

In action



Joining forces to shape a resilient,
sustainable, safe & healthy food system!

November 2022

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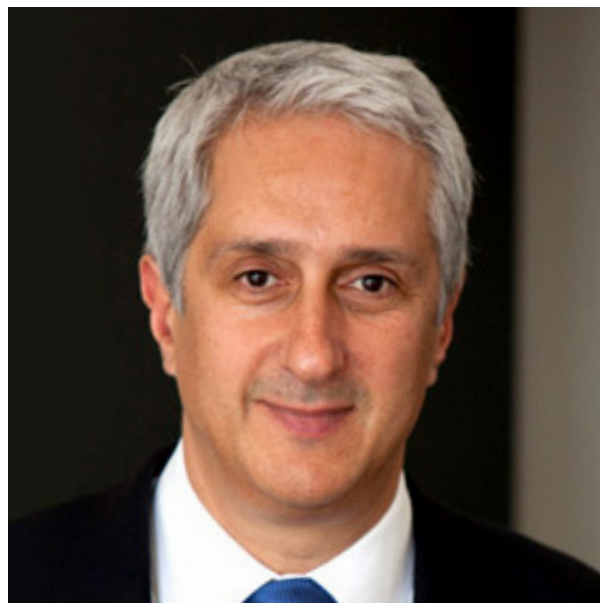
In a foreword

Dear readers,

October was an important month for WUWM, with the organization of our annual conference. I want to thank again to everyone for participating onsite or online in WUWM Abu Dhabi 2022 conference «Global food security in the XXIs: Risks, challenges and solutions to ensure resilient and sustainable fresh food supply chains». I also want to extend again my gratitude to Abu Dhabi Ports and all the UEA authorities that helped to carry out this important event for the first time in the MENA region. More than 500 high level stakeholders participate (wholesale markets CEOs, ministers, UN agency representatives, policy makers, NGOs, food banks, farmers associations, national and local governments, traders, NGOs, universities and startups). The conference took place at a crucial time for our sector, as governments around the world are realizing the need to develop national food security strategies to improve resilience, diversification of food supplies and secure access to food in case of international shocks. There is no doubt that food security will be one of the major challenges of our century.

The actual context of polycrisis is particularly affecting food systems and contributing to increased food insecurity, with 222 million people in 53 countries facing acute food insecurity by the end of 2022. WUWM conference provided a concrete ground to explore solutions to both the conjunctural and structural problems that current food systems are facing. It was a unique opportunity to have an open discussion with a multi-stakeholder approach and expert views about innovations, best practices and pathways to mitigate the risk of food crises, increase resilience and foster sustainability in the fresh food value chain.

This conference was just the beginning of a role that WUWM wants to accomplish, as the federator of actors of our sector. Inside of our markets we have thousands of traders, they work with millions of farmers around the



world, our markets often have public capital (90% of cases) and strong ties with local and national authorities, we supply food to millions of fresh food markets, restaurants, school and public canteens, hotels, amid so many other retailers to go finally to the dishes of citizens around the world. In this sense we are a unique platform where all the fresh food ecosystem meets, we can play therefore the role of supporting links that didn't exist before, and foster innovative cooperations to accelerate the transformation of food systems to climate-positive and resilient sector. This month WUWM will be at COP27 to encourage more cooperation and clear commitments to achieve a rapid transformation into a fresh food sector able to feed the world with healthy, nutritious, accessible and affordable food whilst acting for planetary health.

We are happy to share with our readers exclusive interviews with several key figures of WUWM 2022 Conference, such as Ms Almheiri, UEA Ministry of Climate change.

I truly believe that together we can create a sustainable food architecture from farm to fork by working together boldly and taking concrete steps to ensure better production, better supply chains, and a better environment where everyone, at all times, has access to safe, nutritious, and affordable food for an active and healthy lifestyle!

Thank you again.

Stephane Layani,
WUWM Chairman

In the loop:

WUWM 2022 Abu Dhabi Conference: Acting together to ensure resilient and sustainable food systems

WUWM Conference 2022 was held this past 20th of October in Abu Dhabi, United Emirates Arabs. It was the first time that WUWM annual conference took place in the MENA (Middle East and North Africa region), bringing together over 500 leaders and experts from the broader global fresh food industry.

