

CITY FOOD POLICIES



Rennes' food policy:
A local partnership focusing on local farming to reconcile the city with rural areas.

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City	Rennes
Country	France
Population: city area	210.000
Population: metropolitan area	626.000
Surface area (metropolitan area)	67 sq. km
Surface area (Rennes)	52 sq. km
Green areas (metropolitan area)	8,1 sq. km

Rennes Metropole offers a successfully completed example of responsible and coherent urban planning policy, built over 40 years of political and territorial involvement. In particular, it was effective to organize a "win-win" dialogue between farmers and territorial decision makers, and innovative by choosing to implement a new model of urban expansion, the "archipelago city", aiming to preserve functional agricultural territories connected together and surrounding well delimited urban nuclei.

Among the strengths of the food project, there is a deep knowledge and strong sensibility about the local food consumption and the development of direct sales systems. Very interesting is the capacity to use research resources, in particular students, to help to the construction of a strategy for the future of local food systems. Not only it integrates more deeply territorial projects in the core of academic institutions, but it also insures the enlargement of the actual vision to new challenges with the perspective to provide innovative basis for further reflection to elected representative in order to reinforce and integrate the current development policy.

To reinforce high quality local food supply chain, attractive for consumers, still today too marginal, the pioneering PLA could evolve to integrate all the food life cycle, in particular to enlarge the observatory and the various diagnostics to food industry, in particular artisanal food sector, including caterers and restaurants.

Setting the scene for the municipal project

Rennes, 10th largest French city, has developed for more than 30 years a vision of its future development as a metropolis, including neighbouring towns and villages. In the past years, the city has seen the highest demographic growth at national level. The metropolitan area also called "Grand Rennes" (415.000 inhabitants) stretches out around the central city and is separated from the rest of the district by a green belt to preserve rural identity of the suburban towns and villages. Indeed, vast farmlands have been maintained in a fertile area, along with numerous natural sites, notably along the rivers, thus connected with downtown by the mean of public transport and road network compatible with environmentally friendly means such as cycling.

This very dynamic student city (around 60.000 students) and pole of research and technology (agronomy and food industry, electronics, fine chemicals, health and environment) is also a not-to-be-missed tourist destination because of its historical heritage and vivid cultural activities. Agriculture and food industry are the two pillars of primary industry. Car production (today in crisis) has been developed in the past years, as well as telecommunications and IT services.

With respect to the development of agricultural strategy, Rennes metropole is closely tied to an even larger territorial entity called Pays de Rennes and made of 5 different communities members including 140 distinct municipalities.

Pays de Rennes's agriculture is strongly oriented towards dairy cattle farming, but also pig and poultry farming (respectively 20 and 6.7%).

Agricultural prairies, that occupied half of farm lands in the Eighties, have been gradually replaced by crops such as cereals and corn. Hedged farmlands (typical "bocage" landscape) are relatively preserved as an identity of this agricultural territory. Wooded areas are relatively small, except in the area of Pays de Liffré, and large forests are restricted to the mountainous massif of Marches de Bretagne.

Today Rennes metropole agricultural production represents 53% of the total area, including 665 farms (half less than in 2000) and 880 farm head and co-head. Agriculture is an important economic lever all over Pays de Rennes, with 1.400 farms and nearly 10.000 induced jobs, including 3,200 direct agriculture jobs, 3.000 jobs in agro-food companies, 2.000 jobs in services

related to agriculture and 2.000 jobs in agronomy research and teaching.

Between 1999 and 2007, no less than 3.300 hectares were used on the territory, (on average 367 hectares per year), of which 39.5 % for housing, 41,5 % for activities and 18,9 % for community facilities. Such urbanization has taken place on a great extent over farmlands. As it also occurred at national level, the number of farms has dropped off due to farm assembly and enlargement, (- 40 %). As a consequence, the dimensions of farms and livestock have increased, whereas the number of employees (mainly family workers) has been reduced (-36%) and workforce is aging (40% of farmers are more than 50 years old).

The willingness to consider agriculture as a key element of Rennes metropole urban policies has raised 40 years ago from the awareness of serious threats to farmlands: surfaces to be urbanized were appointed without any consultations and agriculture was forced into residual spaces. Land shortage has highlighted the necessity of a comprehensive strategy leading to a local partnership to reconcile the expansion of the city with farming activities.

