merely about providing food. It is a tool for broadening capabilities: enhancing nutritional status and cognitive ability, facilitating educational participation, lessening household vulnerability, and creating pathways for long-lasting agency (Bundy et al., 2017). The focus of the project-

supported intervention is therefore underpinned by a rights-based and capability-oriented logic rather than a humanitarian or efficiency-maximising one.

### **2.3 Education in Emergencies and School Feeding as a Peacebuilding Tool**

Although education in emergencies is labeled as a welfare provision, a growing body of literature is linking education provision as a peacebuilding (UNESCO, 2019; Burde et al., 2016). Schools in fragile situations are safe havens for children, preventing exposure to violence, providing psychosocial support and sustaining social networks in the community (UNESCO, 2019). School feeding programmes enhance these impacts by not only promoting attendance but also providing a reliable daily routine, thereby reinforcing the social and institutional fabric of stressed communities (WFP, 2024). The evidence from WFP's Integrated Resilience Programme in the Sahel is relevant in the region. In Mali, 80 percent of households with at least one child enrolled in a school canteen state that they intent to keep both boys and girls in school until completion. This number falls to 60 percent for households without access to a school canteen (WFP, 2023). In Niger — a comparable Sahelian context — dropout rates in schools with WFP-supported meals were 7 percent lower than in schools without canteens (WFP, 2023). These figures confirm positive associations between meal provision and educational continuity across the region.

### **2.4 Community Participation and Programme Sustainability**

The sustainability challenge in school feeding programmes is well-documented. Programmes that depend primarily on centralised management and international procurement tend to face structural vulnerabilities: supply chain disruptions in insecure areas, weak local ownership, limited adaptation to cultural and dietary preferences, and collapse when external funding is withdrawn (Frontiers in Sustainable Food Systems, 2024).

Community participation has been identified as a key determinant of sustainability and social impact (Annan, 2015). Research from West African contexts demonstrates that programmes which integrate mothers, teachers, and community representatives as co-managers achieve higher levels of continuity, trust, and community acceptance (Annan, 2015). The home-grown school feeding models supported by WFP in Benin and Burundi illustrate the economic dimension of this approach: in Burundi, local food procurement for school meals increased

farmers' incomes by 50 percent in 2024 and created employment across 67 cooperatives (WFP, 2025). This evidence base directly informs the intervention design.

### **3. Diagnostic**

#### **3.1 The School Feeding Landscape in Mali**

School feeding in Mali is primarily coordinated through the Programme National de Cantines Scolaires (PNCS), implemented in partnership with WFP and supported by UNICEF, the World Bank, and bilateral donors (WFP, 2026). The programme has expanded significantly since the 2000s, reaching several hundred thousand primary school children across the whole country (WFP, 2024).

Nevertheless, the programme faces different structural constraints in conflict-affected areas. Coverage is lowest precisely where need is greatest: the Sahel region and Mali's central areas show the largest gaps between programme reach and the food insecurity levels (WFP, 2026). Schools in Mopti often operate on reduced schedules —two/three days per week, as documented in the field data collected for this project — and school feeding provision is frequently interrupted by logistical breakdowns, insecurity, or the absence of personnel. In April 2026, WFP temporarily suspended all field movements and operations in Mali, impacting directly food distributions for internally displaced people and the school feeding activities (WFP, 2026).

#### **3.2 Limitations of Existing Programmes: Evidence from the Literature**

A review of the existing evidence on school feeding in Mali and comparable fragile contexts reveals a consistent pattern of tension between programme scale and programme quality (Bundy et al., 2017). Large-scale interventions achieve wide coverage and generate measurable aggregate effects, but then tend to operate through standardized models that are poorly adapted to local contexts (Aurino et al., 2019; Bundy et al., 2017).

#### **3.3 Primary Data: Exploratory Survey with Mothers in Mali**

##### ***3.3.1 Survey Design and Methodology***

An exploratory survey was designed and administered to mothers and female caregivers of school-aged children in Mali through local contacts established during the author's professional placement. The survey was developed in French and distributed remotely. It covered five different thematic areas: household food security, school attendance patterns, awareness of

existing feeding programmes, institutional trust, and willingness to participate in community-managed initiatives.

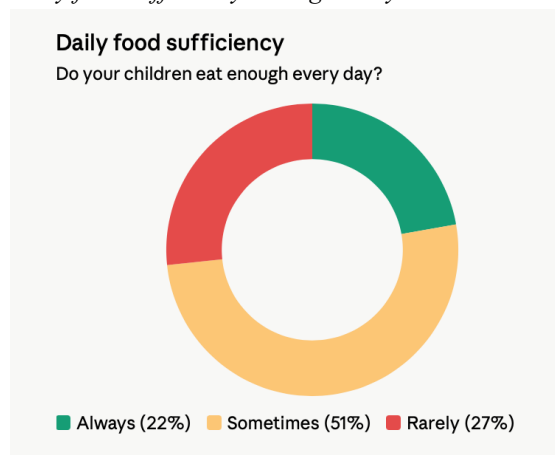
### 3.3.2 Key Findings from the Survey

The responses from the survey illuminate several themes that are consistent with the broader literature.

On food security: various respondents reported food-related difficulties at least occasionally, with lack of financial resources identified as the primary barrier to consistent food access. Some of the mothers reported that their children eat enough only sometimes, reflecting the precarious food situation of households, even among those with urban residence.

**Figure 1.**

*Daily food sufficiency among surveyed households (n=45)*

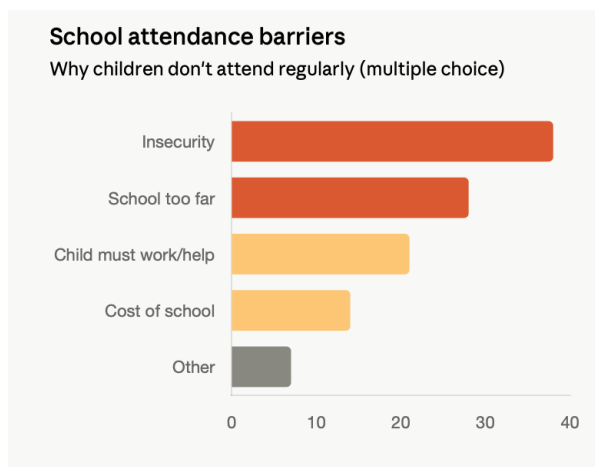


*Source: Author's own elaboration based on exploratory survey data, see Annex 3.*

On education and barriers to attendance: responses revealed divergent attitudes. Approximately half of them considered education very important for their children's future; the other half rated it as not important — a response that likely reflects the practical impossibility of attending school regularly due to insecurity, distance, and economic constraints, rather than a principled rejection of education's value (UNICEF, 2024). Insecurity and distance to school were cited as barriers, alongside the need for children to contribute to household labor.

**Figure 2.**

Main barriers to regular school attendance reported by surveyed caregivers



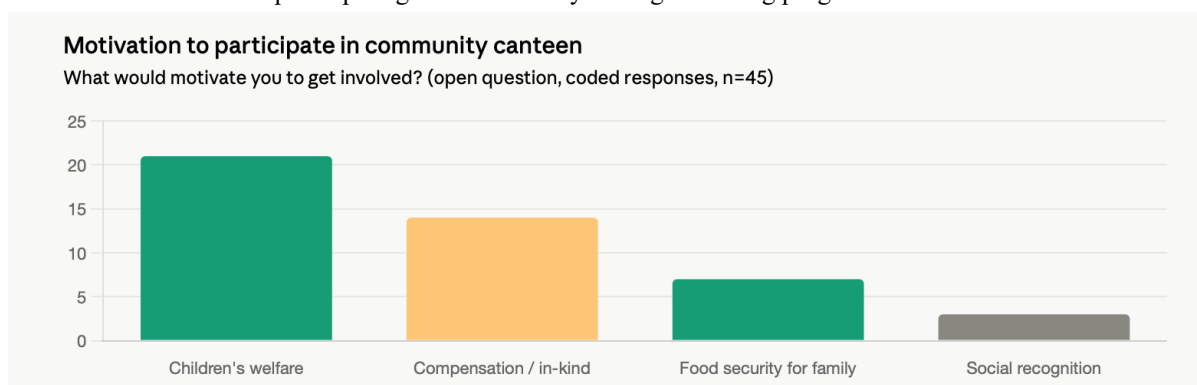
Source: Author's own elaboration based on exploratory survey data, see Annex 3.

On school feeding: None of the respondents' children currently benefit from a school canteen, and awareness of existing programmes was minimal— consistent with documented coverage gaps (WFP, 2026). When asked whether access to a free daily school meal would increase the likelihood of sending their children to school regularly, they answered affirmatively.

