Report
Eating City: Sustainable Food Chain and Collective Catering

International conference, April 23rd –27th 2012
Institute of Public Administration of Guangzhou (Canton), China

Author: Isabelle Lacourt, i.lacourt@risteco.it
# INDEX

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>The participants</td>
<td>4</td>
</tr>
<tr>
<td>Eating City Challenge</td>
<td>5</td>
</tr>
<tr>
<td><em>The lack of sustainability of actual food patterns worldwide?</em></td>
<td>5</td>
</tr>
<tr>
<td><em>The challenge of Eating City and the necessity to design food policies.</em></td>
<td>6</td>
</tr>
<tr>
<td><em>What are the contradictions of food systems faced in Europe?</em></td>
<td>6</td>
</tr>
<tr>
<td><em>The challenge of Eating City in China</em></td>
<td>8</td>
</tr>
<tr>
<td>The presentations</td>
<td>9</td>
</tr>
<tr>
<td>The learning journey</td>
<td>18</td>
</tr>
<tr>
<td>The process of dialogue</td>
<td>20</td>
</tr>
<tr>
<td>Conclusion</td>
<td>24</td>
</tr>
<tr>
<td>The gallery</td>
<td>25</td>
</tr>
</tbody>
</table>
Eating City is a multi-year program of activities, launched in 2010, established by the Consortium Risteco – Terre Citoyenne, co-funded by the CLM Foundation for Human Progress in Paris (FPH), and locally, for each of the different editions, by other public and private institutions.

The aim of the program is to create opportunities of international meeting, to elaborate concrete proposals, useful for public and private decision makers, working upstream and downstream of the food chain, and also for food industry and food service operators and buyers.

The meeting in Guangzhou takes place within a long activity of dialogue, started in 1995, between FPH, RDI (Rural Development Institute) belonging to the Chinese Academy of Social Science, based in Beijing and lately with Risteco which has written part of this collaboration in the publication « *Dialogue China-Europa – les filières et systèmes agroalimentaires* » Le journal de Risteco, volume 2. (Available on: [www.ecomeal.info/documents/journal_chine.pdf](http://www.ecomeal.info/documents/journal_chine.pdf)).

Among the main steps of this process of dialogue: the visits in Shandong in 2006 and 2008, the international conferences in Ningxia in 1999, 2009, 2010, in Beijing in 2010, the workshop organised in Turin within the second edition of China Europe in 2007, the participation of a chinese delegation in Terra Madre event in 2008, in Turin and to the first international conference of Eating City organised in Rome in 2010. Such a long history is certainly a warranty for all the participants to be able to create suitable conditions for a trustful and fruitful dialogue.

In particular, the theme of the meeting Eating city, sustainable food chain and collective catering, is very similar to the meeting «Sustainable Food systems» organized in 2008 in Shandong, (organized with FPH, Sustainable Food Chain and Risteco), however the topic remains very actual.

The dialogue starts from the statements made during the symposium organized 4 years ago, when participants focused on the question of the definition of food sustainability and ended up with the idea that sustainable development means the protection of natural resources, including water resources, air and soil resources, and also food safety, the importance of renewable energy, biodiversity, the concept of OGM free food etc..., raising tracks and thoughts about the relevant measures to be taken in order to promote sustainable development.
<table>
<thead>
<tr>
<th>Prénom Nom</th>
<th>ORGANISATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anestis Anastasious</td>
<td>Consultant, Thessaloniki, Greece</td>
</tr>
<tr>
<td>Jean Baud</td>
<td>Former deputy mayor of Chambery, France</td>
</tr>
<tr>
<td>Baohui Ren</td>
<td>Research Fellow of Ningxia Dep. of Education</td>
</tr>
<tr>
<td>Cuiling Ma</td>
<td>Deputy Dean of Economic Dep. and associate Prof. Gansu IPA</td>
</tr>
<tr>
<td>The Anh Dao</td>
<td>CASRAD, Hanoi, Vietnam</td>
</tr>
<tr>
<td>Gang Cao</td>
<td>ex Deputy Dean and Professor of Gansu School of Administration</td>
</tr>
<tr>
<td>Andrea Ivaldi</td>
<td>Risteco, Turin, Italy</td>
</tr>
<tr>
<td>Huanjun Lin</td>
<td>Deputy Secretary, China Society of Territorial Economists</td>
</tr>
<tr>
<td>Ji Ma</td>
<td>Research Fellow of Ningxia Governmental Research Office</td>
</tr>
<tr>
<td>Niu Jining</td>
<td>Coordinator of cooperation between Ningxia and FPH</td>
</tr>
<tr>
<td>Isabelle Lacourt</td>
<td>Risteco, Novalaise France</td>
</tr>
<tr>
<td>Linping Xie</td>
<td>Dean of Vocational Education College of Guangdong, Institute of Public Administra-</td>
</tr>
<tr>
<td>Chen Long</td>
<td>Professor, Guangdong, IPA</td>
</tr>
<tr>
<td>Maurizio Mariani</td>
<td>Risteco, Novalaise, France</td>
</tr>
<tr>
<td>Nicola Mendito</td>
<td>Villa Montepaldi, University of Florence, Italy</td>
</tr>
<tr>
<td>Sylvie Puissant</td>
<td>City of Paris, France</td>
</tr>
<tr>
<td>Qing Chang</td>
<td>Senior Research Fellow of Ningxia Governmental Research Office</td>
</tr>
<tr>
<td>Sergio Escribano Ruiz</td>
<td>Consultant, Valencia, Spain</td>
</tr>
<tr>
<td>Emily Sandusky</td>
<td>Karp Resource, New York, USA</td>
</tr>
<tr>
<td>Siddhartha</td>
<td>Fireflies, Bangalor, India</td>
</tr>
<tr>
<td>Siyan Jin</td>
<td>Editor of Revue Dialogue Transculturel, Paris, France</td>
</tr>
<tr>
<td>Suizhou Li</td>
<td>Professor, Guangdong, IPA</td>
</tr>
<tr>
<td>Suru Li</td>
<td>Food Nutrition Supervisor of COFCO Food Marketing Co Ltd.</td>
</tr>
<tr>
<td>Pierre Vuarin</td>
<td>Fondation FPH, Paris, France</td>
</tr>
<tr>
<td>Xian Chen</td>
<td>Deputy President of Gansu IPA</td>
</tr>
<tr>
<td>Xiaoshan Zang</td>
<td>ex Director Rural Development Institute - Chinese Academy of Social Sciences</td>
</tr>
</tbody>
</table>
EATING CITY CHALLENGE

1- The lack of sustainability of actual food production patterns worldwide.

According to FAO in The State of Food Insecurity in the World 2012 “progress in reducing hunger during the past 20 years has been better than previously believed”. However such optimism must not overshadow the many evidences that the productivist model of food production that has allowed to get such result is NOT sustainable in a long term perspective, considering the state of natural resources, the increase of food related diseases, or the evolution of demography.

