

# Sustainable Food School Program

Morais Inês, Patrício Salomé, and Rodrigues Paula

*Unity of Food and Schooler Health, Education Department, Municipality of Torres Vedras, Portugal*

**Abstract:** Torres Vedras is a county in the west of Portugal with about 80.000 inhabitants and 407 km<sup>2</sup>. This area is divided into 13 smaller regions, known as “councils”, each one of them with its own Local Public Authority. In the 2006/2007 school year the National Government established the obligation of all the municipalities to be in charge for managing the school meals for kindergartens and primary schools and, in 2020 all school levels became part of the Municipality’s management. At the present moment, around 6.000 are served in schools per day. Instead of hiring a single catering company, the municipality decided to opt for an integrated strategy of governance and territorial development. This involved: 1) *Decentralization to local public authorities*: For the 12 small regions outside the city area, the responsibility for school meals was decentralized to the local public authorities. This means these authorities, rather than a central body or a private company, manage the school meal services in their respective areas by acquiring this service from the local NGOs; 2) *Direct management in the city*: In the city area, the Municipality directly manages the school meals through five municipal kitchens. These kitchens not only provide meals, but also serve as a “laboratory” for creating guidelines to the NGOs.

**Key words:** school meals, education, public procurement, social economy, local economy, territory

## 1. Introduction

The Sustainable School Food Program, set up by the Municipality of Torres Vedras in 2014, is a good practice that aims to provide healthy school meals in a social, ecological and sustainable way by, for instance, taking into account the products’ freshness, territorial development and job creation. The Program is based on four axes: Production; Acquisition; Cooking; Consumption and Healthy Habits.

In the 2006/2007 school year the National Government established the obligation of all the municipalities to be in charge for managing the school meals for kindergartens and primary schools, with a total of about 4000 meals/day. This situation was at the time adopted as a political strategy for a territorial opportunity to support the local and social economy, by stimulating these sectors through school meal acquisition services. Two municipal kitchens were

created for the city schools’ meals, while the schools outside the city area were (are still) provided by the kitchens of the local NGOs.

In 2020 all the school levels were integrated into the Program, reflecting on the need to create three more municipal kitchens, resulting on a total of five kitchens in a total of 3.000 meals/day (instead of the previous 1.300 of the two initial kitchens) managed by the municipality with the support of forty staff people. In parallel, an additional 1.700 meals/day were contracted to the NGOs compared with the year before, with a total of also 3.000 meals/day at the moment.

One of the major problems was the financial support since this type of project reflects a bigger investment from the Municipal budget.

The most relevant issue is the one related to the public tender constraints. But, by creating a local network with the local public authorities of the councils they assume the responsibility of contracting the school meals’ services to their local NGOs, following the municipality’s guidelines. Through this strategy, the city hall could better manage the public tender needs

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**Corresponding author:** Paula Rodrigues, Livestock Engineer, Master; research areas: school meals, sustainability, food and agriculture education, and project management. E-mail: paularodrigues@cm-tvedras.pt.

for the municipal kitchens by its lower number, compared to if all the counties' meals were provided in this way.

## 2. Description

After seven years of working and consolidating the school meals management, in 2014 the Sustainable Food School Program gained a body structure, divided into four axes:

1) Production: working on direct contact with the vegetable cultivation processes consistent with agro-ecological techniques, through school gardens and study visits to organic farms managed by the Municipality together with the teachers, school staff and students, also integrating elderly people and parents in some of the 50 schools of the territory;

2) Acquisition: From an environmental perspective, the municipality exclusively purchases high-quality and fresh raw food materials, preferably from local small and medium producers and suppliers and prioritizes bulk deliveries to minimize plastic packaging waste. Emphasizing short agro-food chains reduces the ecological footprint due to geographical proximity. For this to be possible, the Municipality divides the products into lots generating multiple tenders, specific to one of them. This represents lower tenders' values and, though, less will be given to large companies interested in providing raw food materials, representing a promotion of the small and medium suppliers. "Freshness" criteria is one of the "quality criteria" used to evaluate the local suppliers, promoting the local social economy at the territorial level. At the moment 13 lots have been created for each municipal kitchen, which results in the possibility of having 65 different suppliers. In total, the price only reaches between 20 to 30% of the evaluation in the tender, compared with the quality criteria percentage.

Moreover, electric vehicles transport school meals, curbing emissions of polluting gases.

From a nutritional standpoint, the focus is on

procuring fresh, seasonal food (applied in the organic fresh products lots (vegetables and fruits) to ensure healthy, nutrient-rich school menus.

Since 2007, the municipality has fostered collaborations with other councils and NGOs for economic and social purposes. Employment is boosted by transferring municipal responsibilities to entities that partner with NGOs for meals preparation. This is achieved by establishing a contract with the local council authorities, delegating to them the respective competencies for school meal management. The aim is to source from regional agricultural producers and suppliers, which would help to support their businesses and encourage sustainable production practices tailored to school meal provisions.

### 3) Cooking

The menus are carefully prepared with the support of a nutritionist, respecting the nutritional balance, taking into account anthropometric values and favouring local seasonal foods (in the case of the used organic vegetables), traditional dishes or the most appreciated ones in each location, according to the Mediterranean Diet. We can distinguish that:

- Food waste is not considered at the cooking level through the use of technic menus sheets that cover the reduction of food waste in terms of cooking, by preparing specific daily quantities multiplied by the number of students who previously purchased the meal, via electronic booking;
- Drastic reduction of food waste at the production level due to the fact that the sizes of the products were removed from the tender (with the corresponding compensation in terms of the number of pieces, to make up the necessary kilos placed in the order), as well as, in the case of the batch of organic vegetables we are able to absorb "ugly products" with the guaranty of equal nutritional quality;
- Creation of the "Preparation Manual for School Meals" that allows operational assistants (who operate at the level of plating on the distribution line to students) to have assistance through the respective

utensils (made available by the municipality) of the indicated doses for the students' according to their age, reducing the excessive amount available on the plate. There is, of course, the possibility of repetition for students who want to.