On participation and incentives: some women answered that they would participate in a community-managed feeding programme; the others were uncertain but not opposed. Critically, the stated motivation of some respondent for participation was 'rémunération' — financial compensation. This single data point is analytically significant: it challenges any design assumption that community participation, particularly by women, can be secured through voluntarism alone (Annan, 2015). This finding is directly incorporated into the CFC incentive model in Section 5.

**Figure 3.**

Stated motivations for participating in a community-managed feeding programme



Source: Author's own elaboration based on exploratory survey data, see Annex 3.

### **3.4 Qualitative Field Insights: Interview with a Local School Contact**

Qualitative data was collected through an interview with a Malian male contact working in a school in central Mali, facilitated through CC Ajuda al Desenvolupament. The interview was conducted remotely via audio messages in French, subsequently transcribed and translated. This format reflects the operational constraints of the context: face-to-face research access is prevented by active insecurity.

The interviewee described how security deterioration had forced the relocation of the school from Guelel to Guarni, a community that hosts a military camp providing a degree of physical protection. Classes currently take place only two to three days per week — a direct consequence of the security situation. This account illustrates the compounding effect of insecurity on educational continuity: violence prevents attendance, but it also constrains the basic conditions under which schooling can take place at all.

Regarding the school feeding programme, the interviewee noted that it 'only works when they are able to find a cook' — a detail that encapsulates one of the most fundamental operational problems facing local implementation. Programme continuity depends on individual-level logistics rather than institutionalised management structures (Frontiers in Sustainable Food Systems, 2024). This finding is the direct empirical basis for the Community Feeding Committee model proposed in this project.

The interviewee also highlighted material shortages beyond food: children lack backpacks, notebooks, and basic school supplies. Blackboards and windows had recently been provided through external support, but the broader material context of education remains severely constrained. These observations contextualise school feeding within a larger picture of educational precarity and inform the inclusion of a complementary educational materials component in the budget.

Connectivity in the area is severely limited: the interviewee could only access internet on specific days when travelling to Homboli. This constraint is directly incorporated into the monitoring system design in Section 5.

### **3.5 Synthesis: Three Deficits and the Intervention Rationale**

The triangulation of secondary literature, survey findings, and qualitative field data produces a coherent diagnostic picture. Existing school feeding programmes in Mali face three interrelated deficits that this intervention is designed to address.

First, a coverage and access deficit: the most conflict-affected communities — precisely those with the biggest nutritional and educational vulnerability — are systematically underserved due to the logistical constraints and insecurity.

Second, there's a trust deficit with the ownership; communities are insufficiently engaged as decision-makers and managers. The survey and interview data both point to the potential value of community co-management as a mechanism for strengthening trust and operational resilience.

There's also a sustainability deficit: the dependence on international procurement and external funding creates a structural fragility. When funding is disrupted, programmes collapse without leaving behind the local institutional capacity that they need to continue.

The proposed intervention addresses the three deficits through a pilot model focused on community co-management, local food, and context-sensitive design grounded in actual field conditions.

## **4. Project Objectives and Theory of Change**

### **4.1 General Objective**

To design and pilot a community-based school feeding programme in a conflict-affected rural community in the Mopti region, central Mali, with the aim of improving child nutrition, increasing school attendance, and strengthening community resilience through local co-management and local food procurement.

### **4.2 Specific Objectives**

- Ensure that children attending primary school in the target community receive at least one nutritious meal every school day.
- Increase school enrolment and attendance rates, particularly among girls and children from the most economically vulnerable households.
- Establish a functional Community Feeding Committee (CFC) composed of mothers, teachers, and a community representative, capable of co-managing the programme operationally and financially.
- Prioritise local food procurement, generating economic multiplier effects within the community, and at the same time reducing supply chain dependency.
- Generate operational evidence on the feasibility, social impact, and sustainability of a community co-managed model as a complement to large-scale programmes.

### **4.3 Evidence Review: What Works in School Feeding Interventions**

A review of existing interventions in Mali and comparable contexts informs the design choices of this project. WFP's home-grown school feeding model has demonstrated positive effects not only on child nutrition and attendance but also on local economic development and community engagement. In Benin, purchasing local food for school meals contributed over \$23 million to the local economy in 2024, with direct purchases from smallholder farmers increasing by 800 percent (WFP, 2025). In Burundi, local procurement increased farmers' incomes by 50 percent and created employment across 67 cooperatives (WFP, 2025).

A 2025 global study by the Centre for Global Development, analysing 216 school feeding programmes across 102 countries finds that on-site meal preparation is associated with higher community participation and local employment, though it carries higher per-meal costs. The study also confirms that scaling is the main driver of cost reduction: programmes that double its size, can reduce per-child costs by 20 to 30 percent, which means that a pilot operating at 200 children will inherently carry higher fixed costs than a national programme (CGD, 2025).

Experience from West African contexts demonstrates that community management committees are associated with a higher continuity, a better-quality control, and stronger accountability (Annan, 2015; Gelli et al., 2016). These findings are directly consistent with the qualitative evidence collected for this project.

#### **4.4 Theory of Change**

The theory of change rests on the following causal logic: if a community-based school feeding programme provides one nutritious daily meal to primary school children in a conflict-affected rural area of central Mali, and if this programme is co-managed by a Community Feeding Committee composed of elected mothers, teachers, and a community representative, with structured participation incentives and local procurement, then:

- Children's short-term hunger during school hours will decrease, improving their concentration and learning capacity.
- Family decisions regarding school attendance will be positively influenced by the guaranteed daily meal, increasing enrolment and retention.
- Community actors' active and incentivized involvement in management will strengthen programme continuity, social trust, and local ownership.
- The integration of local food procurement will generate economic benefits within the community and reduce supply chain vulnerability.
- These combined effects will help strengthen educational continuity and community resilience in a context of protracted conflict.

The intervention operates on a dual assumption: that access to food and education are interdependent capabilities (Sen, 1999), and that community participation is an important precondition for sustainable humanitarian impact in fragile settings, not an optional one.

#### **4.5 Assumptions, Risks, and Limitations**

The theory of change is conditional on external factors that the project cannot fully control. Key assumptions: that schools in the target area remain minimally operational, the security situation does not prevent humanitarian access entirely, community actors can participate given their existing labor and time constraints, and that the initial donor funding can be secured.

Key risks include: security deterioration forcing school closure or evacuation (as previously occurred with the move from Guelel to Guarni), disruptions to local food markets due to conflict or climate shocks, governance instability affecting the legal operating environment. Risks addressed in the legal framework (Section 6) and the budget contingency provisions (Section 7).

## **5. Project Planning**

### **5.1 Geographic Scope and Target Population**

The proposed pilot intervention is located in the school community of Guarni, Mopti region, in central Mali. This location is not chosen generically: it emerges directly from the qualitative field data collected for this project. The school was originally based in Guelel but was relocated to Guarni following acute security deterioration. The proximity of a military camp provides a degree of physical protection that, while fragile, makes limited humanitarian access operationally feasible.

Mopti is one of the epicenters of Mali's food insecurity crisis. According to GIEWS (2024), wholesale prices of locally produced millet and sorghum in Mopti markets were between 40% and 80% above their five-year averages in late 2024, due to conflict-related market disruptions and flooding. The Mopti region also saw a 35% decline in rice area harvested in 2024/25 because of the insecurity preventing farmers from accessing their land (USDA, 2025). These conditions are the operational parameters within which any feeding intervention in the area must function.

The target population consists of primary school children aged 5 to 12 enrolled in the Guarni school. Based on the field account and typical primary school sizes in rural Mopti, the estimated number of direct beneficiaries is 150-200 children. For budget purposes, this project plans for 200 children. Indirect beneficiaries include their families and community members involved in procurement and programme management.

### **5.2 Core Components of the Intervention**

#### ***5.2.1 Baseline Needs Assessment***

Implementation is preceded by a two-month baseline phase. The assessment covers: current enrolment and attendance patterns, household food security perceptions, existing community organisational structures and local food market access points. This phase is essential for evaluation purposes and for adapting the CFC composition and procurement strategy to specific local realities.

### ***5.2.2 Community Feeding Committee: Design and Gender Dimensions***

The Community Feeding Committee (CFC) is the central institutional innovation of this intervention and its primary risk mitigation mechanism. The qualitative data illustrates clearly what the absence of such a structure looks like: a school feeding programme whose continuity depends entirely on whether a cook can be found on a given day. The CFC replaces this individual-contingency model with an organised, and institutionally accountable community structure.

The CFC will be composed of: five mothers of enrolled children, selected through a community election facilitated by the school. Two teachers, who, as state employees, provide institutional legitimacy and a bridge to formal authority. And one community elder or local representative, who provides cultural authority and conflict resolution capacity.

