

Food system assessment and inspiring initiatives of Ho Chi Minh City and Lyon (France)

As part of the cooperation between Ho Chi Minh City and the metropoli of Lyon, the Let's Food Cities project analyzes the economic, social and environmental sustainability of HCMC food system and identifies initiatives that have a positive impact on the territory. The results of the assessment will help define the projects that can be implemented locally as part of the cooperation between the two cities to improve the food system sustainability.

#1 - Preserving a gastronomic culture while reducing the environmental impact

Food is an important part of Vietnamese culture. For example, while France counts 4 different tastes, Vietnam counts 5 (sweet, salty, bitter, pungent, sour). The Vietnamese diet, mainly rice-based, presents rich and varied dishes including many vegetables but also fish and meat (especially pork). Food habits are moving towards more frequent meals taken outside home. Vegetarian and vegan food offer is growing in some neighborhoods of Ho Chi Minh City but is still small: nowadays the middle classes still want to eat more meat, sign of higher social class.

Develop a sustainable food offer and communicate on it

Fair Food Forager

Fair Food Forager is a smartphone application that aims to identify the sustainable food offer around you. It is one of the most complete applications. It includes 16 sustainability criteria (organic, vegetarian but also zero waste, fair trade foods, donations, etc.), individual consumers can also suggest new places.

Kashew cheese

This young company makes cashew nuts-based vegan cheeses, a local product from Vietnam. In the face of the increasing consumption of meat in Vietnam, it is important to develop tasty, healthy and sustainable alternatives to meat.

La Holista

The Holista is a sustainable company that offers healthy products and biodegradable packaging. In order to raise the awareness of the inhabitants of Hồ Chi Minh, the company organizes documentary evenings as well as numerous events aiming to bring to the forefront all the small sustainable food companies of the region (The Holistic Fair).

Festitabl', it's close, it's good

Lyon Metropolis, in cooperation with other territories, offers and provides support to events and festivals of its territory to provide local food. An unprecedented festival (Festitabl') made possible to connect local food professionals and event organizers, in the form of a speed dating.

Valorize the gastronomic culture of the region

The City of Gastronomy

In November 2010, the French gastronomic food was registered as a UNESCO Intangible Cultural Heritage. To reinforce this achievement, the French mission for the heritage of food cultures launched a call for projects involving local authorities. In June 2013, Lyon was selected to host one of the 4 International « Cities of Gastronomy » with Tours, Dijon and Paris-Rungis. This unique place aims to convey the vital importance of better food and the pleasure of eating well, the richness of French cuisine.

The Super Hall of Oullins

The Super Hall of Oullins is a producers' cooperative that brings together in one place an organic grocery store and a restaurant-caterer who both foster short circuits, local products and bulk. Oullins is also a place to meet, learn and exchange on issues regarding agriculture, waste management, solidarity economy and ecology. The store offers a range of products from about 50 producers in the Lyonnaise region, 73% of products sold are certified Organic Agriculture, 47% of products sold come from local producers and more than 250 bulk products are available.

Thanks to the economic growth of the country in the last 15 years; Vietnam has significantly reduced food insecurity in rural areas. The increase of income has led to a diversification of food (especially pork and seafood) and the share of rice, which remains important, has reduced in the share of calories taken per day. However, public policies have focused primarily on rural areas and new types of food insecurity are appearing in urban areas because people no longer have the opportunity to produce their own vegetables. Moreover the precarity of jobs in the city means that many inhabitants of HCMC have a low purchasing power. The rise of food prices are directly affecting some vulnerable households who spend up to 75% of their budget on food. New solutions adapted to the urban environment are to be put in place.

Ensuring the food security of urban populations

Public policy for food autonomy

In the late 1980s, the Vietnamese government opened up its economy to the market and redistributed land to the farmers. The farmers now all have small plots of 2 hectares where they are strongly encouraged to grow some rice. This policy has made it possible to ensure the country's food security.