Meeting under the theme “Global food security in the XXIs: Risks, challenges and solutions to ensure resilient and sustainable fresh food supply chains”, decision makers and field actors from around the world exchanged about major global food security challenges with the goal of identifying solutions to minimize the risk of food crisis and to bring in the longterm efficiency and sustainability into the sector.

As the need to transform food systems is urgent the conference aim was to gather for the first time a large diversity of stakeholders of the fresh food supply chain, from logisticians such as AD Ports, to farmers, scholars and traders, in order to find innovative and systemic pathways to ensure and accelerate food system transition at each step of the fresh food value chain.



Experts engaged engaged in a fruitful exchange of know-hows, points of view, main challenges and good practices to ensure security, sustainability and resilience.

Participants emphasized the need of a coordinated and urgent response to ensure food security at national but also at international level.

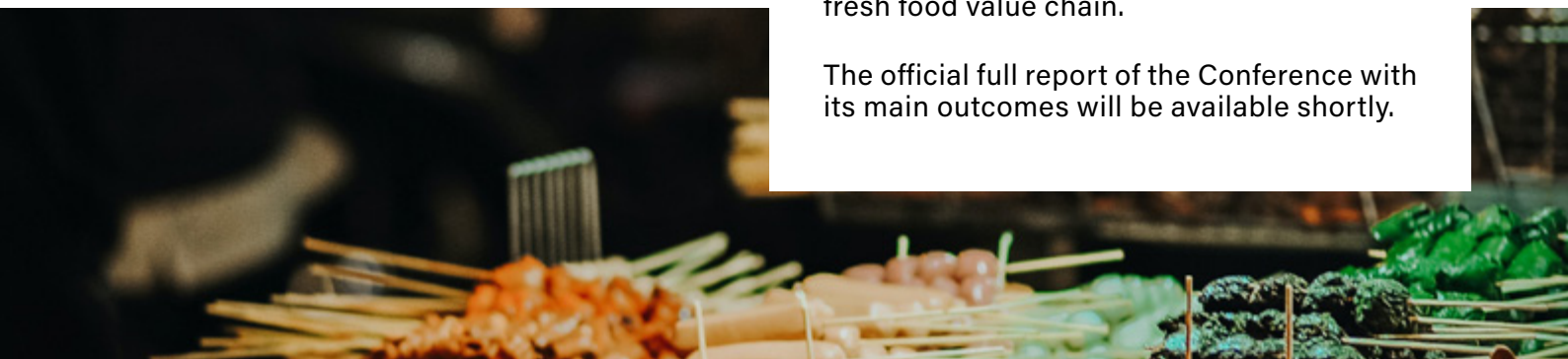
During the morning panels speakers exchanged about the role that the relocalization of food systems can have to build more resilience, the potential of digital technologies to bring bold solutions to ensure food loss and waste reduction, to improve food safety, and to increase logistics efficiency.

The Conference portrayed the UAE's major efforts to increase food security and become a food hub. With the launch of the National Food Security Strategy 2051, the UAE aims to bring the country to the top5 countries of the food security index by ensuring year-round access to safe, nutritious and sufficient food. A key UAE project to ensure food security, both locally and globally, is the Abu Dhabi Food Hub. The site will serve as a logistics and food trading hub within Abu Dhabi's Khalifa Economic Zone and is expected to open in the second quarter of 2024.

“Experts engaged in a fruitful exchange of know-hows, points of view, main challenges and good practices to ensure security, sustainability and resilience.”

The Conference reinforced how a systems approach can help overcome major challenges such as logistics, storage, cold chain, overflows, showing the potential that this multi-actors approach can have to accelerate changes in current practices of the fresh food value chain.

The official full report of the Conference with its main outcomes will be available shortly.