However, the CFC model carries a significant design risk that must be addressed directly. Community participation by women is not cost-free. Rural Malian women carry substantial household labor burdens such as water collection, agricultural work, food preparation, and childcare. That constrain their practical availability for volunteer programme management roles (Annan, 2015). The survey data collected for this project is unambiguous on this point: some respondents stated motivation for participating was 'rémunération' — compensation. This is consistent with the broader evidence on women's participation in community programmes in the Sahel, which consistently identifies labor, and economic opportunity costs as the primary barriers to sustained engagement (Annan, 2015).

The project therefore proposes a structured incentive model: a monthly in-kind contribution for CFC members, equivalent to a portion of food for their household, calibrated during the baseline assessment in consultation with the community. This approach respects the economic reality of participants while avoiding the financial and legal complexity of formal employment contracts.

### ***5.2.3 Local Food Procurement: Realities and Constraints***

The project prioritises local procurement as both an operational strategy and a development objective. Based on current FEWS NET and USDA data, the proposed meal basket prioritises millet and sorghum (FEWS NET, 2024; USDA 2025). Each meal targets 600–700 kilocalories per child and consists of approximately 250–280 grams of dry cereal or legume, cooking oil and salt.

At a realistic per-meal food cost of €0.50, the total food budget for 36,000 meals is €18,000. This figure is substantially higher than estimates produced by generic Sahelian averages, and intentionally so: a budget that does not reflect the actual price environment will not survive the first quarter of implementation.

#### 5.2.4 Monitoring and Community Feedback

The monitoring system is designed around a fundamental operational constraint: in an area with severely limited internet connectivity — the interviewee could only access the internet on specific days when travelling to Homboli — digital or web-based data management is not viable. The system relies entirely on paper-based tools: a daily meal distribution register maintained by a designated CFC member, a weekly school attendance sheet signed by the teacher and a monthly summary compiled by the local coordinator and transmitted to the implementing NGO during regular field visits. Quarterly community assemblies — open to all families of enrolled children — serve as the participatory accountability mechanism.

### 5.3 Implementation Timeline

**Table 1.**  
*Implementation timeline*

Phase	Months	Key Activities and Milestones
Phase 1: Baseline and Preparation	1–2	Community mapping and needs assessment; CFC election and formation; CFC training (roles, record-keeping, food hygiene, procurement); food supplier identification; kitchen equipment procurement; paper monitoring tools distributed
Phase 2: Pilot Launch	3–4	First meals served; daily monitoring begins; first community assembly for feedback and adjustment; first monthly report submitted to NGO
Phase 3: Full Operation and Mid-Term Review	5–10	Sustained daily meal provision (180 school days total planned); monthly monitoring reports; mid-term review at month 6 — attendance data, CFC functioning, procurement performance, security assessment; adaptations implemented
Phase 4: End-Line Evaluation and Dissemination	11–12	End-line attendance and perception survey; CFC capacity assessment; lessons-learned documentation; report to donors and stakeholders; recommendation for continuation, adaptation, or discontinuation

*Source: Author's own elaboration*

#### **5.4 Sustainability Assessment**

Sustainability is the most contested dimension of this project, and it requires honest analysis rather than optimistic assertion. Three levels must be distinguished.

Institutional sustainability is the most achievable in the short term. The CFC model, if properly trained and incentivised, can outlast the departure of any individual NGO staff member or a funding disruption.

Financial sustainability is the most challenging one. A programme costing approximately €33,600 per year cannot realistically be funded by a rural community. The financial sustainability strategy is not self-sufficiency but diversification and progressive cost reduction.

Operational sustainability in a conflict environment is inherently uncertain. The school has already been relocated once. Classes operate only two to three days per week and WFP itself was forced to suspend field operations in April 2026 (WFP, 2026). The sustainability strategy therefore includes explicit crisis protocols: contingency plans for reduced-schedule operation, alternative food storage arrangements, and a pre-agreed communication chain with the implementing NGO for an emergency decision-making.

## 6. Legal and Governance Framework

### 6.1 Mali's Political Context in 2025–2026: A Deteriorating Operating Environment

The governance context in which this intervention is proposed has deteriorated to a degree that requires direct and unambiguous acknowledgement. Since the military coups of 2020 and 2021, Mali's transitional government — led by junta chief Assimi Goïta — has systematically closed the country's political and civic space: political parties and civil society associations were suspended in April 2024, multiparty politics effectively abolished in May 2025, and several civil society organisations formally dissolved (Human Rights Watch, 2025).

The security situation has simultaneously reached a critical threshold. Throughout 2025, JNIM (al-Qaeda-affiliated umbrella group Jama'at Nusrat al-Islam wal-Muslimin) demonstrated an unprecedented expansion of territorial control across central and southern Mali, imposing a sustained fuel blockade on Bamako, conducting seven simultaneous attacks in western Mali in July 2025, and reaching de facto control agreements with communities in the Mopti region with tacit junta approval (ISPI, 2025). On 25 April 2026, JNIM and the Tuareg separatist Azawad Liberation Front (FLA) launched the largest coordinated attack on the Malian state since 2012, striking simultaneously from Bamako to Kidal across 1,500 kilometres; JNIM claimed full control of Mopti — the exact region in which this project is proposed (Long War Journal, 2026). According to the 2025 Global Terrorism Index, the Sahel now accounts for more than half of all terrorism-related deaths worldwide (Institute for Economics and Peace, 2025).

These developments have direct operational consequences for this project. WFP temporarily suspended all field movements and operations in Mali in April 2026, directly impacting school feeding activities (WFP, 2026). The junta's Russia-backed security strategy has demonstrably failed to contain the insurgency, and state authority in the Mopti region is now openly contested (ISPI, 2025). This context does not render the proposed intervention impossible — community-based models with low external visibility may in fact be more viable than externally directed programmes in areas of contested governance — but it demands honest acknowledgment that the feasibility conditions assumed in the project design may change rapidly and unpredictably.

## 6.2 Legal Conditions and Viability

For the proposed intervention to operate legally, three conditions must be met. First, the implementing NGO must be legally registered and in good standing with Malian authorities. Under the current junta, this regulatory environment has become increasingly restrictive toward organisations perceived as aligned with Western governments (Human Rights Watch, 2025), and preliminary legal advice from Malian counsel is strongly recommended before any operational commitment is made.

Second, the project must avoid any activity that could be interpreted as politically subversive or as undermining Malian state authority. The CFC model is designed with this in mind: by working through local teachers, by framing the intervention as complementary to the government's own PNCS programme, and by maintaining a deliberately low public profile, the intervention minimizes its surface area of political friction without eliminating it entirely.

Third, the project must navigate a practical paradox: the communities most in need of the intervention are those in areas of active insecurity where formal legal operating frameworks are weakest. Any implementation agreement must therefore include explicit protocols for how the programme responds if the security situation deteriorates further — a contingency that the history of this specific school, relocated once already from Guelel to Guarni, makes not hypothetical but probable.

## 6.3 Community Governance as Risk Mitigation

Paradoxically, the CFC model functions as both a development innovation and a political risk mitigation strategy. A programme that is visibly led and managed by local community members, anchored in local teachers, and designed to complement rather than replace state provision, presents a substantially different profile to local authorities than one that is clearly externally directed. Community legitimacy in fragile contexts is not merely a development ideal — it is operational protection (Swithern, 2024). This is consistent with the localisation of humanitarian aid agenda, which argues that locally led and locally accountable programmes are not only more effective but more durable in politically volatile environments (Swithern, 2024). The proposed intervention is, at a micro level, a practical test of this principle: whether a community-embedded model can achieve operational continuity in a

context where externally managed programmes, including WFP's own, have been forced to pause (WFP, 2026).

## 7. Budget and Comparative Cost Analysis

### 7.1 Methodological Note

The budget presented in this section is constructed from primary price data sources rather than generic estimates. Food costs are based on FEWS NET Mali Price Bulletins (2024) and the USDA West Africa Rice Annual Update (2025), which report retail prices specifically in Mopti markets. Personnel costs are calibrated against Mali's national minimum wage of 40,000 FCFA/month (~€65/month, as of 2025) and NGO local staff salary ranges documented for Mali (Africarrieres, 2026). All figures include a 20 percent inflation contingency, reflecting the documented 40–80 percent cereal price increases recorded in Mopti between 2023 and 2024 (GIEWS, 2024) — a structural reality, not an anomaly.

The programme serves 200 children over 180 operational school days — deliberately reduced from the standard academic calendar of approximately 200 days to account for the school's documented two-to-three-day weekly schedule and expected security disruptions. Total planned meal deliveries: 36,000.

### 7.2 Food Cost Calculation

Based on current Mopti retail prices: local millet and sorghum are priced at approximately 300–350 FCFA/kg (~€0.46–0.54/kg), local rice at approximately 550 FCFA/kg (~€0.84/kg), up 25–55% from the previous year (GIEWS, 2024; USDA, 2025). The meal basket prioritises millet and sorghum, consistent with rural dietary patterns and significantly lower cost (FEWS NET, 2024). Each meal targets 600–700 kcal: ~250–280g dry cereal or legume, plus cooking oil and salt (WFP, 2024).