Vietnam Food Bank

The Vietnam Food Bank was created through VTCorp's corporate social and environmental responsibility strategy. The Food Bank is tackling two food issues: food insecurity that particularly affects the elderly and workers from rural areas in Ho Chi Minh City and food waste. In two years of creation, the food bank has distributed more than 20,000 meals. They also organize a food festival to collect food, and also recover surplus from restaurants.

The community gardens of Lyon

A shared garden is a cultivable area, located on public or private land. It is maintained by the inhabitants, for their own benefit, through a management body. There are about 60 in Lyon Metropolis.

Food bank of Rhône Alpes

In 2018, the Food Bank of the Rhône supplies 126 associations throughout the department. And Lyon Metropolis provided over 11 million meals to people in precarious situations.

Les petites cantines

Les Petites Cantines is a canteen network, open to all, whose objective is to develop local links and promote sustainable food through the preparation of a meal. This initiative offers residents and local workers the opportunity to eat together.

Preserve agricultural areas and local know-how and support producers

Beloved Organic Farm

Located in the Mekong Delta, the Beloved Organic Farm was created thanks to the investment of a civil engineer who wanted to feed the children of his wife's school. The production is organic thanks to an integrated farming system that includes fishes: the fishes are fed with restaurant leftovers. Once filtered, the water from the fish farm is used for the garden, providing nitrates. The remaining restaurant waste is feeding the pigs and chickens.

« PENAP/ PSADER », Lyon Metropoli

In France, the « PENAP » areas are areas protected for agricultural and / or natural purposes. They also enable the implementation of rural development projects in order to sustain and boost agricultural activity in these areas through the PSADER-PENAP program (agricultural and rural development strategic project).

Fair trade food sector and CSR: Marou chocolate

Marou is a French company that produces chocolate in an ethical and responsible way by paying the farmers a price well beyond the very low cocoa world price. They also develop an agroforestry project.

Short value chains

"AMAPopote" is a CSA (Community Supported Agriculture) project which creates a partnership between a group of consumers and a local producer to offer to the members baskets of vegetables, bread, eggs, yogurt etc. certified organic. The "Arbralégumes" is a short value chain project that provides local and organic products and connects directly farmers and city dwellers, without intermediary. At the scale of the Auvergne Rhône Alpes region, a hundred shops have been created, including 18 in the Grand Lyon: the producers organized themselves to sell their production directly without intermediary.

The increase in the urban population relative to the rural population requires an increase in productivity, most often based on an increased use of chemicals, which, poorly controlled, affects the quality of food. In addition, longer food processing systems make it difficult to ensure the cold chain. The safety of food appears to be a real problem in Ho Chi Minh City. The inhabitants having suffered several health scandals, they are now particularly suspicious especially with respect to products imported from China. But the main challenge is that of pesticides whose excessive use has a long-term impact on the ecosystems and health of Vietnamese people.

Organik Farm and Shop

Organik Farm is located in Da Lat in an isolated place to produce organic food. It benefits from several organic certifications (United States, Japan, Europe) as well as GAP (Good agriculture practices) VietGap and Global Gap certifications that limit the use of pesticides but are less restrictive than the organic one. More than 25 different vegetables are produced to maintain biodiversity and the ecosystem. The products are marketed in Ho Chi Minh City in their organic shop.

Support Policy to organic farmers

Voted at the end of 2016 by the Rhône-Alpes region, this ambitious plan of more than 13 million euros aims to reach 30% additional farmers producing organic food by 2021. "Manger bio et local c'est l'idéal" is an information campaign aiming at raising awareness on local organic farming, its practices, its marketing channels and its positive contributions to the environment, health and the dynamics of our territories.

The Mekong Orchards

Les Vergers du Mekong is a French company that has been working in Vietnam for the past 20 years. It offers fruit juices and coffee under the brands Le Fruit and Folliet. The company has implemented an exemplary corporate social and environmental responsibility policy (in 2018 they received the first EuroCham Vietnam Sustainability Award.) They provide support to their producers of guava, pineapple or mango in the Mekong Delta, helping them towards more sustainable practices while ensuring good income (despite market price fluctuations). Les Vergers du Mekong is currently developing a phone application to monitor and analyze practices, but also to preserve local know-how (« We Trace » app). 70% of their products are distributed on the Vietnamese market.