To go further:

Rennes: Le programme Local de l'Agriculture : <http://www.paysderennes.fr/Le-Programme-Local-de-l.html>

Agenda 21 Rennes Métropole : <http://metropole.rennes.fr/politiques-publiques/elus-institution-citoyennete/l-agenda-21/>

Rennes métropole - Un partenariat local pour concilier Ville et Agriculture. p13-18 in : Atténuer les émissions de gaz à effet de serres du secteur agricole en France. Recueil d'expériences territoriales. Available at: <http://www.rac-f.org/IMG/pdf/AGRO-FICHES1-7-2.pdf>

« Rennes : Les Métamorphoses de la Ville Archipel » Article de Dominique Pialot - juin 2013, Grand reportage. http://www.alliantis.store-factory.com/media/130919_Reportage_Rennes_Ville%20durable.pdf

Observatoire de l'agriculture périurbaine du Pays de Rennes <http://www.rac-f.org/IMG/pdf/AGRO-FICHES1-7-2.pdf>

Starting point and milestones

Building-up governance tools.

Rennes' first Development Plan was introduced in 1974 (Schéma directeur d'Aménagement et d'Urbanisme). Such approach is considered as a pioneer of the French "territorial coherence scheme" so-called SCoT (Schéma de Cohérence Territoriale). Indeed SCoT is a planning document which aim is to ensure consistency between all different policies dealing with urban planning, such as housing, mobility, commercial building and equipment etc. Established by the law SRU (relative to solidarity and urban renewal) in 2000, it was reinforced by the law Grenelle II in 2010, including specifically the necessity to preserve farmlands and forests and to reduce greenhouse gas emissions.

In 1983, this first Development Plan was revised and for the first time clearly focused on polycentric urban development, proposing the preservation of greenbelts, rather than a linear urban sprawling. Indeed, the original feature in Rennes metropole's territorial approach is to consider itself as an "archipelago" city in which urban centres are considered as "islands" surrounded by "oceans" of nature and farmlands, needed to be preserved as much as possible. In such a territorial development scheme urban centres increase their densification and networking rather than concentric linear expansion and thus coexist with natural and agricultural areas.

In 1994, a new revision led to the definition of a landscaping plan, to maintain a balance between urban and rural areas to allow both preservation of local agriculture and urban population growth.

In 2004, Rennes metropole began to draw up its Agenda 21 and signed the Aalborg charter, charter of European cities and towns towards sustainability. Rennes Metropole Agenda 21 includes a strategic plan divided in two main areas: land-use planning and an urban and social programme. It also fosters the involvement of local stakeholders and relies on a sophisticated system of indicators for monitoring and managing the sustainable development strategy.

In 2006, the CODESPAR, local development council (Conseil local de développement)

launched a working group on the future of agriculture in the Pays de Rennes, to prepare the first SCoT document, which was adopted in 2007, giving clear priority to the development of the "archipelago city".

Besides the PLH, Local Housing Plan (programme local d'habitat), which gives guidelines for the needs of Rennes metropole in terms of urbanization, in 2007, a partnership was also established under the name of Local Agricultural Plan (PLA – programme local d'agriculture), between the main territorial authorities : Rennes metropole and pays de Rennes, the chamber of Agriculture, public service body, interface between public authorities and farmers and also the SAFER, French public body in charge of the planning for rural areas. The PLA is a space of exchanges and projects between farmer representatives and elected local authorities, to understand better the challenges and needs for the maintenance and future growth of agriculture in front of urban development of Rennes metropole.

In 2008, the Chamber of Agriculture of Brittany produced a territorial assessment on agriculture and forestry sector's energy consumption and greenhouse gas emissions (ClimAgri®). In 2009, an inventory of all greenhouse gas emissions for the territory of Rennes was made in order to prepare a Territorial Climate Energy Plan (PCET - Plan Climat Energie Territorial), successively adopted in 2010.

The Local Agricultural Plan (PLA).