Because our limited understanding of all parameters and interactions ruling food and eco-systems, the various models proposed by researchers for agriculture and food consumption patterns so far do not give a clear clue on the solutions to solve environmental problems whilst ensuring at the same time the necessary level of agriculture productivity. In absence of clear-cut solutions, economy still prevail over environmental aspects. The calculation of economical impacts and the introduction of environmental indicators in food system economics would be a step further to highlight possible solutions or at least to introduce externalities in cost evaluation. But a general method for sustainability metrics recognized by all stakeholders is still missing.

Another range of dramatic evidences derives from epidemiologic data about food related diseases, such as « diabesity », resulting from high fat and sugar contents in occidental style diet. Calories’ intakes are overabundant but diet is lacking the necessary amount of secondary metabolites and there are many evidences that food quality must become our objective rather than food quantity. However, as health depend on so many factors, and once again in absence of clear-cut effect of each single piece of food on health, and since effects result from long term intake and can be affected by many other parameters, decision maker delay necessary decisions in order to look for the right compromise between the freedom of choice of consumers - thus giving space to unhealthy but attractive food - and the necessity to prevent unhealthy eating habits.

Economical activities have evolved during the last decades and short term view financial politics gave rise to spasmodic and sometimes aberrant search of solutions to reduce costs of production; in particular, reduction of labor costs resulted in product standardization. Today we are facing a global situation in which several countries of the old world are less and less competitive at industrial level, and even the food industry undergo the effects of the globalization and relocate its pro-
ductions in countries where labor and energy cost less with negative consequences such as unbalanced employment opportunities and increasing environmental impacts due to the higher number of food miles.

2- The challenge of eating cities and the necessity to design food policies

More than half of the world population lives in urban areas and this trend is still growing up: in 2030 urban population will reach 70% whereas most of the food is produced elsewhere.

Therefore cities eat.

They swallow not only food but also the territory necessary to produce the food. The flows of the food supply chain induced by urban areas are big, of course unavoidable and further intensify negative environmental impacts. Dialogue around sustainability must embrace many aspects, ranging from production, processing, distribution and logistics.

Feeding the cities has always been a political challenge, a true matter of security policy, for instance during wars when food strategy was based on the management of surrounding lands, supply modalities, storage and on the surveillance of food inlet and outlet. In more recent times large market places have been set up and gradually have been in charge of food governance implementation. Even if there are national food policies, in the cities the market is driving the organisation of food supply chains with rather unhappy outcomes.

Despite the complexity of models and the unpredictability of many parameters, including the future consumption patterns of emerging countries, specific urban policies on food are needed to cope with the problems that arise due to the necessary quantities of food, but also the impact of food consumption on environment, health and local economies. It is clear that in the absence of reference scenario, all decisions affecting primary and secondary production sectors, such as agriculture or food industry are extremely difficult to take because affecting global food security.

However the unanimous statement of the unsustainability of actual food production patterns must prevail upon us to act. That's why urban food policies could start from Food Procurement as a leverage for the shift of paradigm. Today the potential of food services to deliver sustainable food is promising. Indeed 40% of calories are consumed out of home and public food service represents in Europe 21 billions of meals served every year for an annual turnover of 77 billion euro. Such an amount of money is relevant but very low if compared to the 954 billions of euro of the annual turnover of the whole European food and beverage industry, especially if we consider that only 1/3 of the public food service turnover is used to buy food.

Therefore, public procurement seems an appropriate economic leverage to give an incisive signal of change and innovation by promoting the emergence of more sustainable food production and consumption patterns without the risk of sudden destabilisation of F&B industry. Despite such evidences, several problems and barriers still must be overcome before implementing an efficient strategy.

3- What are the contradictions of food systems faced in Europe?

*Public Procurement generally based on the lowest price*

There are already guidelines for green procurement. They are clear enough but not well enough disseminated. Not only natural inertia leads public buyers to do the same as they did previous years but the fear of legal problems and the misunderstanding of EU procurement regulations ex-
plain why in most of the cases, tenders are awarded to lowest bidder which cancel any ambitions of bidders (catering companies), to be actively involved in sustainability.

The current GPP rules also must be adapted to food procurement specificities deriving mainly from two main features: food is having strong impact on the health of consumers and it is a natural product and may be deeply influenced by environmental conditions during production and conservation.

Although through EU, many cases show that meal quality can be increased without raising meal price, it is not clear for all decision makers that to fulfil such condition, it is necessary to re-engineer public food service through a time consuming and innovative process. Moreover, innovation is needed in sustainable food procurement through new forms of partnerships between private and public bodies, in order to gradually involve food industry in this process.

**The lack of a sustainable food supply chain that integrates local food.**

The question of local food can be related to the importance of agriculture in all the EU territories. The number of farmers is reducing and without farmers, agriculture will disappear or intensify with dramatic social and environmental consequences in both cases. A tight tissue of farmers can warrant local food sourcing although it is clear than food need to be sourced both locally and globally in the majority of the cases.

The promotion of fresh local food is a way to reduce the intake of highly processed unbalanced food by the consumers.

It is also a way to reconnect consumers with the reality of food production: culture and traditional recipes, generally healthy, but not always, can be used to promote local and seasonal food consumption.

Short supply chain or direct sale by farmers is a way to get fresh products at a fair price for both producer and consumer.

But there are several limits for the development of local food production. The difficulty to find farm-land close to urban and peri-urban areas, the lack of logistics facilities to enable an easy access to the market for small producers and the fact that local products cannot be sourced directly by public procurement. How can we rebuild the bridge between the cities and the campaign?

**The specific problem of meat consumption**

Meat consumption highlights an interesting cross-cut of environmental, health and economical aspects of food sustainability.

Meat production, especially by using intensive methods is creating high negative impacts on environment and many scenarios indicate that there will not be enough land to produce the necessary quantity of meat if the worldwide population decides to raise meat consumption levels to occidental standards.

However nutrition analyses indicate that the level of meat consumption according to occidental standards is responsible for a large part of food-related diseases.

Moreover, to reduce meat content in public food service is a good way to improve meal quality, by replacing part of animal proteins with vegetal proteins, without increasing the budget, as meat, even of poor quality, is expensive.

In the meantime it is worth considering the economical sector of meat production, even looking at the point of view of agricultural land. Not all agricultural areas can be cultivated and cattle can give value to preserve necessary grasslands. Therefore it must be underlined that straightforward negative assumptions about meat production could damage unnecessarily an important agricultural and
food production sector. Quality versus quantity can be the way to rebalance meat production and consumption and common sense leads to put into question intensive husbandry practices.

**Food safety regulations can be counterproductive with sustainable development**

The necessity of food safety rules is to put into question here. However it is one of the constraints today to implement sustainable re-engineering of meals. For instance, food safety regulations can be unnecessarily tight and restrictive for smaller producers. They are also one of the causes for the preoccupying amount of food waste and leftovers.