ORLAR

Orlar is an Australian company that is developing vertical intensive agriculture technologies to produce healthy and accessible food for the people of Ho Chi Minh City. The technology is based in particular on the use of a rock from Australia which allows a particularly intense exchange of nutrients and minerals but also a great saving of water because it spreads very slowly in the plant. This technology consumes much less energy than hydroponics and allows intensive production in a small space. (on one hectare - 30.000 poles with 20.000 salads on each of them.)

Eco-phyto program

Launched in 2008 following the « Grenelle Environnement, » in France, this plan is led by the Ministry of Agriculture and Food. Since 2008 farmers, researchers, technicians from the Chamber of agriculture have been working on projects to reduce the use of chemicals.

Fresh Studio

Fresh Studio offers consulting expertise on all stages of the food system. The Da Lat Experimental Farm built the Fresh Academy project to train farmers in organic farming practices and help them increase yields while limiting the use of pesticides.

ALiSEA (Agroecology Learning Alliance in South East Asia)

ALiSEA is supported and coordinated at national and regional level by GRET. ALiSEA's goal is to enable local and regional agroecology stakeholders to leverage one another's expertise to produce evidence-based studies and share them broadly to support a regional transition towards agroecology. An innovative regional platform has been created to network all initiatives supporting the agroecology movement.

For example, Nong Trai Ech Op farm, a small-scale integrated organic farm (VAC) of 1.2 ha located in the Mekong Delta, is mainly composed of vegetables beds and fruit trees. Truong Thanh Dat rears chickens and cows while frogs and fish breed freely in the farm. VAC is an acronym formed from the three Vietnamese words Vuon, garden or orchard, Ao, fish pond, and Chuong, pigsty or poultry shed. It refers to a form of domestic agriculture in which food gardening, fish farming and animal husbandry are wholly integrated, and stems from farming methods developed in the Red River delta of Vietnam. The VAC system is a highly intensive method of small scale farming that makes optimal use of land, water and solar energy, achieving high economic efficiency for low capital investment. Plants are used for food, fibre, and fuel, and products are always passed back into the production cycle. Developed from age old production agricultural practices, VAC farming now takes place in many regions of Vietnam, with models varying according to the terrain and the climate.

Lyon branch of Vavilov botanical conservatory

Inaugurated in April 2019 near Lyon by the Russian Vavilov Institute, the largest botanical seed bank in the world aims to reintroduce the production of forgotten vegetables, provide responses to climate change in different regions, study the resilience capacity of cultivated varieties and raise awareness of these issues. Thus nearly a thousand fruit trees will be grown on this farm, which is open to the public, as well as over a hundred varieties of vegetables, cereals, aromatic herbs, some of which are nearly five centuries old.

#4 - Reduce plastic waste associated with food distribution and enhance organic waste by linking urban and rural areas

Vietnam is one of the five countries producing the most plastic waste in the world with 1.8 million tonnes emitted each year. Nylon bags, plastic bottles, straws, etc. are disposable products that do not have the capacity to decompose naturally and yet are very much used within the urban food system (street food, supermarkets, markets, etc.). The municipal recycling system is still poorly organized and does not make a difference between organic and inorganic waste, burning them both. The latter could provide a natural and essential input to regenerate agricultural soils.

Reduce the use of plastic

Wave Ecosolutions - alternative material to plastic

WAVE bags are made out of a bio-based polymer compound that comes from the raw material cassava. WAVE bags are an alternative to regular plastic, as they merely make use of the sustainable natural resources available. The material is strong and durable and is therefore perfectly suitable to replace plastic.

Saigon Zero Waste

Saigon Zero Waste is an NGO that promotes the reduction of the use of plastic and works with food distribution chains (for example Domino's Pizza) or restaurants to support their transition towards more sustainable practices (bamboo straws, etc.).