"Elected representatives and farmers share a common interest to work together on an attractive and favourable frame for the economic viability of agriculture in the territory of "Pays de Rennes". They must design together local policies that enable to consider all dimensions of agriculture in order to warrant a long term visibility." (Extract from PLA, 2008)

PLA's different activities are planned and funded by Rennes metropole and the Chamber of Agriculture, according to the level of involvement of their respective staff. First action has been to provide a comprehensive view of the evolving situation of local agriculture. A 50 pages document (27) was published and presented during a discussion evening in 2011.

It describes the territory, the typology of farms and the work forces, and the typology of productions.

To explain urbanization choices and to gather the views of farmers, in order to help decision-making process in a transparent way, the PLA also led to the creation of a methodology for farm assessment (diagnostic agricole). This work is carried out by Rennes Metropole and the Chamber of Agriculture.

The exchange of agricultural parcels is another issue, to manage the reduction of the number of farmers and the enlargement of agricultural holdings, for two reasons mainly: to reduce induced costs and also inconvenience due to the move of tractors or animals on the roads. The Chamber of Agriculture has published a guide book to inform farmers about several legal win-win possibilities already existing. Several cities are also mapping local farmlands to highlight the possibilities. In 2013-2014, Rennes Metropole co-funded with the Chamber of Agriculture (respectively 80 and 20%), the production of an atlas of agricultural parcels for the whole metropolis.

The PCET: Territorial Climate Energy Plan

Both the city and Rennes metropole have made a [climate energy plan](#), in order to translate the will to reduce Greenhouse Gas (GHG) emissions into concrete actions and commitments. In particular, they focus on the reduction energy consumption of public facilities, but also to bring public policy forward and to mobilize all territorial actors. They are complementary according to the specific competences of both territorial bodies.

At the level of Rennes metropole seven categories of activities have been compared on the basis of their GHG emissions: Industry (9%), Agriculture (11%), Services (17%), Housing (22%), freight transport (11%), people mobility (28%) and waste (2%).

In 2011, the city of Rennes got the [European energy award](#)[®] (label Cit'ergie), for its involvement in city-owned buildings and street lighting energy performances, measures to increase the use of bikes, car-pooling etc. Such label "supports municipalities willing to contribute to sustainable energy policy and urban development through the rational use of energy and increased use of renewable energies"

GHG emissions and agriculture.

As dairy cattle are the main production of Agriculture in Rennes metropole area, the question of GHG emission is tightly linked with local farming. However the metropolis does not interfere bringing forward specific methods of farming, considering it is out of its range of competencies. Indeed all farmers indiscriminately are called to collaborate within the Local Agricultural Plan.

Nevertheless the debate about intensification or extension of bovine milk production is widely open and the ClimAgri assessment is widely used to better understand the impact of beef livestock on GHG emissions. In particular deeper studies have demonstrated that the kind of concentrated food, as well as the genetic diversity of races can influence the methane production, whereas, if intensification allows a diminution of methane locally, where animals are living, it induces a greater level of other GHG emissions due to the production of all other inputs such as specific food, antibiotics, pesticides etc. Among the PLA stakeholders, groups of farmers are actively working to define low inputs milk production systems, environment-friendly and also economically viable ([see more](#)).

Towards a sustainable Food System.

If Rennes Metropole has today widely accepted the idea that a long-lasting urban development is correlated with a long-term survival of local agriculture and has worked for forty years on a model that enable harmoniously spatial distribution between rural and urban spaces according to the concept of archipelago city, its vision still does not embrace with equal intensity of intent the whole food system also including food transformation, logistics, distribution, consumption up to waste management.

Among the five objectives identified by Rennes Metropole in the PCET to reduce structurally GHG emissions, food systems are not clearly mentioned: the effort is mainly made on energy consumption through heating systems and "soft" modes of transport. (1- to mobilize inhabitants and local actors, 2- to improve thermic performances of entire public building stock, 3- to achieve work-saving energy in multiple dwellings, 4- to develop renewable energy based heating systems and networks, 5-to promote

environmental-friendly people mobility.)

Although no overall action plan has been yet designed for the PLA, some of the activities are devoted to implement a more sustainable food supply chain. For instance, to reinforce the link between farmers and citizens is one of such area of work. In 2007, a six month study allowed to assess the potential demand/supply for local food. Since then, several systems have been reinforced or implemented to increase direct selling of local food. They are periodically monitored and evaluated.