4) Consumption and Healthy Eating Habits: parallel programs for the development of healthy food and the promotion of physical activity, for example:

- The EU program “School Fruit, Vegetable and Dairy Scheme” — free distribution of fruit and vegetables to the kindergartens and primary schools (twice a week); once a week the milk distribution (despite the municipality providing the daily distribution) and cheese once a month;

- The “Lunch With Me in My Birthday” set up by the Municipality since 2014 — which consists of inviting families to have lunch at school on their children's birthday, with to raise awareness of healthy eating practices, also allowing them to be able to evaluate and provide suggestions for daily meals through an anonymous survey. This program allows the families to integrate the food theme, approaching the parents to school and their role in food;

- The Food Waste Separation Leftovers — Children can play an active part in sorting out food leftovers, which are then monitored daily basis in order to adapt menus and ensure significant food waste reduction. Sensitize the youngest for the impacts of food waste in natural resources, is another important goal of this action;

- “October — the Food Month” — a dedicated month to food activities with the development of several events related to Food are promoted, focused especially on schools, but with some actions for the population. The Food Month agenda is dynamic, so every year is different.

### 3. Results and Discussion

#### 3.1 Results

Production: Around 3.000 students benefit from the school gardens initiative.

Acquisition: In total, 15 suppliers participated in the tender process (65 lots = 13 lots × 5 municipal kitchens) of 2023 corresponding to a total of 139 proposals in the total lots. Not all suppliers met the specified standards; some showed interest but did not submit proposals, often due to cost considerations.

The percentage of organic food is actually around 30% of the total raw materials but in terms of comparing fruits and vegetables of organic/non-organic, the rate is 50%. This means that between 80 to 100% of the vegetables used for the daily soup are organic.

The budget line is 1.405.000€ for the annual public tenders of the five municipal kitchens and 1.620.000€/year is paid value for the decentralization of the councils public authorities' system.

The financing of the school meals is shared between the corresponding budgets from the municipality and the Ministry of Education. However, according to this Ministry, the families must share the cost of each meal according to their socioeconomic scale: 0.00€/meal; 0.73€/meal or 1.46€/meal.

The average distance from the suppliers' facilities of the fresh products to the municipal kitchens is around 8 km [1].

The municipal kitchens contribute 70% of their raw materials budget to local products [1].

Cooking: Job creation, representing around 80 new jobs at the NGOs level and 40 in the municipal kitchens.

#### Consumption and Healthy Habits:

According to the monitoring data of the 2023/2024 school year of a total of 25 primary schools universe (approximately half the number of the primary schools of the county), we have a 0.05 kg average of food waste at dishes leftovers in the canteens.

#### 3.2 Discussions

For the public tender, the process allows multiple suppliers for the same lot, each offering different prices for food items without exceeding the base value.

Despite the option for a single lot to supply all schools, which would reduce bureaucracy and technical work, the decision was to assign one lot per product category for each of the five kitchens. This approach accommodated smaller suppliers with limited production capacity.

The tender process faced challenges, including the exclusion of potentially good suppliers due to missing mandatory documents or unrectifiable irregularities as stipulated by the Public Procurement Code.

From an environmental perspective, the delivery of food contributes to local emissions. The freshness of products is ensured by prioritizing bulk deliveries and daily shipments.

Organic school gardens represent a commitment on sustainable food education, currently reaching 80% of schools.

Food waste is controlled in terms of cooking through menu technical sheets with specific amounts of raw material to be used per student, according to their age and number of daily meals.

At the nutritional level, the menus reflect seasonal (for organic products) and cultural influences. There has not only been an increase in the number of organic products used but they have also been introduced across all county schools. Educational initiatives targeting both young students and their families have been rolled out, with a spotlight on themes such as “Organic Food”, “Healthy Eating”, “Combating Food Waste”, and the “Mediterranean Diet”.

From a socio-economic standpoint, the emphasis on Agro-Food Short Chains has been improved, boosting purchases from regional producers and suppliers. The initiative has catalysed job creation for the residents of the municipality’s councils.

By contracting the school meals to the NGOs job promotion is also accomplished.

#### 4. Conclusions

Successful implementation hinges on a clear strategic vision and political will, which might entail

higher budgetary allocations for quality school meals to secure political commitment and budgeting.

Public procurement imposes several restrictions that must be studied at the local level to adapt them to the specific needs.

Food production in the territory of Torres Vedras allows the promotion of the short food chains by local producers and/or local suppliers.

When introducing organic vegetables (and fruits), it was necessary to adapt the menus, according to the seasonality of the products and introducing new vegetables that were not previously included. Despite this, the quantity and variety of organic products are not enough in the region (for example, there is a lack of livestock products).

To optimize production plans for farmers, the Municipality has the capacity to provide exact weekly quantities relating to the needs of municipal kitchens. This option of supplying meals according to the Program strategy is more expensive for the municipality compared to the contracting of the service of confection and provision of meals to a collective catering company, which would alienate all entities locations in this economic circuit involving only one catering entity.

By creating financial fluxes in the NGOs, they became less financially dependent on case-by-case support from the public authorities (in this case, from the Municipality).

Constant monitoring is essential to minimize food wastage while educating students, families, and educators on sustainable eating habits ensures that the community is collectively on board to reduce and educate.

Finally, we can risk saying that almost the entire population of Torres Vedras is involved: students and their families, school staff and teachers, local farmers/suppliers, and non-profit organizations and their beneficiaries.

## References

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