**The loss of knowledge and culture - food standardization**

The new generations face a lack of a food culture. Most of the time they don’t know where food comes from, they don’t know how to cook. This explains why wrong food diet and habits are rapidly increasing in the population: they are related with sedentary lifestyle and consumption of highly processed, hyper caloric food.

**4- The challenge of Eating City in China**

**A clearer understanding of food sustainability**

Looking at the food chain, farmers’ revenues should be increased, food safety regulations must be implemented and consumers should be in the conditions to expect safe, diversified and nutrient food. In Beijing, the index of happiness is not very high; the population suffers a lot of environmental problems; it is also difficult to trust labels such as green label or organic labels, in particular because of the increasing number of scandals such as the gelatine that it used to make the capsules for the medicines, or the milk powder with melanin.

Food safety accidents in China should not be excessively dramatized. Certainly this is a very serious problem that needs to be faced, getting first a clear awareness of the present situation.

One of the causes of disorders which have been identified is the increasing length and complexity of the food chain. Therefore, decision makers and practitioners agree to take measures to shorten the food chain. One way is to connect directly farmers with supermarkets; it is also possible to use the public food services to serve local food to the students for instance; not only to insure food safety, but also to reduce the cost of the supply chain.

**The difference of development between rural and urban areas**

Over the 5 past years, the price of food products has been increasing: how is it possible to stabilize such price?

China is also experiencing the situation of contrast between urban and rural areas, between excessive, imbalanced diet and insufficient food. In urban areas, people eat a lot of junk food and produce a lot of waste. In rural areas, there is malnutrition. Which measures can take ourselves to overcome such a paradoxical situation?

Public food service can be a suitable approach. For instance, in the Indian schools free meals are served to children; such basic meals cover the needs for the food requirements of young people. Such idea should be taken in consideration by China that has the financial means to do so. In such case, food safety issues must be warranted as well as the necessary financial resources to make the best of such measures targeted to the future generations. New technologies can also be tested to achieve results faster and put in practice at a local level (institutes, agencies, administrations).
The consequences of new consumers habits: the increase of waste production

Developing countries are in great need of effective organizational models. According to statistics, by 2020 the urban population in China will reach 840 to 920 millions people. Food policy issues and in particular, the question of urban food governance raised by the project Eating City have to be taken into account.

The habits of the population are changing, more and more people, especially in cities, take their meal out of home, in fast food and take away. One of the consequence of taking meal out of home is the waste production. No much attention is given to this issue. Some TV programs have shown the tremendous amounts of waste produced in China. According to a survey made in a Chinese Agricultural University, over several universities, college students throw away about one third of the meal, we estimate that such waste, per year are equivalent to the amount of food necessary to feed 10 million people per year.

Another statistic shows that between 2007 and 2008, people wasted the equivalent of 8 million tons of proteins, this amount is equivalent to the protein intake of 260 million of people.

THE PRESENTATIONS

A summary of each presentation is given, in chronological order.


Puissant started her presentation by giving key numbers on the dimension and on the population of “Ile de France” region respect to the whole country and by showing the organization of the city of Paris. Within such an organization, the Urban Ecology Agency is in charge of environmental management. Indeed the city of Paris is committed to reduce its ecological footprint, starting from a diagnosis in order to establish an action plan. All stakeholders are mobilized, ranging from citizens to private and public sectors and NGOs. The Agency is working on several overlapping topics such as biodiversity, Green development (eco activities, sustainable consumption and environmental management), Climate and energy strategy (climate protection plan, energy strategy and renewable energies), Territory mobility and health and environmental impacts (soil pollution, air quality, noise, electromagnetic radiation).

Municipality-managed food service have been identified as one of the major area of action because of food environmental impacts all along the life cycle from agriculture to waste management, including logistics, food transformation, meal preparation and consumption. City canteens serve 29,5 millions meals per year, mainly in primary school canteens (69%) but also in kindergartens, secondary schools, nursing and social centres, child welfare centres and staff restaurants. A plan of action has been voted in 2007 (Paris climate plan) with the objective to serve 20% of organic and local food in city canteens in 2010. Such aim was further reinforced up to 30% of organic, labelled, local and seasonal food in 2009.

To increase offer:

Such an ambitious commitment must overcome several difficulties among which the low level of organic agriculture in the neighboring region Ile de France. Organic food demand grows faster than...
production and most of this local organic production is destined to household consumption. Only cereal production is sufficient to cover the demand of public food service.

Therefore the city of Paris has launched a project of development of organic farming in water catchment area with a positive side effect: to reduce the cost of water depollution caused by high levels of nitrates. Paris water supply system covers a surface of 300 km². The public company that manage water supply in Paris (Eau de Paris) is buying 100 hectares per year and convert agriculture to organic farming (+ 34% between 2009 and 2010), the rest of the land being covered by woods and grasslands. Not all the organic food produced in these areas is used to supply school canteens.

To reduce food environmental impact:

Logistics improvement are currently studied to reduce green house gas emissions. The evaluation of a primary school carbon footprint shows that the highest impacts derives from canteen management. Food carbon footprint is mostly due to farming (84%), independently of organic or conventional farming techniques. However organic production presents advantages such as reduced soil and water pollution, increased biodiversity and also lesser effects on people health. Looking at the specific carbon footprint far all meals ingredients, the city of Paris recommends to reduce meat and cheese consumption, accordingly to nutritional guidelines.

To communicate:

A web platform has been launched to allow buyers to share their experiences, guidelines have been published and training has been set up, as well as a purchaser group. Communication is also used to increase population awareness. Five training centres have been created: the “Maison de l’air” on air noise and pollution, The “Ferme de Paris”, a real farm where children become aware of what is farming and where the food is coming from originally, the “Maison Paris Nature” showing urban biodiversity, the “Maison du jardinage” on urban gardening and the “Maison des Acteurs du Paris Durable”, on territory governance.

In conclusion:

Between 2008 and 2010, the amount of sustainable food served in the canteens managed by the city of Paris has doubled from 7.4% to 14% (up to 25% in kindergartens). Now we are looking to the objective of 30% to be reached in 2014. One of the areas of action concerns waste reduction for instance. This will allow to save costs that can be invested to buy higher quality food. To succeed the city would benefit either from more efficient national policies and also an increasing demand from the population.

Ma Cuiling: A survey report of the Sustainable Development Strategy of Food Supply Chain in Lanzhou City, Gansu Province.

Improving the food supply chain in Lanzhou city.

Intensifying agriculture, farmers working in cooperatives receive technical guidance to improve their production. In 2011, 97% of the production reached suitable standards of quality for consumption (1% above national average), and 98% of the production did not exceeded pesticides threshold (1.6% above national average). However, small farmers adapt to intensified agriculture with great difficulties.

