

Position Paper Food & Climate Change



Eating City Focus Group 3
PP FGCC 1

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Introduction

Context

Eating City is an international learning platform which stimulates intellectual social dialogue and aims to foster a long-term vision of public and private decision-makers on the future of sustainable food supply chains worldwide. This position paper discusses our position on the critical connection of our food systems, consumption and production patterns with global patterns of climate change, and urgency to adapt and build resilience of our food systems to face the multitude of climate risks and challenges.

Agricultural practices in production of food is the sector that spans across a wide range of environmental problems. Increasing number of globally validated studies recently emphasize substantial contribution of food systems to climate change.¹ While in popular public opinion the main contribution to carbon footprint or to climate change are energy sources and transportation, few consider the impact of the food they eat. In fact, globally, our food systems account for roughly one quarter of all manmade greenhouse gas emissions². That's roughly the same as the electricity and heat production, and more than the whole transportation sector, and all industrial practices.

Since food production and consumption patterns largely define the impact of food systems on natural resources, sustainable urban diets must be seen as a crucial driver for food system sustainability along all steps of the food chain.

To illustrate the immediate link between climate change and how it already affects our dinner table, we should understand that between 1980 and 2008 our ability to grow critical staple crops that feed the entire world has been significantly affected by the warming we are experiencing.³ Wheat yields dropped 5.5% and maize yields fell 3.8% due to rising temperatures. This means that climate changes poses a serious threat to millions of people around the world, especially the poorest who depend on these staples both as the main source of daily food intake, but also as the primary source of income due to their leading role in production.

Young people are increasingly engaged and aware of the urgent need to balance these unsustainable patterns of consumption and production. Youth are driving the major trends of shifting to plant-based diets and preferring vegetarian or vegan lifestyle choices. In the same time, youth are also increasingly less involved in the production end of the food chain. Eating City sees the juncture of these trends as the critical intervention point for mobilizing public and private stakeholders, especially youth leaders, who seem most willing to make changes. The present and future is already alarmingly affected by climate challenges due to food production and consumption. Governments must work to create a responsible agricultural industry and use public information to develop knowledgeable food consumers. This may take at least a generation to deliver and underlines why the Eating City platform mission is to invest in young professionals who will become the future decision makers within the food system.

¹ <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

² <https://www.annualreviews.org/doi/abs/10.1146/annurev-environ-020411-130608>

³ <http://science.sciencemag.org/content/333/6042/616>

Sustainable diets

It is clear that a sustainable diet is a healthy diet and a healthy diet is a sustainable diet. Short and simplified food chains can deliver fresh food that contains more nutritional quality than processed or fresh food that has been transported over large distances and longer time periods.

This also means that a healthy diet means more than just nutrients. Sustainable diets and eating should tackle sustainability and health in a mutually-beneficial way. Eating City believes that there is an important link between public health and sustainable food, and the role of government in facilitating this important connection. Public servants like mayors have public health responsibility for their citizens, something that healthy food can help with, since many public health expenditures can be linked to health budgets increased by non-communicable, food-related diseases.

Environmentally-friendly food practices can protect local biodiversity, diversify diets, and counter-balance the homogenizing effects of the industrialized food chains, as well as reduce packaging, food losses, and waste.

It is well-known that production of red meat has the highest environmental footprint due to the way livestock is being raised and fed. Feeding the world with red meat takes large reserves of the world's freshwater and leads to biodiversity loss when land is converted into farms.

A major component of the sustainable diet involves shifting to plant-based meals, especially in Western countries. Young people are driving the trend toward plant-based diet, seeking plant proteins, while insects are also increasingly being integrated as an alternative. There are serious challenges of shifting to sustainable diets, as that goal requires high income levels, dietary conditions, cooking skills and people's personal (cultural, religious etc.) relationship to food.

Sustainable gastronomy

Gastronomy has an increasingly important role in driving sustainable food consumption and production patterns. More than ever before, people are favoring eating away from home. Urbanization and increasingly urban lifestyles drive change in diets and increase both diversity and inequality in (urban) food environments. While in some contexts, increased 'out of home' eating trend means more affordable, diverse and balanced eating than cooking from scratch, in the other cases the opposite is true. With urbanization and increasing culture 'out of home' dining culture in cities, HORECa sector is under increased pressure to bring into their service not only food, but a whole culinary experience: high quality ingredients, artisanal craft of preparation, awareness of social and environmental origin of their food produce, and sensitively illustrate cultural identity of respective cuisine.

The trend of increased popularity of gastro-experiences for increasing population worldwide can be seen as an opportunity to explore the sector's ability to introduce products with high attention to interlinkages between products' ecological origins, socio-cultural and nutritional value as well as price. Climate gastro-challenge for those in the industry, and especially chefs, is learning how to purchase, treat, prepare meals which promote plant protein, and contain ingredients that support local eco-systems and climate-friendly production practices.

As the combination of high-end gastronomy and tourism has started to grow, even in developing countries, chefs and cooks maintain their growing popularity as innovative change activists by creating a culture of care in their kitchens and taking action to influence the decisions of policy-makers. Chefs and cooks would benefit from professional development trainings offered in both the public and private sectors. By partnering with producers and waste management, chefs and cooks can more efficiently match demand with supply and minimize food waste in the food supply chain.