- Open-air peri-urban markets. On 20 markets, 13 have been created since 1990. An attention is paid to match the respective sizes of markets and the cities. Also direct selling by producers has been encouraged as well as innovative work schedule, to enable larger attendance from the public.
- Open air market in Rennes. The city welcomes no less than 14 markets. A study has shown that city centre is more attractive to direct selling by producers.
- Sales outlets managed by food producers These innovative systems allow farmers and artisanal food producers to manage shops where they sell their production directly to the consumers. Few selling points opened respectively in 1992 and 2001. There is still room for more projects as the demand is bigger than the offer; however these projects require high level of professionalism. Webshops are also arising in different places, as well as vending machines for raw milk.
- AMAPs (associations supporting small farming), organize weekly distribution of food products (mainly fruits, vegetables, meat and dairies...) remain a pillar of local food distribution with about 20 of such groups (AMAP and similar) in Pays de Rennes in 2012.
- direct selling in the farms. In most of the cases this system induces very local costumers (75%). It has known a recent development (+60% in less than 5 years) and concerns about 8000 clients.

An economic analysis updated in 2009 indicated that such systems still remain marginal within total food consumption (see table 1).

Table 1: Alternative food Systems' economic data in Rennes Metropole

Typology	sales value in millions €	jobs number
Open-air markets	4,5 to 10	110 - 230
Collective selling points	2,7	60
Direct selling in farms	1,2 to 1,6	15 - 30
AMAP (food baskets)	0,5	8
Public Food Service	0,2 to 0,3	5
Other	2,9 to 5	65 - 110
Total	12 to 20	263 - 445

Two main lines of reflection have been identified to reinforce sustainable food systems: 1-to use the lever of public food services, 2- to inquire more deeply on the food self sufficiency of the territory.

The lever of Public Food Service

As appear in the study performed in 2009, public food service is a minority stake compared to other consumers of local food products. In 2011, five workshops were organized to allow exchanges and increase awareness on the possible leverage role of Public Food Service to reinforce Sustainable Food Systems. They focused on the consumption of organic food in public school canteens and allowed to present the results of survey about organic food consumption, but also about the challenges of introducing organic food in the menus, the importance of nutritional and environmental aspects and public food procurement rules. Exchanges and discussions also took place between the staff of canteens, in particular cooks, to face all the constraints raised by the use of organic food to prepare meals in particular according to budget lines and kitchen organisation.

The project "Rennes Villes Vivrière" (Subsistence Food City)

This project (28) consists in an investigative work that was assigned to two successive classes of students from the School of Agronomy of Rennes, specializing in "Sustainable Agriculture and Territorial Development". Three main questions are at the origin of this idea: What are the barriers for local food consumption? How productive can be urban agriculture? How should evolve agriculture in a context of economical/environmental/social crisis?

The objective of the first year of work was to present prospective scenario on food and farm models and to determine the necessary surface to feed the population with local food.

The objective of the second year was to draw up a logistics model and to assess the impact on employment of the different food consumption models.

The study has highlighted the difference of surfaces needed by the population to produce food, by comparing to the actual food production (scénario tendanciel) and consumption model with an "autonomy" scenario (scénario d'autonomie) in which :

- urban agriculture is developed by citizens in their own garden but also by the municipality on urban green spaces and roofs.

- people reduce their calories intakes by replacing a part of meat by vegetable consumption.

The study also produced cartography of Rennes metropole taking into account the following typologies of areas in the horizon 2020: urban highly-dense population (Rennes city), peri-urban area with dense population, rural areas with medium-dense population, rural areas with low-dense population, in order to create a logistics scheme for these different consumption basins. Moreover it also attempted to estimate induced employment, still in reference to both scenarios (tendanciel and autonomie). It also included surveys to evaluate the possibility for the population to shift the consumption model from the actual scenario to the "autonomy" scenario. In conclusion, this study identifies several avenues for future research that seeks to mainstream new environmental and social aspects in the current vision of urban and peri-urban agriculture, including food access to disadvantaged groups, architectural innovation, benchmarking etc.

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