Building a food industry district in the city to gather innovative food companies in one area in Lanzhou. In April 2011 the construction of a staple food production centre was officially launched. A food traceability system has been implemented to increase food safety.
Improving logistics with efficient storage facilities. By the end of 2011 the city was able to store 7000 tons of spring vegetables. This has also contributed to stabilize vegetables prices during the winter. However, today, economical added value is not equally shared between all the actors of the food supply chain: in particular the highest profits are made by food retailers.

**Managing food safety.**

Today the management system of food supply chain is based on the segmentation of the different steps, the categorization of food products and the identification of the bodies in charge of the regulation and the supervision of the different segments. Small shops are becoming a problem as they cannot be easily classified in one of the segment: They often combine food production and consumption: in this case which body will be responsible for their control?

An other issue related to food safety problems concerns the control of industrialised food production. In Lanzhou, there was no case of poisoning with melanine due to locally produced dairy problem but pork meat production was reduced due to the use of clenbuterol by farmers between 1995 and 2005.

**Public Food service in Lanzhou.**

It is well developped but not sufficient. In Lanzhou there are 8540 school canteens from which 70% are small catering units. An inquiry among the users indicated that school meals are considered as a good nutritional complement to the families meals and also that the canteens are well appreciated by the users because of the possibility to socialize.

**Waste management in public food service.** Waste monitoring has indicated an increasing amount of waste in the canteens between 2007 and 2011. In 2007, 208 tons of waste were produced every day and the amount has rose up to 300 tons in 2011. It is the first city in the country to have implemented a recycling system based on anaerobic treatment thank to the investment of the province of Gansu. This project was advertised by mass media at a national level.

**Food procurement:** The authorities are working on two different models: 1 grassroots regulation model with a multi-disciplinary panel including medical experts, food experts and social volunteers 2 electronic regulation model insuring food traceability.

**The challenge of sustainable development.**

- Promote environmental-friendly “green” production processes all along the food chain
- Improve food supply chain (infrastructures for storage, logistics, …)
- Modernize business models and technical approach to promote public canteens.
- Increase awareness on sustainable food systems issues to local authorities, companies and consumers.
- Improve the benefit distribution system.

**The Anh Dao: ‘Short Food Supply Chain and governance: the case of safe vegetables in Hanoi’.**

Dao started his presentation with a picture of peri-urban agriculture around the city of Hanoi. Rural activity has not followed the augmentation of the population that has more than doubled between 2000 and 2008. The production of basic food such as rice, maize and soybean as well as vegetables has been reduced, whereas the production of fruits, flowers and also the livestock has increased. Urban extension mainly damages agriculture because of the increase of pollution and the destruction of irrigation systems for rice and also vegetable production. Two maps were presented to
show the evolution of urbanization in Hanoi, within the last years. Urban areas replace the old green belt that is pushed away 30 to 50 km further. In some areas the agriculture is intensified; rice production is made in the plain in the south of the city, whereas livestock production is the north; it is also diversified to produce high value productions (vegetables, flowers orchards) or livestock, other production like tea and non agricultural activities such as tourism. An other evolution of the food chain concerns the spontaneous wholesale markets restructuring within the last five years in and around the city of Hanoi. In 2011 there are 4 wholesale markets in the city 2 in peri-urban areas. The number of wholesalers has increased as well as the quantity of food (+200%). Logistics is not well developed and in the summertime in particular a big part of the production is coming from the mountains areas of Vietnam or for other countries (China).

Food safety control is very difficult, as food origin is not known for a large part of the production. The government applies a policy for food safety, mainly for pesticides levels in vegetables, using technological transfer programs since 1995, and recently a voluntary certification has been created (VietGAP) but it is too expensive for the small producers. Projects to implement vegetable production areas are still in the papers. Some projects are developed with peri-urban production areas (“from farm to table”), using the VietGAP certification, innovative packaging systems or organic production systems. A network of supermarket is also involved to give the right communication (mostly about the origin of the product) to the consumers. A website has also been created to give information to the consumers. A map presents all certification production areas. As shop are expensive, web-shops are organized. However there is no control on logistics and quality control systems are very expensive.

In conclusion: The current food supply situation in Hanoi highlights the negative effect of urban extension on peri-urban agriculture and the difficulty to insure safe food supply chain (especially in the case of vegetables), because of concrete extension over agricultural zones and pollution increase. There is a spontaneous development of food supply chain to fulfil food demand but without control no suitable logistics infrastructure are developed neither traceability systems especially for food that is imported from far areas.

Big cities need to develop specific food policy in particular to organize food supply based on 3 priorities:

1. a multi-stakeholder approach to integrate local food demand and offer with suitable infrastructures to organize food supply chain
2. affordable systems to ensure and monitor food quality,
3. the development of long term vision to anticipate future needs.

Tan Xuewen: ‘The sustainability aspects of Urban Agro-Food Fair trade markets in China: comparison with the farmers’ markets in Los Angeles, USA’.

This presentation offers an analysis of the different systems of urban wholesale food markets based on long or short supply chains in China. According to urban communities size, the supply system is more or less complex and need to integrate local food supply with food produced in other regions/ countries. Xuewen outlined the agro-food marketing system in Beijing made of one major and 8 smaller wholesale markets. Only 30 to 40% of food is coming from suburban areas. Part of the food is sold in one of the 170 “fair-trade” or direct sale markets of the city. “Fair trade” markets described here are marketplaces to buy fresh products near home. He pointed out direct sale advocacy, to cut out the price of commercial intermediaries sometimes contradictory with the necessity to build up a proper supply chain able to warrant transparency and efficiency.

Besides the shared concern about food safety, consumers want to buy fresh food at a fair price whereas the government must warrant food supply and plan supply/price fluctuations. The question of food direct sale raise few questions.
On which basis fair prices are established? To warrant sufficient revenue to the producers or affordable price to the consumer?

What is the role the added value of the intermediaries?

How can we evaluate social and environmental costs of food supply chain?

Are fair trade markets sustainable?

So-called “Fair-trade” markets, in Beijing, allow consumers to find fresh products at a good price. However, they present food safety risks. They do not exclude middleman, although there is no visibility on such intermediaries. It is also necessary to evaluate accurately the environmental costs (carbon emissions).

To ensure food supply, the government is planning to double the number of wholesale markets, to promote local production, to regulate both food safety and value share, to implement direct connections between farms and supermarkets, between wholesale markets and retailers. It is also promoting actions such as weekend truck markets. Four of these initiatives have been launched in July 2011 by Beijing authorities. They are run by three cooperatives which transport and sell their products. They have met a big success among the population; indeed, from seasonal events they have become annual and they have moved from open space to indoor structures: But they operate with significant subsidies from the government and there is no plan to extend this experiment. These weekend truck markets have been compared with similar farmers markets organised once a week in California (USA) in the city of Santa Monica. Both initiatives are well appreciated by the consumers but rely on some form of subsidies from the local authorities. In both cases, they provide only a part of the food that the consumers must buy to eat, but their potential of development is low as they are taking place in specific areas with no possibility of extension and as the number of farmers is limited. For all these reasons, they do not offer a sustainable economical model to be proposed as an alternative to what was defined as “fair trade” markets. These markets offer fresh food at a good price but it is also the case in supermarkets.