Involved:



WUWM participated in the 8th edition of the MUFPP Global Forum that took place in Rio de Janeiro

The 8th Global Forum of the Milan Pact on Urban Food Policies (MUFPP) was held in Rio de Janeiro from October 17th to 19th under the theme «Food for Climate Justice - How Cities Can Find Solutions through Urban Food Policies». WUWM was invited to participate in the jury of the “Milan Pact Awards” an initiative of the MUFPP to encourage member cities to develop urban food strategies in different priority areas. The official ceremony of the awards took place during the 8th MUFPP Global Forum in Rio de Janeiro.

As 75% of the world population is expected to live in cities by 2050 we believe that cities can play a major role to drive the transformation of our food systems and ensure food security in the forthcoming decades.

“More than 250 cities send their projects showing the growing interest of mayors around the world in promoting and implementing food policies.”

We believe that cities and municipalities are the backbone of food systems transformation towards sustainability and resilience and its implementation, as they take into account local cultures, realities and complexities. The Milano Urban Food Policy Pact has been actively engaged in raising cities’ voices and actions on food agenda, and integrating food-related issues in urban planning agenda since 2015, through the provision of the Pact and its Monitoring Framework, and initiatives such as the Annual Gathering and Mayors Summit, regional forums and the Milano Pact Awards.

Under this framework, collaboration between cities are encouraged and there has been a growing awareness by cities on their role in transforming food systems and the need to better integrate food-related issues within their urban political agendas.

The 8th MUFPP Global Forum aimed to explore how food systems can become one of the most powerful levers for achieving a fair world, and to create a space for city delegates to turn challenges into solutions, for a more prosperous future for all.

The MUFPP developed the “Milan Pact Awards” (MPA) to recognize and highlight the most creative efforts of concrete projects that the network of MUFPP cities are implementing in line with the commitments of the pact.

For this edition, more than 250 city initiatives were sent to the MUFPP Secretariat from April to June 2022, demonstrating the growing interest of mayors around the world in promoting and implementing food policies.

WUWM Secretary General, Eugenia Carrara, was invited to participate in the jury of the Awards for the best practices of cities in the field of «food supply and distribution».

The winner of the Food Supply & Distribution award is Yeosu, located in the south of South Korea for its strategy for securing its talents and small farms.

Considering the impressive number of submissions received this year and the high quality of such contributions, the Evaluation Committee decided to recognize 3 additional Special Mentions for Food Supply & Distribution category : Baltimore (US), Barcelona (Spain) and Lyon (France).

WUWM looks forward to strengthen our collaboration in more concrete projects with the MUFPP and with city mayors.



In facts:

- The UN Food and Agriculture Organization (FAO) defines food security as a state whereby "all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life"
- We produce enough food to feed 10 billion people, but we still fail to feed 768 million people that are living in hunger
- Experts claims that climate change and the high percentage of agricultural land that is extremely degraded are expected to stress even more fresh food production in the decades to come
- Actual food systems waste around 30% of all the food that is being produced.
- Globally, there is an exacerbation in the inequalities of access to secure food, acute food insecurity continues to escalate, reaching up to 222 million people in 53 countries/territories in mid-2022.
- It is estimated that the livelihoods of about more than half of the world population (4.5 billion) people globally are tied to food systems.

"It is estimated that the livelihoods of about more than half of the world population (4.5 billion people) globally are tied to food systems."





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Interview

Mariam bint Mohammed Saeed Hareb Almheiri, Minister of Climate Change and Environment in the United Arab Emirates

We are pleased to share with our readers an exclusive interview with the Minister of Climate Change and Environment of the UAE, Mariam bint Mohammed Saeed Hareb Almheiri. Ms Almheiri was one of the key figures of WUWM 2022 Conference, she is also the one that developed the UEA national food security strategy. Ms Almheiri is also in charge of hosting the COP28 Conference in Dubai next year. We are glad to share with our readers her insights about food systems transformation and why food matters in the climate change mitigation agenda.

The UAE has an ambitious food security plan for 2050 that was adopted under your proposal and supervision. Could you share with our readers what led the UAE to establish this plan? And what are the main objectives of this plan?

As our population continues to expand exponentially, having increased from about 300,000 in 1971, when the UAE was established, to more than 9.5 million today, our food demand is rising correspondingly.