Ingredient cost per meal at current prices: approximately €0.38–0.44. Adding a 20 percent volatility buffer: €0.50 per meal as the planning figure. Total food cost:  $36,000 \times €0.50 = €18,000$ . This is more than double what a generic Sahelian estimate would produce — and it is the correct figure for Mopti in 2025–2026.

### 7.3 Full Budget Breakdown

**Table 2.**  
Full budget breakdown

Category	Calculation Basis	Annual Cost (EUR)
Food supplies (millet, sorghum, cowpeas, oil, salt)	36,000 meals × €0.50/meal (incl. 20% price volatility buffer based on FEWS NET 2024 data)	€18,000
CFC incentives (5 members)	In-kind food equivalent of ~€25/month per member × 10 operating months	€1,250
Local coordinator (1 person)	€150/month × 12 months (above minimum wage of ~€65; below NGO professional rate)	€1,800
CFC training and capacity building	2-day initial workshop (facilitator, materials, venue); refresher at month 6	€700
Kitchen equipment (initial investment)	3 cooking pots, utensils, serving bowls, storage containers (one-off)	€900
Food storage infrastructure	Secure dry storage rental or basic structure construction	€600
Educational materials (complementary)	Backpacks, notebooks, pencils for 200 children — one-off attendance incentive	€1,800
Transport and logistics	Monthly food delivery from nearest accessible market; NGO field visits (est. monthly)	€2,400
Monitoring tools and administration	Paper registers, printing, coordinator phone credit for monthly reporting	€500
Community assemblies (4 per year)	Quarterly open community meetings: basic facilitation and materials	€400
Security contingency and crisis protocols	Emergency food reserve (1 month), alternative storage, evacuation planning	€1,500
Baseline and end-line assessment	External facilitator, travel costs, data collection materials	€800
NGO operational overhead (10%)	Standard humanitarian accounting practice applied to direct costs	€3,055
<b>TOTAL</b>		<b>€33,705</b>

Source: Author's own elaboration.

Estimated cost per child per year: €33,705 ÷ 200 children = €168.50.

Estimated cost per meal delivered (including all overhead): €33,705 ÷ 36,000 = €0.94.

## 7.4 Comparative Cost Analysis

The most reliable global benchmark for school feeding costs in low-income countries comes from a 2025 study by the Center for Global Development, which analysed 216 programmes across 102 countries using data from the 2018–2023 Global Survey of School Meal Programmes. Their findings show that in low-income countries, programmes spend an average of approximately \$110 per child annually for 200 meal days (CGD, 2025). This, and not the €40–80 range that appears in older or less precise sources, is the appropriate comparator.

**Table 3.**  
*Comparative cost analysis*

Dimension	WFP / PNCS Large-Scale Programs	Proposed Pilot (Guarni)
Estimated cost per child/year	~\$110 USD (CGD 2025 global low-income average at scale)	~€168 (~\$182 USD equivalent)
Scale of operation	Hundreds of thousands of children nationally	150–200 children (single school pilot)
Meal days per year	Up to 200 where fully operational	~180 (adjusted for security disruptions)
Food sourcing model	Primarily national/international procurement chains	Local market procurement (Mopti region)
Community management	Institutional: government/NGO-led	Community Feeding Committee (CFC) model
Flexibility to local context	Limited by <del>standardised</del> model requirements	Built into design; adapted from field data
Operational continuity	Vulnerable: WFP suspended operations April 2026	Designed for local resilience with crisis protocols
Accountability	Upward: donors and government counterparts	Dual: upward (NGO/donors) + downward (community assembly)
Primary purpose	Coverage at scale	Evidence generation and model testing

*Source: Author's own elaboration.*

## 7.5 Cost-Effectiveness

The proposed pilot costs approximately 65% more per child than the global low-income programme average. This premium has two distinct components that must be assessed separately.

The first is structural: pilot-scale programmes cannot achieve the economies of scale that drive down per-child costs in large programmes. The CGD (2025) data confirm that scaling is one

of the most powerful cost-reduction mechanisms — programmes that double in size can reduce per-child costs by 20–30 percent. A 200-child pilot will inherently carry higher fixed costs per beneficiary. This is not inefficiency, it is the unavoidable cost of generating context-specific evidence at a small scale.

The second is contextual: the Mopti food price environment in 2025–2026 is structurally more expensive than the conditions under which benchmark figures were generated. Cereal prices 40–80% above five-year averages are not temporary anomalies, but a reflection of conflict-driven market disruption that is unlikely to resolve in the pilot period (GIEWS, 2024). A budget built on pre-conflict averages would be operationally insolvent within weeks.

Whether the higher cost is justified must ultimately be answered by the evaluation: does the community-based model generate demonstrably higher levels of programme continuity, community trust, and social impact that standardized approaches cannot deliver in this context? If yes, and if those gains can be documented in transferable form, the pilot's contribution extends far beyond its 200 direct beneficiaries. If not, that is a valuable finding as well.

## **8. Evaluation Framework**

### **8.1 Rationale and Design Principles**

The evaluation framework serves a dual purpose. At the programme level, it measures whether the intervention is operating as designed and achieving its intended outcomes. At the research level — equally important given the pilot nature of the intervention — it tests the central hypothesis: that a community co-managed model can generate higher levels of operational continuity and social trust than conventional school feeding approaches in conflict-affected settings (Annan, 2015; *Frontiers in Sustainable Food Systems*, 2024).

Three principles guide the design. First, feasibility: tools must be simple enough to be maintained by local actors without continuous external support, given the connectivity and security constraints documented in the field. Second, honesty: the framework must be designed to detect failure as well as success — to identify when the intervention is not working and why, rather than generating reporting that confirms funder expectations. Third, learning orientation: findings are intended not only for the implementing NGO and its donors but for the humanitarian community operating in comparable contexts.

### **8.2 Implementation Evaluation**

The implementation evaluation tracks whether the programme functions as designed on a continuous basis. It is the responsibility of the local coordinator, with inputs from the CFC.

**Table 4.**  
*Implementation Evaluation*

<b>Evaluation Question</b>	<b>Indicator</b>	<b>Tool</b>	<b>Frequency</b>
Are meals served consistently?	School days with meal served / total school days open (%)	Daily distribution register (CFC)	Monthly compilation
Is the CFC functioning?	Active CFC members; meeting minutes completed	CFC attendance and minutes log	Monthly
Is procurement local and on budget?	% food sourced locally; actual cost per meal vs. budget	Procurement register	Monthly
Are community assemblies held?	Assembly convened; family attendance rate	Assembly attendance record	Quarterly
What disruptions occurred?	Nature, duration, and management response	Incident log (coordinator)	As they occur

*Source: Author's own elaboration.*

### **8.3 Impact Evaluation**

The impact evaluation is based on three points: baseline (month 2, before meals begin), mid-term (month 6), and end-line (month 11). It assesses changes in key outcomes using a pre-post comparison design.

**Table 5.**  
*Impact evaluation.*

<b>Outcome</b>	<b>Indicator</b>	<b>Method</b>	<b>Responsible</b>
School attendance	Average daily attendance rate at baseline, month 6, and end-line	School registers; teacher report	Teacher + coordinator
Perceived hunger in school	Proportion of teachers reporting children unable to concentrate due to hunger	Structured teacher questionnaire (3 items)	Coordinator
Community trust in program	Proportion of families expressing satisfaction with CFC management	Household survey (~20 households, purposive sample)	Coordinator + NGO
CFC institutional capacity	CFC self-assessment on roles, records, procurement confidence (5-item scale)	Facilitated CFC self-assessment	NGO field staff
Local procurement share	Proportion of food budget spent with local producers or traders	Procurement register	CFC + coordinator

*Source: Author's own elaboration*

#### **8.4 Evaluation Limitations**

Several limitations must be acknowledged precisely rather than as a pro forma caveat.

The absence of a control group makes causal attribution impossible: any observed improvement in attendance could reflect seasonal patterns, security improvements, or other concurrent factors unrelated to the programme. The pre-post design identifies associations and trends. It does not establish causation.

The sample sizes are limited for statistical analysis. This is not a fixable design flaw but a characteristic of a single-school pilot. Findings will be presented as descriptive and qualitative insights, not as broadly applicable evidence.

The evaluation also carries ethical risks specific to the conflict context. Data collection involving community members' perceptions of security conditions or armed actors could, if mismanaged, expose respondents to harm. The evaluation protocol will not collect data that

could identify individuals or communities to armed actors; all data will be stored outside Mali and without personal identifiers.