To conclude:

- it must be kept in mind that social and environmental costs of the food systems must not be charged only to food supply chain as they are a direct consequence of growing urbanisation
- the organisation of food supply chain must take into account the diversity of people trading food and also the diversity of Chinese cities population.

Emily Sandusky: ‘The City Food Policy in New York, experiences of Karp Consulting’.

After a brief presentation of the role of “facilitator” by the Karp Ressources, a consultancy company created in 1990 to support business oriented to improve food sustainability, the main topic was the implementation of New York City food policies within the larger context of federal and state policies.

The farm Bill, renewed every 4 years, is the pillar of Federal food policy in the USA which shapes the national food production by orientating agriculture production by determining the budget allocated to social support programs and to farmers subsidies. The 2008 farm bill included a new program, the National School Lunch Act, to allow schools to implement food procurement based on food geographical origin and not only on the lowest price.

The State of New York is also regulating food business with several programs to fund agriculture research (pests, new varieties, …), to spread certification programs (ex organic certification), food territorial marketing (ex NY labelling products), and also to protect farmland with specific taxes reductions on the highest value pieces of land.

Within such wider context, the city of NY has developed its own vision on how food can become the basis to improve local economical development but also environmental and social conditions for the citizens. This vision is presented in a document available on:


Food production
The map of NYC potential sites for urban agriculture is one of the main projects within this policy; it shows how much the vision developed by the city must be integrated and articulated with federal and state policies in order to be efficient. In its farmland protection program, NY State has modified the destination of use of land, protecting the areas to be turned into agriculture and has implemented a database available online to indicate who is in charge of potential public vacant lands, in order to enable communities associations to take in charge their use for urban agriculture production.

Among the other projects, to support local food production, a suitable economical support that must be provided to food processing local business. Indeed running this kind of business in NYC is very expensive and companies tend to move to other areas, and also some guidelines to allow local food public procurement are currently on the process to be developed.

**Food distribution**

The projects aim to increase healthier food consumption and to reduce food waste. For instance food packaging guidelines for tenders are developed. But it must be underline the necessity to integrate public food policies at the different levels, because for instance one of the main public food procurement tender are the NY schools which serve approximately 900,000 meals per day but are managed by federal laws. In this case the city of NY cannot act directly to impose any decision in the schools.

**Creating a dashboard for measurement** : a set of indicators allows to measure food policy efficiency : the number of growers, food manufacturers getting economical support, the number of supermarkets or farmers markets etc.

The Green Card program aims to give equal access to fresh food in all areas of the city. That’s why a special permit has been created, to sell fresh food, especially vegetables, directly in the streets. 1000 permits have been made available and for instance Karp Ressource has developed specific entrepreneurial support for vendors to enable them to get one of these permits.

Li Suru: ‘Enhancing the level of nutrition: social responsibility of Public Canteens’.

Li Suru has recorded her participation to the China Europe Forum and this new possibility to get in touch with international colleagues to share views on sustainable food. She is now working for COFCO, the largest food producing company in China.

Her presentation on Public Canteens’ social responsibility started from the observation of population nutritional intakes and food related diseases trends.

The difference of growth among children due to food intakes shows a difference between rural and urban population. Indeed a national survey has indicated that urban population eats excessive quantities of meat and fat, not enough cereals. The forecast number of Chinese population who may suffer food related disease shows a potential increase of diabetes, obesity and cardiovascular diseases in the next 20 years if nothing is changed.

Both urban and rural population do not have sufficient micronutrients intakes according to the recommendations, as shown in the case of iron, calcium and vitamin A. Moreover the level of these micronutrients intake has not increased between 1992 and 2002, despite the improvement of the economy and of the level of production in the country. The causes of the limitation of micronutrients intake has to be found at different levels:

1. the increase of the offer of highly processed-refined food including junk food by agro-food industry either at home, either out of home (catering)
2. social changes among the population, more attracted by this new, tasty, fashionable food and by the evolution of traditional dining habits according to fast-growing needs in urban areas.

A strong importance is given to the role of micronutrients in a balanced diet to warrant health among the population. It must be understood that it is a major responsibility of the government, not only because of the increase of health budget and costs, but also because a weak health status becomes a threat for national competitiveness. The government has taken art in two major international conferences in 1992 and 1996. Chinese dietary guidelines have been published in 2007.
To improve nutrition it is possible 1) to include nutritional supplements, 2) to improve the diet or 3) to add artificially essential nutrients in the basic food. This third option is cost effective respect to the first option and easier to implement than the second option as a balanced diet is not so attractive for the population.

Indeed micronutrients have been added to salt, rice, orange juice, soya sauce oil, etc. according to food composition and also according to packaging. For instance vitamin A is photosensitive and therefore has been added to oil in plastic non-transparent bottles.

Public canteen can also be used to provide nutritious food to the population, according to the high number of people taking their meals out of home everyday, with the following advantages: a lot of people take regularly their meals in canteen, therefore it is possible to monitor the results.

Li Suizhou: ‘Food Safety and Food governance, with special focus on the application of a Z code technique’.

The food culture in Guangzhou is highly praised and rely on diversified fresh ingredients. Lunch or dinner, are usually made of 3 different dishes including seafood (fishes, shrimps...), meat (pork, chicken, duck...) and vegetables as well as tofu. Soup is always served at the beginning of the meal and rice as a side dish.

Respect to the northern parts of China, the population is more used to eat out of home, in restaurants. As a consequence, food industry and catering is more developed than in other parts of the country. The population of Guangzhou enjoys trying other regional gastronomies, with different tastes. Occidental fast food is also becoming popular: Mac Donald, KFC, pizza hut and recently subway.

Food traceability is one of the main problems faced by Chinese food supply chain. China has solved the problem of food starvation and is now directly confronted with the question of the price regulation and food quality. Food transparency and labelling is a big challenge respect to the needs of:

- Consumers: they have little/no reliable information on the food they buy.
- Food companies: they have to cope with domestic food piracy: fake products invade the market, creating conditions for unfair competitiveness to the detriment of food companies. Unfortunately fines and penalties are too low to be viewed as a deterrent.
- Government. It is not able to manage such a huge market, as the staff is insufficient to control adequately all food companies. Taking the example of a city where 120,000 food companies are registered, only 200 persons belonging to administrative staff are making the controls: indeed 1 person is handling 600 companies.

