

Municipal Territorial Food Project:

an efficient way to transform consumers' food practices

Presentation of the main results from the three impact studies of the Territorial Food Project of Mouans-Sartoux's municipality



Mouans-Sartoux: a municipal «laboratory for innovation» of local food policy

the municipality is providing to children 100 % organics meals in schools and nurseries

Mouans-Sartoux, a town of 10,000 inhabitants in southeastern France, is known for its ambitious school catering project 100 % organic, its municipal farm and its Center for Sustainable Food Education or MEAD (Maison d'Éducation à l'Alimentation Durable) dedicated to putting into action the territorial food strategies.

Responding to the health and environmental concerns in relation to food, the municipality is providing to children 100 % organics meals in schools and nurseries since 2012.

In 2019, middle school children motivated their headmaster, and their canteen also became 100 % organic. Therefore, Mouans-Sartoux is the only municipality en France to provide 100 % organic meals in its structures hosting children from 0 to 15 years.

The 100 % organic canteen has been implemented without additional charge thanks to the reduction of food waste by 80 %.

Noticing the shortage of organic and local vegetables supplies, the municipality has created the first municipal farm in France, which provides directly for school canteens. Haute-Combe is a 6 hectare domain where 3 municipal farmers grow each year 25 tons of seasonal vegetables, but also olive trees for summer salads oil.

Since September 2022, 50% of the meals in the canteens are vegetarian. The reduction of the meat portion in the plates is a way to answer at the threefold objective of reducing the meals carbon footprint, protecting young people's health and controlling the cost of food bought to prepare the meals.

In order to support these initiatives, the Center For Sustainable Food Education or MEAD (Maison d'Education à l'Alimentation Durable - MEAD) was created in 2016. It is an innovative structure that contributes concretely to the territorial food policy. The MEAD acts on 5 pillars:

- 1. Preserve farming lands and encouraging new agricultural settlements
- 2. Settle organic and sustainable food as an economic concern for the territory
- 3. Raising all inhabitants awareness about sustainable food
- 4. Support for innovation and research projects
- 5. Communication and networking with other municipalities, in France and all over the world

Since its creation, the MEAD has led various actions: a producers market, collective vegetable gardens, families for positive eating program, workshops with actors from the private sector...

Territorial Food Project assessment: a necessity

Since the very beginning of its food project, Mouans-Sartoux has committed itself to assess the initiatives driven by the municipality and their impact on the territory and beyond. This process is quite important, as the issues tackled in the municipal food project are part of an innovative field, and quite recent in local public action even if the decision-making and executive organ remains mainly at state level.

In this objective and in order to measure the effects of the Territorial Food Project the MEAD has built several assessment studies supported by researchers and academics. This booklet is introducing the main results from the tree following impact studies:

- Observatory For Sustainable Canteens: started in 2013, this triennial survey aims to measure the effect of the sustainable canteens's project on children and families food behaviour. The last investigation was conducted in 2022.
- 2. Impact assessment « Syalinnov »²: This study, started in 2020 and conducted during 2 years, had the objective of measuring the impact of the actions driven by the MEAD on the territory, since its creation in 2016, during the 5 year-period, in addition to the sustainable canteen's project. The Syalinnov method, inspired by the theory of change, was created specifically to answer the need of the assessment of local food initiatives, and has been tested on several other territories.
- 3. Environmental assessment of the Territorial Food Project of Mouans-Sartoux³: the territorial Food Project of Mouans-Sartoux has been selected to be a field study of a thesis (2021-2023), carried out both by the ADEME (French agency for ecological transition) and the Côte d'Azur University, willing to develop an assessment methodology of the environmental impact based of Territorial Life Cycle Approach. This method looks into all the environmental impacts of a territorial food system (ex. greenhouse gas emissions, land use, water consumption etc.) at each essential step: from the production, processing, distribution, consumption to waste disposal.

^{3.} A.Lulovicova & S.Bouissou, Environmental assessment of local food policies through a territorial life cycle approach, Sustainability 2023, 15(6), 4740



^{1.} Those 3 studies are available here: Alimentation Durable (mouans-sartoux.net)

^{2.} P.Le Ray & A.Ourabah, Rapport d'évaluation: Contributions du PAT de Mouans-Sartoux à la durabilité du système alimentaire, Mai 2023 (available only in French). More information on the Syallinov method here: www.syalinnov.org

School catering:

a efficient tool to help families and children to acquire sustainable food habits

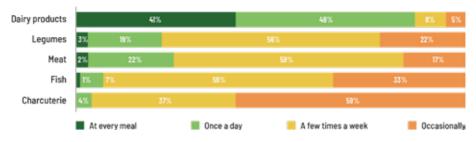
92 % of the families have changed their food habits

The last investigation from the Observatory For Sustainable Canteens driven in 2022 with Mouans-Sartoux families confirms the results seen these last 10 years: the sustainable canteen's project, with homemade meals from 100 % organic products, local, seasonal green and vegetable recipes in addition to the education of children plays an active role in the family's food habits evolution.

Main results are1:

- 92 % of the families have changed their food habits and committed themselves into more sustainable behaviours
- 20% of the families eat 100% organic and 40% say that they eat often organic food
- 66 % of the families say they reduced the food waste
- More than half are buying seasonal products and 46% take into account the origin of the product when they are shopping
- More than 60 % follow the objectives of the National Nutrition & Health Program²
- Illustrated below is the results the families are diversifying their protein sources, like for instance with a balanced consumption of animal and vegetable proteins.