Finally, data collection will itself face interruptions due to insecurity and connectivity constraints. The paper-based design anticipates this by prioritizing tools that can be maintained by community actors during periods when external supervisors cannot access the area.

## 9. Discussion and Conclusions

### 9.1 What the Evidence Actually Shows

The diagnostic work conducted in this project — triangulating humanitarian literature, real-time food price data from FEWS NET and USDA, field interview testimony, and an exploratory household survey — produces a more complex and more honest picture of school feeding in Mali than is typically found in intervention design documents.

The evidence shows, first, that the limitations of existing programmes are not primarily about intent or resources. WFP, UNICEF, and the Malian government have dedicated substantial institutional capacity and funding to school feeding in Mali for decades (WFP, 2023). The gap lies in the last mile of implementation, where programmes that function smoothly at the institutional level fail because there is no organised local structure capable of ensuring continuity when a cook is unavailable, when a supply truck cannot reach the community, or when the security situation prevents external staff from accessing the area. The image from the field interview — a feeding programme that 'only works when they can find a cook' — is not an anecdote; it is a diagnostic finding that points to a specific and addressable institutional deficit.

The evidence shows, second, that community participation in programme management is not a free good. The survey data is unambiguous on this point: some respondent's motivation for participating was financial compensation. The literature on women's participation in community programmes in the Sahel consistently identifies labor, and economic opportunity costs as the primary barriers to sustained engagement (Annan, 2015). A project design that treats voluntarism as the solution to the cook-dependency problem is replacing one form of individual contingency with another. The CFC incentive model proposed in this project is a direct response to this evidence.

The evidence shows, third, that the operating environment in Mali in 2025–2026 is more restrictive than most project documents acknowledge. WFP has suspended field operations (WFP, 2026). The civic space in which NGOs operate has contracted dramatically under the junta (Human Rights Watch, 2024). Food prices in Mopti are structurally elevated by conflict (GIEWS, 2024). These are not background risks to be noted and set aside; they are conditions under which the intervention must actually function. The budget, the legal analysis, and the

crisis protocols in this project are all designed to reflect these conditions rather than a more convenient version of them.

## **9.2 What This Project Claims and What It Does Not**

The proposed intervention makes a specific and bounded claim: that a community co-management model properly designed and resourced, can address the last-mile implementation gap that currently prevents school feeding programmes from functioning consistently in communities like Guarni. It does not claim to be cheaper than large-scale programmes. Or to be immediately scalable. It does not claim either to resolve the structural causes of food insecurity or conflict in Mali.

What it does claim is more modest and more defensible: that the institutional gap between programme design and community-level reality is real, that it has identifiable causes, that it has a testable solution, and that a pilot in Guarni — with its existing field relationships, its documented need, and its minimal feasibility conditions — is a reasonable place to test that solution. It also makes a methodological claim: that evidence generated in a single school, through a carefully documented pilot, has value for the humanitarian community beyond its direct beneficiaries — not as proof of a universal model, but as grounded, contextually specific evidence that complements the aggregate statistical studies that currently dominate the field.

## **9.3 Implications for International Relations Theory and Practice**

This project sits at the intersection of two theoretical traditions in International Relations that are often discussed separately but are deeply connected in this context. The human security framework insists that the referent of security is the individual, not the state — and that food insecurity and educational deprivation are security threats in the most fundamental sense (UNDP, 1994). The localisation of humanitarian aid agenda insists that the actors best placed to deliver effective assistance are those closest to affected communities — and that international organisations should transfer not just resources but decision-making authority to local actors (Swithern, 2024).

The proposed intervention is, at its core, an attempt to operationalise both principles simultaneously at the micro level. It treats the children in Guarni as the primary referent of value — not donor reporting requirements, not global coverage statistics. And it places local community members at the centre of management and accountability rather than at the

periphery. The fact that WFP — the world's largest school feeding actor — was forced to suspend operations in Mali in April 2026 gives this localisation logic a particular urgency (WFP, 2026): when the international system fails to reach the last mile, locally embedded models may be the only ones that can.

#### **9.4 Conclusion**

Mali's school feeding crisis is not primarily a resource problem. The WFP, UNICEF, the World Bank, and the Malian government have collectively invested heavily in child nutrition and educational access for decades (WFP, 2023). The problem is the structural fragility of implementation at the community level — the gap between what programmes are designed to deliver and what actually happens in a school in Guarni on a Tuesday morning when no cook has arrived.

This project has proposed one approach to that gap: a community co-management model backed by realistic, evidence-based incentives, local procurement grounded in actual Mopti market prices (FEWS NET, 2024; USDA, 2025), and a governance framework that takes seriously the political risks of operating under a military junta in a conflict-affected region. The budget is honest about what such a model costs. The legal analysis is honest about the constraints. The sustainability assessment is honest about the limits.

Whether the model works must be determined by implementation and evaluation. What this project provides is not proof but the analytical foundation, the operational design, and the evaluation architecture needed to conduct a credible test. The children in Guarni deserve a programme that has been thought through with that level of care.

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## Annex 1 — Methodological Note on Primary Data Collection

### A1.1 Overview

This project relies on two primary data sources: an exploratory survey administered to mothers and female caregivers in Mali, and a qualitative interview conducted with a male school contact working in a school in the Mopti region. Both instruments were designed and administered during the period of the professional placement with CC Ajuda al Desenvolupament. This note documents the design rationale, administration conditions, and analytical limitations of each instrument.

### A1.2 Survey

**Design rationale:** The survey was designed to collect structured data on five thematic areas: household food security; school attendance patterns and barriers; awareness of and experience with existing school feeding programmes; institutional trust; and willingness to participate in a community-managed feeding initiative. Questions were developed in French — Mali's official language and the medium of formal communication — to maximise accessibility.

**Administration:** The survey was distributed remotely via an online form through local contacts facilitated by “CC Ajuda al Desenvolupament”. Given the security and connectivity constraints in the target area, in-person administration was not feasible. The survey was available between April 2026 and the project submission date.

**Sample:** 45 valid responses were received. Respondents identified themselves as located in an urban setting (ville). This sample is not statistically representative of the Malian population. No quantitative generalizations are drawn from it. In Section 3.3 of the main report and in Annex 3, the survey is completed and analysed.

**Ethical considerations:** No personal identifying information was collected. Participation was voluntary. Respondents were informed of the academic purpose of the survey.

### A1.3 Interview

**Design rationale:** The interview was designed to collect qualitative, first-hand accounts of the operational realities facing schools and feeding programmes in a conflict-affected community

in central Mali. The interview was semi-structured, allowing the respondent to expand on topics of relevance beyond the initial questions.

**Respondent profile:** A Malian male with direct experience working in a primary school in the Mopti region. The respondent was identified and contacted through the NGO “CC Ajuda al Desenvolupament”. Identifying details are withheld to protect the respondent's privacy and safety given the conflict context.

**Administration:** The interview was conducted remotely via audio messages transmitted through a messaging application, in French. The respondent could only access internet connectivity on specific days when travelling to the town of Homboli — typically Tuesdays and Fridays. Audio messages were received in April 2026, subsequently transcribed, and translated into English for analysis.

**Analytical approach:** Given the single-respondent format and the non-standardised conditions of collection, the interview is treated as qualitative field testimony rather than systematic qualitative research. Findings are cited as illustrative evidence and triangulated with secondary literature rather than presented as independently generalisable.

## Annex 2 — Survey Instrument: Full Questionnaire (French)

The following questionnaire was administered in French. English translations of question headings are provided in square brackets for reference. The questionnaire was designed for self-completion via an online form.