The presentation has introduced a technology based on a z-code, a two dimensions code bar, that cannot be duplicated and that can be read by a smartphone. Such technique allows a quick control of the products, directly by the consumers. It has been awarded by the provincial government of Guangzhou as a promising technique.

Siddartha: ‘India food governance’.

Today in India, the population is up to 1,2 billions. In 2015, it will exceed the population of China with 1,5 billions of inhabitants, whose 1,2 billions will live in cities. Today urban population in India reaches 30%. A large part of the population lives in poverty. India has the second faster growing economy, just after China, but 500 millions indians lives with less than 1 dollar per day.

During the last 15 years, India has moved from mass starvation to mass hunger. But the future does not look very promising: besides the good economical results, the parameter of climate change is not taken in due consideration. For instance water reserves stored in the glaciers in himalaya mountains are supplying india main rivers (Gange and Bramapoutra): river de-watering would have negative impact on agriculture production. In the context of the planet crisis, a +1°C
Temperature increase will correspond to -10% of agriculture yields. Therefore food security should be considered in a medium-long term context and not only in a short term context.

The prime minister: report 32% of Indian children suffer from malnutrition. 30% of urban children are undernourished. Two important programs have been implemented to feed urban poor population:

1. PDS: public distribution system. 100 millions of Indians benefit this PDS and receive 15 kg of rice or wheat per family and per month. This low quality grain prevents starvation.

2. Midday meals scheme. 120 million children receive a free meal everyday at school. Most of them go to school only for this reason.

The importance of millet about food security in India.

Only 30% of the agricultural land is irrigated. During the sixties the green regulation, promoted the production of rice and wheat in the irrigated areas. Millet was grown on the rest of the unirrigated farmland (70%), and people developed food culture based on its consumption. But government policy did not give subvention to millet and the production went down, despite millet nutritional qualities: such as high level of proteins, fibers respect to rice and wheat.

In the context of climate crisis, millet could represent a valuable alternative to irrigated crops such as rice and wheat. Not only rice and wheat carbon footprints are high and contribute to increase climate change effects, millet does not need pesticides or fertilizers. Therefore emphasis on millet cultivation and consumption would reduce GHG emissions as well as water pollution by fertilisers.

In India, as opposed as many other countries, there are many discussions and debates on climate change effects. Scientists estimate that hundreds of millions of people could die directly from the consequences of climate crisis.

Going back to the initial statement of 70% of urban population in 2050: where the food will come from? Millet can be a pillar of an important adaptation and mitigation strategy.

Slides are showing different aspects.
- Meeting are organised with farmers, tribal woman. Millet culture also has religious relevance for the population.
- Woman are an important target of this campaign: they are dealing with cooking, with children; therefore they are more aware of health problems in the family. In many cases, man become alcoholic in front of economical crisis and the women are managing the family in many cases.
- Millet exhibitions are also organized in cities to increase awareness on the value of millet consumption. In an exhibition a woman is cooking different species of millet. Some restaurants are starting to serve millet dishes.

Other urban food policies issues:
- Urban agriculture, although it is not well developed yet.
- Urban household waste recycling.
- School garden projects. Children participate
- Railway waste land at the side of the railway: the railway employees are cultivating these pieces of land and now there is a debate to cultivate all possible pieces of available urban areas. For instance a slide shows senior citizens cultivating vegetables in a park.

Urban context make worse food related problems. Unlike rural context, land access is impossible for the poorest population to practice subsistence agriculture.

One of the most important problem is clean drinking water. In Bangalor 20% of water is heavily polluted and harmful. Bangalor pumps water from a river, 150km away for its 8 million population. Many of periurban areas earn money to pump underground water to sell it to the population. Bringing it in tankers. NGOs researcher put pressure to become conscious on water supply question, urban security and climate crisis. But unfortunately, political leader are concerned by immediate selfish profits (corruption). The government is only concerned by short term ways of profit.
Ren Baohui: ‘An introduction of the nutrition improvement program for students in Ningxia’.
The province of Ningxia is located in the northwest part of China and is crossed by the yellow river which irrigates the northern part of the province. The southern area is very poor.
It is one of the five provinces with a large community of ethnic minorities. The total area of the province covers 66 thousand square kilometers. There are 6.3 billions of inhabitants. As the economy is improving, teenager health is getting better especially in urban areas. But in rural remote areas, the development levels are different. National programs are implemented for poverty elimination. One of these programs aims to improve student nutrition.
The financial support (16 billion RMB) is provided by the Chinese government. At the national level, 680 districts (26 million students) are involved in such a program. It is a non-profit project: the money is only used to distribute food to students. Staff is paid by the local government. 11 departments of the government are involved in the project: they form multi-disciplinary teams in charge to check the implementation of the project in the different districts.
The province of Ningxia gives a strong importance to this national funded project. It has started in 2010 with the free distribution of boiled eggs to students. In 2011 free lunch pilote project was launched. Free nutritious and safe lunch provided in the school canteens; entirely funded by the Chinese government. Lunch and dinner are provided to student in rural remote areas. Meals include meat (pork, lamb, chicken), vegetables, tofu, prepared according to local traditional recipes. Media are involved at a local level to disseminate the results of the project.

Andrea Ivaldi: ‘The public Food Services in Europe, financial issues during the last 15 years’.
The European food and beverage market is large and represents an annual turnover of 954 billion euro whereas the annual turnover of the total food consumption is about 1350 billion euro. Looking at catering service, the annual turnover of European social food service including Eastern countries is 77.6 billions euro. 21 billion meals are served whose 6 billions meals are contracted to catering companies, the remaining being self-contracted.
Looking at food logistics and waste management are among the two main direct environmental impacts of food services, whereas the life cycle analysis of catering service indicates that food production (in particular, beef livestock) is the largest source of CO2 emissions. To reduce meal environmental impacts it is necessary to reduce animal protein, in particular beef proteins, to use fresh seasonal products, if possible local products.
Food supply chain is an important economical/environmental factor according to the level of complexity and to the number of intermediaries. Short supply chain depends on small distances but also on low number of intermediaries. Logistic efficiency depend on the capacity to carry large quantities of goods, which can be unsuitable for small local producers.
The analysis of waste production indicate 1kg of waste per consumer in a commercial restaurant. In social food service each patient in an hospital produces 0.63kg of waste per day. In company restaurant workers produce on average 0.327kg of waste per meal; For each school meal served, 0.250kg of waste is produced. A European survey made by European commission indicate 13 million tons of food waste are produced every year.
In the last 15 years (from 1996 to 2010), the trend of net profit of food industry has decreased. By contrast wholesaler and distribution companies have increased their profit, whereas the net profit of catering companies is stable. On the same period, the ratio of the annual turnover per worker in food industry has increased in food industry. Indeed food companies have reduced staff cost. The trend of Italian food sector indicates the growing importance of logistics to the detriment to production and transformation sectors, in the organisation of the food supply chain. Financial statement analysis indicated that staff costs and raw material costs have decreased in the last 15 years with negative consequences on employment and food quality.
A change of paradigm. Usually a company takes into account financial, technical and human resources. In the future, human labour must be placed again at the centre of economy; moreover companies must also consider the environmental resources.