Sources of protein



^{1.} Every 3 years a detailed survey is sent to parents who have a child in one of Mouans-Sartoux elementary schools. 2022 results are based on 172 questionnaires answered, representing 21,5% of the parents living in Mouans-Sartoux. This quantitative approach is combined with a series of qualitative interviews with parents and children from every age range.

^{2.} www.mangerbouger.fr

How the Territorial Food Project is changing

inhabitants food habits

70 % of the people have changed their practice after taking part in activities led by MEAD

Beyond the sustainable school catering project, the municipal Territorial Food Project and its actions, contribute significantly to change inhabitants food habits towards more sustainable behaviours, caring about their health and environment.

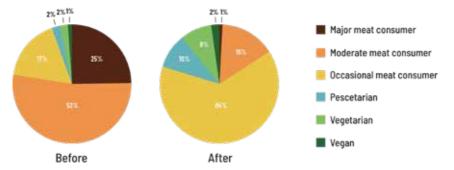
We therefore note that more than 70 % of the people have changed their practice after taking part in activities led by MEAD and that people taking part into Mouans-Sartoux Territorial Food Project's actions are twice or three times more likely to change their food habits than people who aren't.

Those habits changes are in total adequacy with the practices recommended by the NNHP with significant evolution in consumption:



We also observe a sharp decrease of major consumers and moderate consumers of meat (respectively -90 % and -77%) and an increase of 75 % of occasional meat consumers.

Changes in the diets of people who took part in activities led by MEAD over the last 5 years



Inhabitants have also changed their buying habits: 40 % of them are now shopping in organic shops or in shops that sells farmers products directly, 14 % of the interviewed people swapped their car for a bike to go buy their food.

An environmental Territorial Food Project to serve ecological and food transition...

Mouans-Sartoux's inhabitants
who have participated to the MEAD
activities, have reduced by 26 %
their greenhouse gas emissions
in relation to food

The Territorial Food Project of Mouans-Sartoux and its life cycle analysis, shows clearly that local food policy has a substantial positive impact, in terms of environment and biodiversity protection, and climate change mitigation.

Considering the territory specific issues (low level of crop production, organic distribution network and shops historically established etc.), the food habits evolution of the inhabitants towards more sustainable practices, in Mouans-Sartoux, is the main factor that explains the environmental positive effects of the Territorial Food Project.

Indeed, when food represents 1/4 of French people carbon footprint, Mouans-Sartoux's inhabitants who have participated to the MEAD activities, have reduced by 26 % their greenhouse gas emissions in relation to food, and up to 42 % for the most committed inhabitants.

On the contrary, interviewed people who changed their food habits but who haven't participated to any of the MEAD activities, have reduced only by 12 % their greenhouse gas emissions in relation to food.

Thus, Mouans-Sartoux people have adopted more sober diets: the average of the annual food carbon footprint of the municipality's inhabitants is 1,7 teq CO2 per person, in comparison to 2,1 teqCO2 in average per person in France.

The global changes triggered by the local food policy in Mouans-Sartoux during the last 5 years for the 10 000 inhabitants, have generated annual economies in the range of:



20 192 m³

of freshwater, equivalent to the average annual consumption of approx. 400 inhabitants



300 ha

300 hectares of land, equivalent to 20 % of the municipality's territory



3 660 teqC02

the equivalent to the average annual food carbon footprint of 20 % of Mouans-Sartoux's inhabitants

...and local food democracy!



Thanks to the diversity of its actions and of its participants, the Territorial Food Project gives the impulse to build a local food democracy, helping the creation of new partnerships with actors from the territory and beyond, facilitating citizen mobilization and developing new relations of solidarity between inhabitants.

Over the years, the MEAD has built a fertile ground for partnerships, and surrounded itself with a dense network of over 60 institutional, financial, academic and civil partners. This cooperation dynamic runs through different scales: regional, national and international.

 $81\,\%$ of the MEAD activities participants consider themselves associated to the food policy decision-making process at municipal level sustainable food municipal decisions. However, only $23\,\%$ of them state that they actually get involved.

Taking part into MEAD's actions, citizen have created new social relationships:

- 1/4 have made new friendships
- Among them, half estimate that the people encountered have a different profile than the people they usually spend time with.



The results of the three impact studies of Mouans-Sartoux's Territorial Food Project reveal that:

- The sustainable school catering project contributes significantly to change families and children's food habits.
- The territory inhabitants, thanks to the Territorial Food Project actions, have adopted
 more sustainable diets, matching the National Nutrition & Health Program's recommendations. They eat more organic products, fruits and vegetables and reduce the meat in
 their food, diversifying protein sources.
- A part of the inhabitants have changed at the same time their purchase habits, preferring local food shops and soft mobility.
- These new sober food practices are playing an active role in the protection of the environment and in climate change mitigation, reducing the average carbon footprint of the territory's inhabitants.
- The Territorial Food Project gave the impulse to build a local food democracy through new partnerships with local actors, and new bonds of solidarity between inhabitants, with a renewed citizen mobilisation.
- « The three impact studies results show the coherence and the relevance of Mouans-Sartoux's food project, to answer to the ecological and food transition. Those results are encouraging and invite us to pursue and amplify this collective work at territory level and beyond.

Generally speaking, it now sounds unquestionable that the municipal scale is a key element and an essential lever for ambitious public food policy. So yes, a municipal Territorial Food Project, involved in the inhabitants health and the protection of the planet does make a difference! »

Gilles Pérole

Deputy Major in Mouans-Sartoux, in charge of education, childhood and food

More information about Mouans-Sartoux's food project and the Center for Sustainable Food Education (MEAD): www.mouans-sartoux.net mead@mouans-sartoux.net - 04.92.92.47.02