### **Title of survey: Nutrition des enfants, éducation et cantines scolaires au Mali**

*[Child nutrition, education and school canteens in Mali]*

Target respondents: Mothers and female caregivers of primary-school-aged children in Mali

Language: French

Format: Online self-completion form

Administered: April 2026

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## SECTION A — Profile of the respondent and household

### **1. Quel est votre âge ? [What is your age?]**

*[Single choice]*

- Moins de 20 ans / Under 20
- 20–30 ans
- 31–40 ans
- 41–50 ans
- Plus de 50 ans / Over 50

### **2. Combien d'enfants avez-vous ? [How many children do you have?]**

*[Single choice]*

- 1–2
- 3–4
- 5–6
- 7 ou plus / 7 or more

**3. Combien de vos enfants vont actuellement à l'école ? [How many of your children currently attend school?]***[Single choice]*

- Aucun / None
- Quelques-uns / Some of them
- La moitié / Half
- Tous / All of them

**4. Où habitez-vous ? [Where do you live?]***[Single choice]*

- Village rural / Rural village
- Ville / Town or city
- Camp de déplacés / Displacement camp
- Autre / Other

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**SECTION B — Food security****5. Vos enfants mangent-ils suffisamment chaque jour ? [Do your children eat enough every day?]***[Single choice]*

- Toujours / Always
- Souvent / Often
- Parfois / Sometimes
- Rarement / Rarely
- Jamais / Never

**6. Avez-vous des difficultés pour nourrir vos enfants ? [Do you have difficulties feeding your children?]***[Single choice]*

- Non / No
- Rarement / Rarely
- Oui, parfois / Yes, sometimes
- Oui, souvent / Yes, often
- Oui, tous les jours / Yes, every day

**7. Quelle est votre principale difficulté pour nourrir vos enfants ? [What is your main difficulty feeding your children?] (Plusieurs réponses possibles / Multiple answers possible)***[Multiple choice]*

- Manque d'argent / Lack of money
- Nourriture pas disponible / Food not available locally
- Distance au marché / Distance to market
- Insécurité empêche l'accès / Insecurity prevents access
- Autre / Other

**8. Combien de repas vos enfants prennent-ils par jour en moyenne ? [How many meals do your children eat per day on average?]***[Single choice]*

- 1 repas / 1 meal
- 2 repas / 2 meals
- 3 repas / 3 meals
- Plus de 3 / More than 3

**9. Avez-vous déjà gardé un enfant à la maison parce que vous ne pouviez pas lui donner à manger ? [Have you ever kept a child at home because you could not feed them before school?]**

*[Single choice]*

- Oui / Yes
- Non / No
- Je ne sais pas / Not sure

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## SECTION C — Education and school attendance

**10. Pensez-vous que l'éducation est importante pour l'avenir de vos enfants ? [Do you think education is important for your children's future?]**

*[Single choice]*

- Très importante / Very important
- Importante / Important
- Pas très importante / Not very important
- Pas importante / Not important

**11. Vos enfants vont-ils régulièrement à l'école ? [Do your children attend school regularly?]**

*[Single choice]*

- Oui / Yes
- Non / No
- Parfois / Sometimes

**12. Si non, pourquoi ? [If not, why?] (Plusieurs réponses possibles / Multiple answers possible)**

*[Multiple choice]*

- L'école est trop loin / School is too far
- Insécurité / Insecurity
- L'enfant doit travailler ou aider à la maison / Child must work or help at home
- Frais scolaires / School costs
- L'enfant est malade trop souvent / Child is frequently ill
- Autre / Other

*Note: Skip if answer to Q11 is 'Yes'*

---

## SECTION D — School feeding programmes

### 13. Connaissez-vous les programmes de cantines scolaires (repas gratuits à l'école) ? [Are you aware of school canteen programmes — free meals at school?]

*[Single choice]*

- Oui / Yes
- Non / No

### 14. Si oui, comment en avez-vous entendu parler ? [If yes, how did you hear about them?]

*[Single choice]*

- Par des amis ou la famille / Through friends or family
- Par une ONG / Through an NGO
- Par l'école / Through the school
- À la radio ou à la télévision / Radio or television
- Autre / Other

*Note: Skip if answer to Q13 is 'No'*

### 15. Vos enfants bénéficient-ils d'une cantine scolaire ? [Do your children currently benefit from a school canteen?]

*[Single choice]*

- Oui / Yes

Non / No

**16. Si oui, comment évaluez-vous ce programme ? [If yes, how do you rate this programme?]**

*[Single choice]*

- Très bon / Very good
- Bon / Good
- Moyen / Average
- Mauvais / Poor
- Très mauvais / Very poor

*Note: Skip if answer to Q15 is 'No'*

**17. Qu'est-ce qui fonctionne bien dans ce programme ? [What works well in this programme?]**

*[Open text]*

*Note: Skip if answer to Q15 is 'No'*

**18. Quels problèmes avez-vous observés ? [What problems have you observed?]**

*[Open text]*

*Note: Skip if answer to Q15 is 'No'*

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**SECTION E — Trust and community participation**

**19. Faites-vous confiance aux programmes des organisations internationales (ONU, ONG) ? [Do you trust programmes run by international organisations — UN, NGOs?]**

*[Single choice]*

- Oui / Yes
- Non / No
- Je ne sais pas / Not sure

**20. Pourquoi faites-vous confiance ou non ? [Why do you trust or not trust them?]***[Open text]***21. Pensez-vous que ces programmes comprennent vos besoins ? [Do you think these programmes understand your needs?]***[Single choice]*

- Oui, complètement / Yes, fully
- Partiellement / Partially
- Non / No
- Je ne sais pas / Not sure

**22. Feriez-vous confiance à un programme de cantine scolaire géré en partie par la communauté (parents, enseignants) ? [Would you trust a school canteen programme co-managed by the community — parents and teachers?]***[Single choice]*

- Oui / Yes
- Non / No
- Je ne sais pas / Not sure

**23. Seriez-vous prête à participer (cuisine, organisation, aide) ? [Would you be willing to participate — cooking, organising, helping?]***[Single choice]*

- Oui / Yes
- Peut-être / Maybe
- Non / No

**24. Qu'est-ce qui vous motiverait à participer ? [What would motivate you to participate?]**

[Open text]

## SECTION F — Impact of school feeding

**25. Si votre enfant recevait un repas gratuit par jour à l'école, l'enverriez-vous plus régulièrement ? [If your child received a free daily meal at school, would you send them more regularly?]**

[Single choice]

- Oui / Yes
- Non / No
- Je ne sais pas / Not sure

**26. Pensez-vous que les repas scolaires peuvent améliorer l'avenir de votre enfant ? [Do you think school meals can improve your child's future?]**

[Single choice]

- Oui / Yes
- Non / No
- Je ne sais pas / Not sure

**27. Quel est l'avantage le plus important d'une cantine scolaire ? [What is the most important benefit of a school canteen?]**

[Single choice]

- Meilleure nutrition / Better nutrition
- Sécurité pour les enfants / Child safety
- Meilleur apprentissage / Better learning
- Assiduité scolaire / Regular attendance
- Autre / Other

---

**SECTION G — Broader needs and suggestions**

**28. Quels sont les plus grands problèmes pour vos enfants aujourd'hui ? [What are the biggest problems facing your children today?]**

*[Open text]*

**29. De quel type d'aide avez-vous le plus besoin ? [What type of support do you need most?]**

*[Open text]*

**30. Avez-vous des suggestions pour améliorer la nutrition et l'éducation des enfants dans votre communauté ? [Do you have any suggestions for improving child nutrition and education in your community?]**

*[Open text]*

## Annex 3 — Survey Results

### Section B: Food Security

Response	n	%
<b>Q5 — Do children eat enough every day?</b>		
Always	10	22%
Sometimes	23	51%
Rarely	12	27%
<b>Q6 — Difficulties feeding children?</b>		
No / Rarely	5	11%
Yes, sometimes	23	51%
Yes, often	17	38%
<b>Q7 — Main barrier to feeding (multiple choice)</b>		
Lack of money	45	100%
Distance to market	18	40%
Food not locally available	12	27%
Other	8	18%
<b>Q9 — Kept child at home due to inability to feed?</b>		
Yes	19	42%
No	26	58%

### Section C: Education and School Attendance

Response	n	%
<b>Q10 — Is education important for your children's future?</b>		
Very important	28	62%
Important	9	20%
Not very important	5	11%
Not important	3	7%
<b>Q11 — Do children attend school regularly?</b>		
Yes	21	47%
No	14	31%
Sometimes	10	22%
<b>Q12 — Barriers to school attendance (multiple choice)</b>		
Insecurity	38	84%
School too far	28	62%

Child must work / help at home	21	47%
School costs	14	31%
Other	7	16%

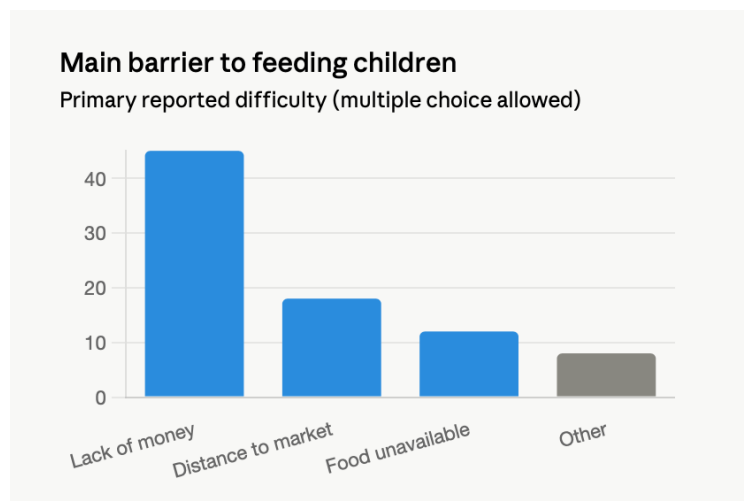
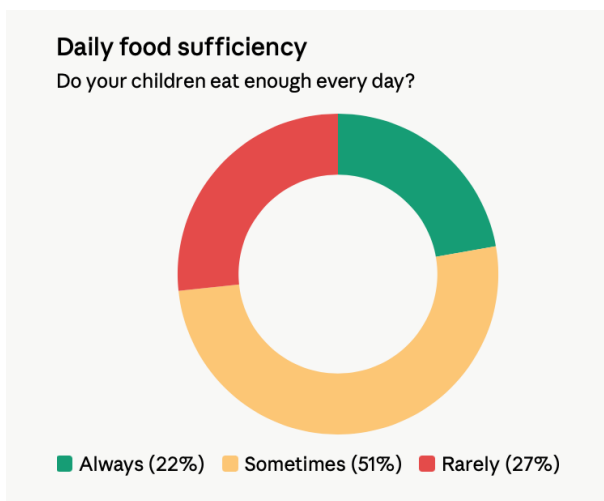
### Sections D–F: Canteen Awareness, Trust, and Participation