Public and social food services

Public food services can be regarded as a powerful ‘lever of communication’ and exemplary catalyser of change that should be in the vanguard of leading both industry and society to a healthier, more equitable and sustainable model apparent in the types of being food purchased and menus served. This can be especially effective in school meals because meals can be a part of food education and equip future generations towards healthier, innovative, resilient, and safe food supplies. Finding schools as a crucial setting for activating change, Eating City has been encouraging school food service to use its menu design to educate and to drive better demand through more sustainable public procurement.

Sustainable menus that are based on short supply chains benefit the regional economy. Caterers are an essential part of this system. In schools and hospitals they can drive the demand for healthier sustainable food through menus. This is vitally important because school food services feed young, agile minds as well as the most vulnerable groups of society where a healthy diet is nothing less than imperative. Procurements that require freshness can be used to support shorter and more resilient supply chains that reflect food produced regionally. By establishing an alliance with the food and beverage industry, shared objectives with food producers and other stakeholders could be established. These shared objectives will lend themselves to a healthier and more sustainable food system. Industry will only respond to this vitally important change if there is a business opportunity to be secured with predictable demand.

Agroecology

Around the world, innovative agro-ecological farmers increasingly challenge the dominant industrial way of farming, combining local and scientific knowledge, putting resilient thinking into practice to feed growing populations and coping with climate change, water scarcity, market volatility and lack of workers’ rights. Many of these agroecological strategies that reduce vulnerabilities to climate impacts are crop diversification, maintaining local genetic diversity, animal integration, organic soil management, and water conservation.

Agroecology refers to the set of agricultural practices and ecological and agronomic sciences to design and steer sustainable agricultural systems. These have to be accompanied through appropriate public policies. Agroecology focuses on localised, multifunctional approaches that meets climate-smart solutions much more than the industrial approach. There is a linkage between agroecology and *4 per 1000* initiative on soil carbon that Eating City is a part of. The

assumption is that increasing 4% per year soil organic carbon stocks throughout the world would make it possible to offset annual global GHG emissions. More carbon in the soil means more organic matter, which in turn means more soil fertility. However, this calculation means stopping deforestation in tropical regions. Although this target is very ambitious and raises scientific questions regarding sustainable increase in soil carbon levels, it has the merit of setting targets and a framework for action in which soils, which are fundamental birthplace for agricultural, and hence, food health, play a crucial role.⁴

One of the biggest clues to meeting climate challenges through food systems is to work with farmers and communities with deep cultural knowledge of their local eco-systems, since those actors work with both forests and soil, the two massive carbon sinks. About 80% of the forests world-wide are clear cut or destroyed to create farmland. Soil locks two to three times as much carbon as there is present in the atmosphere.⁵ If we encourage farmers—especially the majority of small farmers who currently feed the bulk of the world’s population and live in developing countries, we can help restore ecosystem function and build resilient communities by producing crops and livestock in ways that sequester carbon and protect forests. In the last two decades, observation of agriculture performance after extreme weather events like hurricane and droughts reveal that resiliency of farms is closely linked to increased level of biodiversity in production.⁶

Conclusion

Our global food systems are complex, dynamic and widely diverse, producing divergent outcomes in nutrition as well as environmental and climate risks. It is critical that we start to better define entry points where appropriate assessed interventions can take place in order to produce more balanced outcomes. For Eating City, those entry points lie in fostering youth food governance, public food service, multi-stakeholder dialogue that prioritises pragmatic and balanced solutions over promoting highly principled ideologies, agroecological practices, nutrition and gastronomy. Given its multidimensional nature, food systems paradigm shift requires actions through an integrated approach that builds on solid scientific evidence, but also fosters a new type of dialogue between stakeholders of commonly conflicting interests. Initiated by the private sector’s progressive goals, and created on the basis of the participation of young people, Eating City will work on the encouraging new paradigms for climate adaptive food systems through steering multi-stakeholder governance and socially-sensitive (youth) entrepreneurship internationally. For instance; as the African people are most severely affected by climate risk, according to the Climate Change Vulnerability Index for 2015⁷, Eating City attended *The Climate Chance Summit in 2018* in Abidjan, along the Ivory Coast. The Summit focused on broader objectives of structuring sectoral coalitions and setting operational ‘roadmaps’ fitting the context of African Territories for combining development with climate change goals. Organized by Climate Chance, the association

⁴ <https://www.cirad.fr/en/media/documents/publications-et-ressources-doc/perspective/n-47-climate-smart-agriculture-agroecology-and-soil-carbon-towards-winning-combinations.-stephane-saj-emmanuel-torquebiau>

⁵ <https://www.tandfonline.com/doi/pdf/10.4155/cmt.13.77>

⁶ <http://www.fao.org/agroecology/database/detail/en/c/452669/>

⁷ <https://www.maplecroft.com/portfolio/new-analysis/2014/10/29/climate-change-and-lack-food-security-multiply-risks-conflict-and-civil-unrest-32-countries-maplecroft/>

was created to energize and connect international discussions horizontally and vertically across local and global levels.

We emphasize the fact that it is more strategic to create a mindshift between how private and public actors can work on the question of nutrition and the environment. Thus, the Eating City vision challenges the notion of '**business for businesses**' to one of '**business for people**'. As more strategic responses are needed to strengthened those links internationally, Eating City uses Summer Campus to catalyse transforming practices focusing on linking issues of climate change with the food-system, starting from the cities and public services impact-centers for initiating those changes. The aim is to speak with one voice and to mobilize young people regionally and internationally, and also to bring together the various actors to use the platform to create social dialogue and research to implement permanent change.