Recover organic waste by linking urban and rural areas

Distribution of composters by the Metropolis of Lyon

The Metropolis of Lyon accompanies co-owners, neighborhood associations or schools wishing to install a shared composter in the enclosure of their structure. For this, the community provides the composting bins of the composter organizes training for those responsible for the composter, and ensures the proper operation of the composting site for several months.

Reciprocal City-Campaign Contract

Tested in 2016 between the Metropolis of Lyon and the city of Aurillac, this contract is managed by the Commissariat General for Equal Territories (CGET). It aims to overcome the urban-rural divides and increase cooperation by creating a privileged relationship between the two remote territories, establishing, beyond political contacts, technical contacts, identifying cooperation projects that could arise by formalizing a reflection with concrete measures, by developing a study, provided by an engineering assistance.

The territorial food project of Lyon Metropolis

The Metropolis of Lyon has embarked on the development of a metropolitan food strategy to develop its food system towards one that is fairer, more resilient, more sustainable, more inclusive and more respectful of the environment. The first phase which is now being completed is to define the preliminary food strategic framework to identify construction issues related to food with about fifty stakeholders (June 2019). The second phase, which is due to be completed for 2021, aims at developing a metropolitan food project in consultation with the territory.

Recommended projects to improve the sustainability of the Ho Chi Minh City Food System

#1 Put in place a support policy for organic farming to accompany producers in their transition by sharing the risks during the conversion period

Many northern countries (EU Member States and the United States), as well as a few developing countries (including Tunisia), provide financial support to help farmers convert to organic farming. These aids can be very useful for the agricultural economy since the conversion period often corresponds to a drop in yields, since it takes time to restore the full biological activity of the agro-ecosystem. Interventions can take various forms: compensation for losses (foods produced during the conversion period that can not be sold as organic), integration of additional costs (controls) or support for infrastructure development (purchase of equipment or restructuring of rural buildings). Financial assistance may be granted during the conversion period, but also after, in some cases, or in a different format. It usually consists of paying a specific amount per hectare, but also involves tax deductions or preferential conditions for obtaining loans. Direct support can be supplemented by indirect support, such as investment for research, rural extension programs or farmer training, and development of the organic market (awareness campaigns). The higher prices consumers pay for the purchase of organic products are also a form of economic incentive for individual farmers. The aid available to producers is, however, very specific to each country. In order to ensure the safety of all, organic agricultural production must now be intended for local inhabitants and no longer solely for export. It is also necessary to develop the supply of organic seeds and fertilizers in order to stop having to import them, which considerably increases the final price of agricultural products.

#2 Encouraging more demanding and accessible national certification of organic products to producers

National organic standards began to be developed in Vietnam in 2003 by the Ministry of Agriculture and Rural Development according to the international standards set by the International Federation of the Organic Agriculture Movement (IFOAM). Viet Gap certification must be strengthened and training for producers must be made more systematic to promote alternative agricultural practices to pesticides: organic farming, agroecology and integrated systems. For this, certification must be financially accessible.

"Participatory guarantee systems are locally oriented quality assurance systems. They certify the producers on the basis of the active participation of the actors concerned and are built on a basis of trust, networks and exchanges of knowledge." (IFOAM definition, 2008). Participatory Guarantee Systems represent an alternative to third-party certification particularly suited to local and short-term markets. They can also complement third-party certification with a private label providing additional guarantees and transparency. GSPs allow direct participation of producers, consumers and other stakeholders in the selection and development of specifications, the development and implementation of certification procedures, certification decisions.

#3 Encourage producer groups in the form of cooperatives

The Ministry of Agriculture and Rural Development of Vietnam has set up a project to develop 15,000 cooperatives. Today there are very few in Vietnam (rice sector but almost nonexistent for vegetable and fruit producers). Producer groups allow economies of scale in the purchase of equipment or fertilizers and organic seeds as well as a stronger market place for marketing (easier negotiations with buyers, producers' shops, optimized transport, etc.). The cooperative system also facilitates exchanges of experience and the preservation of local know-how. For this it is important to train producers in collective work, tools and methodology to collectively build a strategy.