Response	n	%
<b>Q13 — Awareness of school canteen programmes</b>		
Yes, aware	11	24%
No, not aware	34	76%
<b>Q15 — Children currently benefit from a canteen</b>		
Yes	0	0%
No	45	100%
<b>Q19 — Trust in international organisations (UN/NGO)</b>		
Yes	19	42%
Not sure	9	20%
Partially	15	33%
No	2	5%
<b>Q21 — Programmes understand your needs?</b>		
Yes, fully	4	9%
Partially	29	64%
No	12	27%
<b>Q22 — Trust in community-managed canteen?</b>		
Yes	24	53%
Not sure	16	36%
No	5	11%
<b>Q23 — Willing to participate?</b>		
Yes	20	44%
Maybe	18	40%
No	7	16%
<b>Q24 — Motivation to participate (open, coded)</b>		
Children's welfare / child-centred motivation	21	47%
Compensation or in-kind incentive	14	31%
Food security for own family	7	16%
Social recognition / community role	3	7%
<b>Q25 — Free meal would increase attendance?</b>		
Yes	39	87%

Not sure	4	9%
No	2	4%
<b>Q27 — Most important benefit of school canteen</b>		
Better nutrition	19	42%
Child safety	13	29%
Improved learning	8	18%
Regular attendance	5	11%

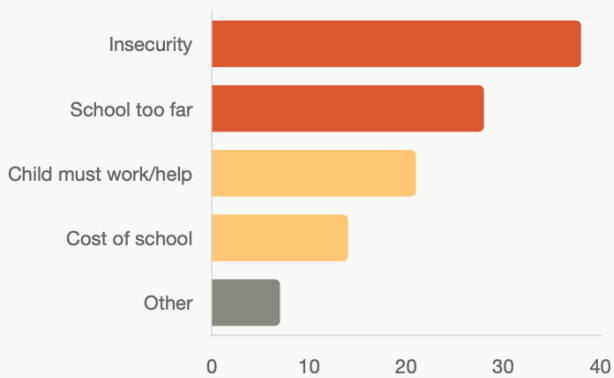
Survey overview

<p><b>45</b> Respondents (mothers/caregivers)</p>	<p><b>89%</b> Report food access difficulties</p>	<p><b>100%</b> Would send child more if free meal provided</p>	<p><b>0%</b> Children currently in a school canteen</p>
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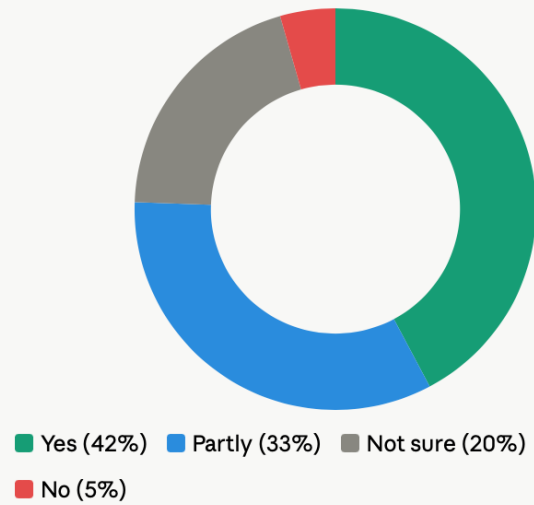
**School attendance barriers**

Why children don't attend regularly (multiple choice)



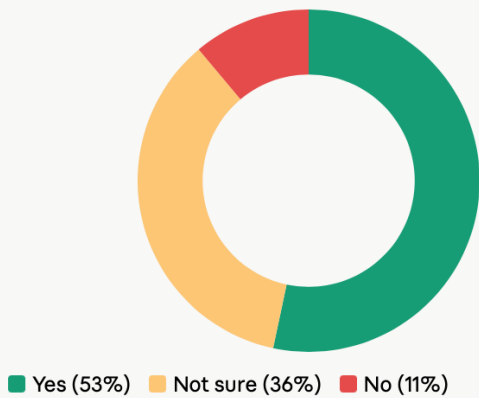
**Trust in international organisations**

Do you trust UN/NGO programmes?



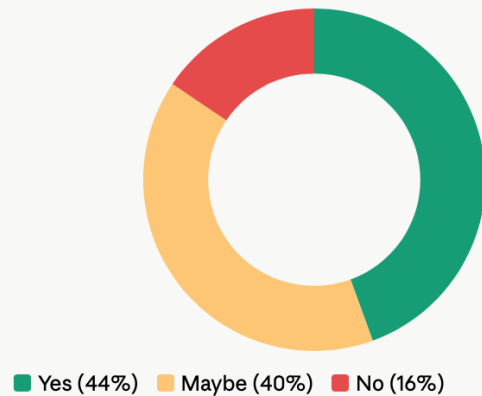
**Trust in community-managed canteen**

Would you trust a canteen co-managed by parents and teachers?



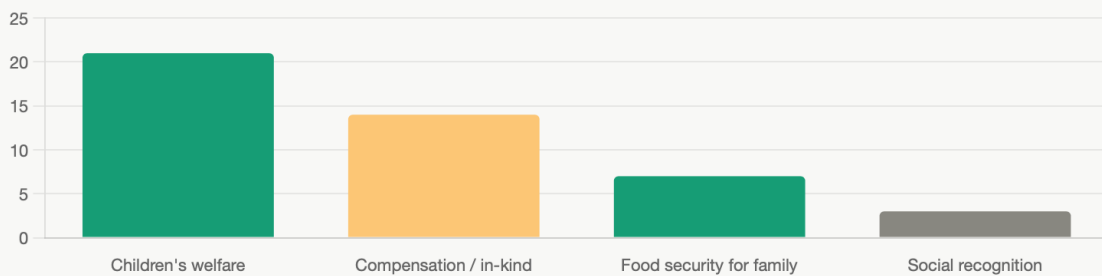
**Willingness to participate in CFC**

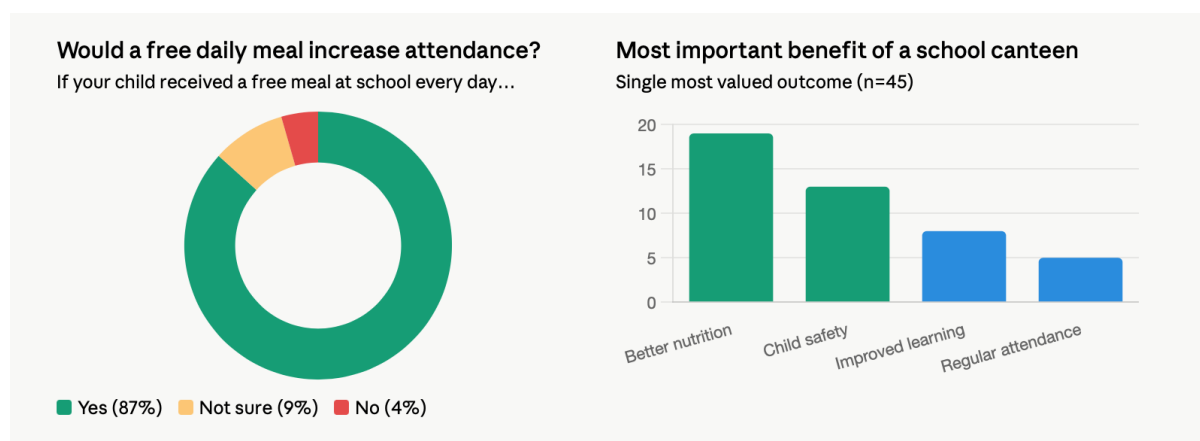
Would you participate in cooking/organising?