Our proposition is the creation of a permanent working group inside the eating city platform, focusing on social food service.

THE LEARNING JOURNEY

A learning journey was organised for the participants. A brief summary is reported.

Guangzhou Agricultural Technology Extension Center.

The presentation of the centre

This research center is a public structure managed and funded by the government: It has been re-organized in 2002. The staff includes about 50 persons. It investigates on new varieties of crops, cultures or animals that can be produced to feed the population. This diversification occurs by testing new wild varieties or varieties imported from other regions or countries such as Australia, Vietnam Taiwan etc.; fruits, flowers, leaves are tested for eventual toxicity, nutritional value as well as suitable techniques of farming and production. If suitable, field tests are performed to demonstrate their potential use to local farmers. The center has also a collection of rare turtles.

There is a quarantine area to control eventual pests and disease, in particular on plants and animals imported from other regions or other countries which are first isolated and checked for the presence of pathogens.

A large part of activity is also devoted to solve technical problems or to develop and disseminate new techniques and new cultures. Although it is not responsible for monitoring environment, it has the role to propose more environmental-friendly farming techniques Therefore it is also involved in the development of the two standards of quality: green food and organic food.

The communication and training is made according to different channels such as an help desk to give technical support to farmers either on the phone, by sms, videos that document farming techniques, farms’ visits. More than 10.000 people are trained every year by the staff of this extension centre.

The questions of the participants

More detailed information was asked about the system of agriculture certifications.

In China, there are three levels: Non-hazardous (basic level), green and organic. Organic food is produced with standards which are the same as international standards (GMO free, no pesticides or synthetic chemicals).

The Green Food standard is specific to China and was developed for the domestic market. It is intermediary between organic and non-hazardous certifications. Limited amount of non-hazardous fertilizers and pesticides are allowed. Originally there were two types A and AA. AA-type green food
certification, very close to international organic standards, has been replaced by organic certification.
There are 73 different green food labelled products and 135 different organic labelled products in Guangzhou area.
Unlike green food certification controlled by a unique green food development center which depend on the ministry of agriculture, organic certification is made by several private bodies that have been approved by the Chinese certification supervising commission in line with IFOAM.
Green food certification follows different steps:
1. The phase of production is controlled by the Ministry of Agriculture, with on-spot inspections on farmers practices, inputs and final products.
2. The food processing is controlled by the Bureau of Quarantine Inspection
3. Food marketing is controlled by the Bureau of Industrial and Commercial Administration.

Before allowed, all pesticides go through a registration system under the responsibility of the Ministry of Agriculture. There are 3 types of tests: the efficiency of the pesticide on pathogens, the side effects on health and the effect on environment (soil, air, water...). International protocols are used, according to the approval of experts' commissions.
In China no edible GMO culture has been allowed yet by the government to be produced for consumption.

A question was asked about the way climate change could affect agriculture in China. The problem is serious. New farming patterns are tested such as circular agriculture, low carbon agriculture.

**Visit of a canteen for students in Guangzhou University**

Catering is managed by the staff of the university, according to HACCP.
6000 meals are served everyday in this canteen. There are several levels of services proposed to the students. There are three floors where 60 different dishes are proposed: fast food at the first floor, self service at the second floor and special dishes at the third floor. Meal prices range from 5 to 6 Yuan per meal. A meal is composed of a bowl of soup, a bowl of rice, and a dish of meat and vegetables.
photographies: Risteco & Sergio Escribano

---

*Eating City: Sustainable Food Chain and Collective Catering* 19/25
1- The centrality of food within the change of paradigm.

The project Eating City gathers people coming from different horizons, regions, countries, continents, to think about the many aspects of sustainable food systems. The participants have highlighted the necessity to create an international network involving as many countries as possible, and to share case studies in order to document feasible actions. However participants have highlighted that to be useful for the decision makers, such local experiments must be analysed within a global perspective, in a long term and systemic vision.

Eating City focuses on the central theme of the sustainability of food supply chain which covers different topics related to food production, transportation, consumption etc. The different presentations have rooted the idea of the transversal nature of food related issues for the society. For instance, according to Italian vision, sustainable urban food policy should integrate all the components of the society and should include several aspects such as food taste, food governance etc.; according to US vision, food policy should involve different factors such as economic opportunities, environmental issues, public health issues etc.
Some participants have regretted that all the issues raised by Eating City are too dispersive to be properly treated. Other have underlined, on the opposite, that even if the thematic is very large, such a meeting gives a deeper inspiration and wider understanding of their own specific research and commitment. A statement was made at the end of the conference on the occurring change of era and on the necessary break away from the traditional models of thought which reflects in our current food related problems: what Eating City calls “the change of paradigm”. In such leap into the unknown it can be very useful to establish a global network of people looking for new solutions.

2- A food policy covering both urban and rural areas.

The participants have underlined that even if the name of the project is Eating City, we need to take into consideration rural areas as well as urban areas. Indeed food issues concern all human societies in a universal manner. They are at the core of the actual environmental crisis that goes beyond the distinction between rural and urban areas as they are closely related to big challenges that such as climate change, shortage of fossil energy, etc. Several presentations have underlined that urban extension occurs to the detriment of farmland either directly by building houses on former agricultural areas, either indirectly because of the increase of pollution or the destruction of necessary infrastructure such as irrigation systems. The policy promoted by the City of Paris shows that it is possible to invert such trend with high investments.

Eating city conference shows how food systems are related to environmental, economical and social questions by raising the question of unsustainable flows of food induced by the increasing urban consumption. Therefore the project highlights the fact that the current pattern of development of globalized food supply chains is 1 - disrupting food-based economies at local level everywhere in the world, 2 - concentrating financial resources in the hands of few players, 3 - generating environmental inefficiencies by increasing road transport and food waste and 4 - generalising the production of standardized and unhealthy food.

Eating City also allows an holistic view on all aspects involved in food production: environmental but also economical aspects, as food production move important financial resources, social aspects such as employment, people health and culture. Participants have underlined how much such a project must involve the joint effort of both government and citizens to implement food governance involving private and public actors, in accordance with the principle of subsidiarity. The food policy implemented by the city of New York gives a good example of it.

Many cases reviewed during the conference have shown how much food policy is closely related to issues such as economy, society, culture, politics ecology. They gave a very vivid image of relationship between the upper class of the society and implementation of the grassroots. To work in the direction of sustainable and reasonable laws we have to make the following efforts : 1- to perfect our laws, taking into account the social mechanisms, 2- to improve market rules regulations, 3- to rethink the patterns of economical development for the society, 4- to leverage the rights / to balance the rights and responsibility of producers and consumers, 5- to give even opportunities to the people, 6- to improve the transparency of information.