#4 Set up a consumer communication campaign to encourage the consumption of organic products

The demand for organic products in Vietnam is still very limited especially because of their high cost. The increase in production will have a leverage effect on the democratization of the market but it is already necessary to encourage consumers who can afford to choose to spend more for quality products by sacrificing some less essential consumer goods. An information campaign on the benefits of organic products and signs of recognition (labels, certifications, etc.) can enable consumers to make conscious choices. It is also necessary to develop the organic offer in the most frequent places of purchase: namely the markets of Saigon. Offering an organic offer in schools and hospitals can also be a first action for the HCMV People's Committee.

#5 Organize the collection of organic waste in order to valorize the compost with the producers

Vietnam has been collaborating with the Netherlands for some years and could also draw inspiration from its model of organic waste management at the metropolitan level. In the Netherlands, the Environmental Management Act requires municipalities to establish systems for the selective collection of household kitchen and garden waste, which has stimulated the demand for composting infrastructure since it came into effect. Municipalities often come together to develop the necessary infrastructure for which they are also responsible. Local direct taxation for waste management has been ubiquitous throughout the Netherlands since the end of the 1980s. Municipalities are also in charge of the collection and sensitization of residents including waste prevention and composting training.

In South Korea too, the government requires residents to separate their organic waste under penalty of a fine. This system has been set up in a few major cities of the country, including Seoul and is managed by the municipality. Since 2013, Koreans are taxed each month according to the weight of their organic waste (2 to 3 dollars). Containers have been placed in all the cities in order to deposit the waste there and each inhabitant must identify himself by means of an electronic card which makes it possible to know the weight for each household. South Korea has also banned any waste from producers in 2005. From bio-food waste, biogas is created which allows processing plants to be 90% self-sufficient in energy. In 4 years of implementation, food waste has already reduced by 10% in Seoul.

In Lyon the asso Les Compostiers which is specialized in installing collective composters, has already put 25 in place in the Metropolis. In addition to these composters installed in neighborhoods and in front of certain buildings, they have embarked on the experimentation of another form of urban composting. With Greater Lyon, they equipped 50 volunteer households in the agglomeration with "vermicomposters". They are small apartment composters in which worms transform organic waste into compost. These test homes, which will soon be joined by 50 other volunteers, are being followed for 2 years to study their practices and the problems they face. At the same time, the urban community has set up composters in schools in the agglomeration.

Wholesale markets are also a major source of waste and food waste. Methanation is a positive energy for waste treatment. The French company BioBezeBox proposes urban micromethanisation installations to be installed directly on site.

#6 Prohibit plastic packaging and propose alternatives

The main source of plastic pollution in Vietnam and especially in the Saigon River is the plastic and polystyrene packaging used by food retailers (markets, supermarkets, streetfood, restaurants, etc.). Many countries have already banned single-use plastics in supermarkets (France, Chile, etc.). The European Union has banned a list of disposable plastic products by 2021. The new European directive also encourages the reduction of "at least 25% by 2025" of single-use food packaging for burgers, sandwiches, fruits, vegetables, desserts or ice cream.

#7 Impose sustainability criteria for Vietnamese and foreign companies established in Vietnam

Vietnam and particularly Ho Chi Minh City are particularly attractive and dynamic territories for companies of all sizes. In order to regulate while there is still time their impact on the environment and the local populations, the People's Committee of Ho Chi Minh may require more guarantees on the quality of the services and products offered especially in the agricultural and food fields: decent income offered to producers and employees, sanitary quality of products in order to preserve the health of the inhabitants and the natural resources of Vietnam (no use of pesticides, preservatives, etc.). It can be accompanied by the Chamber of Commerce and Industry France Vietnam or Eurocham which offers training many training to develop corporate social and environmental responsibility and a prize awarded according to established criteria of sustainability. In addition, CCI FV recently inaugurated a platform to link companies and charities to encourage mutual aid and solidarity.