**Motivation to participate in community canteen**

What would motivate you to get involved? (open question, coded responses, n=45)





## Annex 4 — Interview Transcript: Local School Contact, Mopti Region

### Context and format

The following is an edited transcript of a remote interview conducted with a Malian male contact working in a primary school in the Mopti region, central Mali. The interview was conducted via audio messages transmitted through a messaging application in French, in April 2026. The respondent was identified and contacted through the NGO “CC Ajuda al Desenvolupament” as part of the professional placement that forms the empirical basis of this project. Identifying details — including the respondent's name and precise school location — are withheld to protect his privacy and safety in a conflict-affected context.

The audio messages were transcribed and translated from French into English by the author. Minor edits have been made for clarity and readability; the meaning and content have not been altered. The transcript is organised into a question-and-answer format reflecting the semi-structured interview guide used.

### Respondent profile (anonymised)

Role	School worker / educator
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<b>Location at time of interview</b>	Homboli area, Mopti region, central Mali
<b>School currently operating in</b>	Guarni (relocated from Guelel due to security deterioration)
<b>Interview format</b>	Remote audio messages via messaging application
<b>Language</b>	French (translated to English by author)
<b>Date</b>	April 2026

## Transcript

### **Q1: Can you introduce yourself briefly and describe your current role at the school?**

*I work at the school helping with the children's education and the daily activities. It is difficult now because we have moved the school. We used to be in Guelel but there were too many problems with security — it became very dangerous — so we moved everything to Guarni. In Guarni there is a military camp nearby and that gives us some protection. Without that we could not work at all.*

### **Q2: How often does the school currently operate? How many days per week are classes held?**

*Right now we give classes two or three times per week. That is all we can manage given the situation. It is not what we want — the children need more school — but it is what the security allows us to do. Some days we cannot hold classes at all. The parents know this and they try to send the children when it is safe.*

### **Q3: What is the situation like for the children in terms of food and nutrition? Do they come to school having eaten?**

*Many children arrive without having eaten. This is a big problem. You can see it — they cannot concentrate, they are tired, sometimes they fall asleep. The families have very little. When there is food at home the children eat, but often there is not enough, especially at this time of year [lean season]. Rafa [the NGO CC Ajuda al Desenvolupament] has helped us a lot — with the school canteen, with books, with notebooks. Without that support I do not know how we would manage.*

**Q4: Can you describe the school feeding programme that is currently in place? How does it work in practice?**

*The canteen works when we can find someone to cook. That is the main problem. There is no fixed arrangement — sometimes we find a person, sometimes not. When there is a cook and there is food, the children eat. But if there is no cook that day, there is no meal. It is not organised properly. It depends on one person being available. If that person is sick or away, nothing happens. We need something more organised, with more people responsible, not just one.*

**Q5: What happens when the school feeding programme cannot operate — for example, when there is no cook available?**

*The children simply do not eat at school. They wait, or they go home if their families are close. For many children the school meal is the only proper meal of the day, so when there is no meal it is a bad day for them. Some families then do not send the children the next day either, because what is the point if there is no food? It affects attendance directly.*

**Q6: What materials and resources does the school currently lack? Beyond food, what do the children need most?**

*The children need many things. Mochilas [backpacks] — many children do not have them and carry their things in whatever they can find. Notebooks, pencils. We received some blackboards recently and some windows were fixed, which was very important because before the classrooms were very hot and very exposed. But there are still many needs. The basics — bags, notebooks — are missing for many children.*

**Q7: How do you access communication and the internet? What are the connectivity conditions in your area?**

*In my village there is no network at all. I have to travel to Homboli to connect. I go on Tuesdays and Fridays — I try to be there from eight in the morning to eight in the evening so I can receive messages and communicate. The rest of the time I have no way to communicate with the outside. This is one of the biggest difficulties for organising anything — you cannot coordinate properly when you cannot communicate.*

**Q8: In your view, what would make the school feeding programme work better?  
What does it need?**

*It needs to be organised. Not depend on one person. If there were a group of people — mothers, teachers, people from the community — who were all responsible for the canteen together, it would be more stable. One person cannot always be there, but a group can arrange among themselves. Also it would be better if the food came from nearby — from farmers in the area — so that we are not dependent on things coming from far away that might not arrive. Local food, local organisation. That is what would work here.*

**Q9: How do families in the community generally respond to the school feeding programme? Is there trust and support for it?**

*The families appreciate it very much when it works. When the children eat at school the parents are more willing to send them. They see the benefit. The problem is when it stops and starts — one week there is food, the next there is not. This makes people less confident. If it were consistent, I think many more families would send their children every day that classes are held.*

**Q10: Is there anything else you would like to add — anything important about the situation that you think should be known?**

*I want people to understand that the situation here is very hard but the people have not given up. The children come to school even when it is difficult. The parents want their children to learn. What we need is support that is stable and that we can count on — not that comes and goes. And we need to be involved in organising it, not just receiving it. We know the situation here better than anyone. If someone builds something with us, not just for us, it will last.*

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*End of transcript.*

*Analytical note: The interview was conducted in a context where the respondent's connectivity was severely constrained (two specific days per week, eight hours per day). The audio messages were received in batches and do not follow a strictly linear temporal order. The*

*question sequence presented above reflects the thematic structure of the interview guide rather than the precise order of audio message receipt. No substantive content has been omitted.*

## **Annex 5 — Informed Consent Template**

The following template was used as the basis for informing survey and interview participants of the purpose and conditions of data collection. Given the remote administration format and connectivity constraints, formal written signatures were not obtained; verbal consent was recorded for the interview and participation in the online survey was treated as implicit consent, consistent with standard practice for anonymous online research instruments.

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### **INFORMED CONSENT — Research participation**

Project title: School Feeding as a Pathway to Resilience: Designing a Community-Based School Canteen Project in Conflict-Affected Mali

Researcher: Alexia Nogueras Roca, student of International Relations, Universitat Autònoma de Barcelona

Supervisor: Timothy Kaldas, UAB

#### **Purpose of the research**

This research is conducted as part of a Final Degree Project (Treball de Fi de Grau) at the Universitat Autònoma de Barcelona. The purpose is to understand the food security, educational, and community participation conditions in Mali, in order to design a community-based school feeding intervention. Your participation will contribute to the analytical foundation of the project.

#### **What participation involves**

You will be asked to respond to a questionnaire or interview covering the following topics: household food security; your children's school attendance; your knowledge of and experience with school feeding programmes; your level of trust in international and community organisations; and your views on community participation in school management.

#### **Confidentiality and anonymity**

No personal identifying information will be collected or stored. Your responses will be used exclusively for the purposes of this academic project. No data will be shared with third parties,

government bodies, or organisations that could affect your safety or wellbeing. Given the sensitive security context in Mali, all precautions have been taken to ensure that responses cannot be linked to individual participants.

### **Voluntary participation**

Your participation is entirely voluntary. You may decline to answer any question and may withdraw at any point without consequence.

### **Contact**

For any questions about this research, please contact: alexia.nogueras@autonoma.cat

*By completing the survey / by proceeding with the interview, you confirm that you have understood the above information and agree to participate on this basis.*

## **Annex 6 — AI Declaration**

### **Declaration on the Use of Artificial Intelligence**

In accordance with the academic integrity guidelines of the Treball de Fi de Grau at the Universitat Autònoma de Barcelona (2025–2026), I declare the following regarding my use of artificial intelligence tools in this project.

Two AI tools were used: ChatGPT (OpenAI) in the early stages of the project, and Claude (Anthropic) in the revision and finalisation stages. Neither tool generated the intellectual content of this work.

AI assistance was used for the following purposes: overcoming initial writing blocks by generating first drafts that were subsequently rewritten substantially by the author; discussing how to organise and sequence sections, and what to include or omit given the word limit; formatting tables based on data, figures, and criteria provided entirely by the author; improving academic vocabulary and consistency of register; checking that all required sections per the intervention methodology guide were covered; and formatting bibliographic references in APA style from sources identified and verified by the author.

AI was not used for any of the following: defining the research question or objectives; selecting the theoretical framework; designing or conducting primary data collection (survey and interview); interpreting the data; constructing or verifying the budget figures; or writing the conclusions. These tasks constitute the intellectual core of the project and were performed exclusively by the author.

Regarding the influence of AI on the process and outcome: AI assistance was useful for structure, presentation, and language. However, the project also required active correction of AI-generated content. The budget figures produced by ChatGPT in early drafts were based on generic averages rather than current Mopti market data, producing a per-meal cost approximately half the realistic figure. These errors were identified and corrected by the author through independent verification against FEWS NET, USDA, and CGD primary sources. This experience confirmed that AI tools can produce plausible but contextually inaccurate quantitative data, and that critical judgement by the researcher is essential.

In sum, AI functioned as an organisational and editorial aid. The analytical, empirical, and critical work that constitutes this project is entirely my own.

Signed: Alexia Noguerras Roca

Date: May 2026

Supervisor: Timothy Kaldas Kaldas