The problem of the integration between rural and urban areas about food issues remind several Chinese national policies focussing mainly on the implementation of public services, facilities, infrastructures and incomes to balance the gap between urban and rural areas. EC project highlights that we need to re-think the impact on economy, society, culture and ecology and therefore to enrich our national policies with all these aspects.
3- Exchanges and networking to overcome differences and reach the goal.

The dialogue between all participants has shown that the countries face differently the challenge according to their level of maturity evidenced by the differences between development in rural and urban areas, or by the current food policies and legislations that are applied. The common framework of thought proposed by the project Eating City must integrate the fact that not all the societies cope with the same difficulties, according to their geographical situation and their level of development. Such diversity may occur also inside a single country, such as China, for instance as it was reported by several speakers. In China there is a big difference between rural and urban areas, China is currently a country in transition, where the laws are in a process of improvement, also considering that some of the laws at the moment cannot be fully implemented.

During the discussions, the participants have proposed to collect several case studies in order to demonstrate the feasibility of sustainable food systems occurring at a local level. They have also underlined the necessity to put such pilot actions in a global (environmental, social, cultural, economical) context in order to make them more useful. They also have highlighted the interest in a regional approach reasoned by analogy, by proposing a deeper dialogue between Vietnam and the province of Guangdong, on the basis of similar climate and food production patterns.

4- The role of public food service to implement food policies.

It has been recorded the three different steps or challenges that food management normally goes through, inducing prioritization: 1 - to avoid starvation by producing sufficient quantities, 2 - to regulate the market and the food prices and 3 - to ensure food nutritional quality. The underlying aspect that arose from this was that nutritional aspects and food quality were kind of expensive cost-ineffective solutions reserved to the countries having already suitable infrastructures and food safety rules. But some presentations gave evidences that the very rapid development, especially in the emergent countries is shattering this logic.

- China is dealing with nutritional critical aspects due to the lack of micronutrients related either to food lack (unsufficient food intakes in the poorest areas) and excess (unbalanced occidental diet in the richest provinces). Nutritious and balanced school meals can bring solution to such antagonist issues. In the case of starvation due to poverty, public food service and in particular, the distribution of free school meals is an efficient system to fight children undernutrition. In the case of unbalanced overabundant food habits, school meals, (but also an investment in farmers markets selling fresh tasty food) can be a way to educate and to give the concrete possibility to the citizens to get a better diet.

- India still cope with food starvation in many areas, included poor rural areas and urban areas. Due to the new context of climate change, techniques that seemed successful in the past to solve starvation, mainly based on agriculture intensification, are no more suitable today within because too much water dependant. And the example of crops such as millet, cultivated extensively, bring simultaneously solutions to starvation, economical and nutritional drama thus showing that the 3 steps presented above must not necessarily be treated separately.

To cope with such complex issues and this fragile balance, public catering appears as one feasible way to implement sustainable food policy with very effective social influence, because a large part of the population uses public food services. Moreover, it allows to perform pilot tests about our food policies. It can be readily organized with low cost in the canteen and the effects can be easily measured.
Besides these aspects the public food service also: 1. insures the consumer sovereignty because the consumers can supervise the meal that are served, 2. provides a platform of negotiation to find out a balance between each player, 3. disseminates food education including food supply, food safety etc. to students, farmers citizens etc., 4. improves the transparency of the information of the supply chain

5- Raising the question of food safety.

Several Chinese participants raised the question of food safety management either in groups or in plenary sessions. Indeed China is aware of the complexity of the necessary process of food supply chain modernization, due to the huge dimension of the country of the population size, the uneven pace of development and the strong rural exodus movement towards the larger urban centers, mainly concentrated on the eastern part of the country. It urgently needs to get a proper legislation, some standards and logistics infrastructures and strive to model the systems implemented by the most developed countries. (in fact, China now has almost all the tools and skills needed but faces the difficulty to implement them). By contrast more and more people in occidental countries are criticizing such systems and highlight their weaknesses and negative impacts on food overall quality.

Several presentations have highlighted that urban extension induces the necessity to reinforce the network of food distribution. Usually market places and distribution systems are implemented before a proper system of control. Governments invest (ex Lanzhou, Hanoi) in modern infrastructures and certification systems well adapted for industries but excluding small producers. EU and US have long experience, for instance testing federal laws and strict regulations about food safety, city commitments for food quality in the school canteens, etc. and there is an increasing (still low) effort to revert the collapse of local food producers. Will emergent countries be able to evolve towards efficient food supply chain without condemning small producers to disappear with negative effect on environment, local economies and food quality as it has been observed in many occidental areas?

Food controls are unavoidable and when made at a large scale, the standardization of production processes becomes necessary. And this standardization is highly compatible with the industrialization which simplifies procedures and allows the necessary economical investments. Until environmental and social externalities were not taken into account, the model of development based on industrialization looked more efficient for mass production and cost effective. Consequently it has become a general pattern of governance. Today we have evidences on such externalities but the economy still prevail on environment and social welfare. Until this logic will be unanimously shared by the governments this model of development will remains predominant.

However, with the first scandals related to food poisoning, China is experiencing that controls and standardization of the production do not warrant a fool proof system. There is room for improvement. Therefore food safety management in relation with the implementation of more efficient food supply chain is certainly one of the topics that an international multi-stakeholder thinking platform such as Eating City must treat.

Among the topics related to food safety that have been proposed by the participants:

- Is food a commodity? Can freshness, seasonality, low environmental impacts become criteria able to differentiate and give value to locally produced food?
• How to shorten supply chain (distance, intermediaries, fair trade), in relation with urban agriculture

• Which are the necessary food standards and how to preserve food traditions and culture

• Implementing food traceability and labelling

• Implementing eco-efficient food supply chain with the help of new technologies?

• Regulations and control: how the state can regulate the market, prevent fraud and false labelling

• How to communicate with the consumers?

**CONCLUSION**

Zhang Xiaoshan closed the conference with inspiring words for all participants.

"In conclusion, the conference has been very successful, very meaningful and rewarding. Among the main results: the agreement of building up an international cooperation framework, such an achievement needs the active engagement of all the participants.

For this achievement we must thank professor Xie Linping, our host, and all his team for the great hospitality, wonderful arrangement and all kind of support.

Looking back to the opening ceremony chaired by Mr Chen, he used many times the word we, we, in his sentences, but who are we? We are all the participants, we are all the participants during the past sixteen years thinking, engaging dialogue and exchanging their ideas, we are the people who realized that human beings are facing a crisis but do keep hope and try their best to overcome the difficulties. We are all facing a change of paradigm; in such scenario, China today is engaged in a dynamic process of transition, seizing reforms although with some deep rooted contradictions.

As Charles Dickens wrote, « It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to heaven, we were all going direct the other way. »

In conclusion, I believe we are all going to heaven,

Thank you".