To provide an uninterrupted supply of sufficient, safe, healthy, and nutritious food at affordable prices for all our citizens and residents at all times, we have developed a bold vision that aims to transform our country into a world-leading hub in innovation-driven food security – the National Food Security Strategy.

The integrated framework has set a strong foundation to enable us to develop resilient, innovative, and adaptive food systems.

The Strategy aims to implement climate-resilient agricultural practices that increase production while helping maintain healthy ecosystems. It also aspires to elevate the UAE's ranking in the Global Food Security Index (GFSI) to number one by 2051. This year, we marked a 12-point jump to the 23rd place worldwide and first in the MENA region, confirming that we are on the right path.

The Strategy has several streams, including facilitating global agribusiness trade and diversifying food sources while enhancing sustainable, technology-driven domestic food production across the value chain. It pays great attention to sustainable, healthy, and circular practices, which is why we are focusing on reducing food loss and waste, maintaining food safety, and strengthening the resilience of our food systems to potential food security risks.

To implement the National Food Security Strategy, we established the Emirates Food Security Council that brings together all key stakeholders to build a new frontier in food security for our nation. The Council is supported by an Advisory Committee that works on validating outputs and providing expert advice on areas related to food security. Meanwhile, the Ministry of Climate Change and Environment (MOCCA) monitors the alignment of the KPIs and initiatives of the member organizations with the Strategy. The Council played an integral role in ensuring an uninterrupted food supply across the UAE during the COVID-19 pandemic.

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To achieve the goals of the Strategy, we have introduced several short- and long-term initiatives and programs, such as the Nutritional Labelling Policy, which uses a traffic light system to provide consumers with comprehensive information on ingredients and nutritional content that enables them to make healthy choices when shopping for food. The Policy aims to improve public health and raise community awareness by encouraging people to adopt a healthy lifestyle.

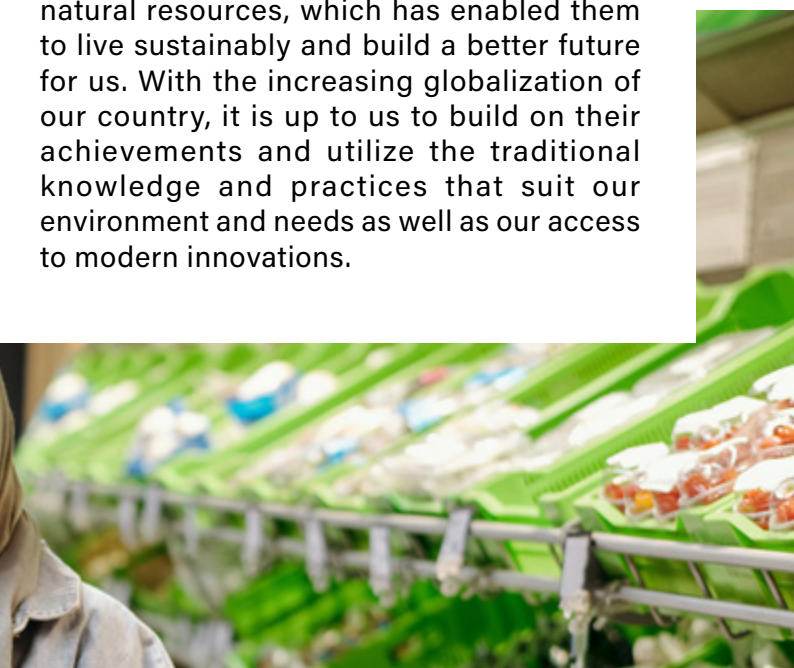
“We have developed a bold vision that aims to transform our country into a world-leading hub in innovation-driven food security.”

In addition, we have adopted the National Nutrition Guidelines as a unified reference on food and nutrition education, specifically developed to suit the people, environment, and culture of the UAE. Developed as a collaborative effort between the World Health Organization (WHO), the Gulf Nutrition Committee, and UAE government entities, the Guidelines seek to improve the status of nutrition in the UAE for a more sustainable and healthier future.

We are also monitoring food imports to follow the movement of the goods within the various components of the supply chain, and supporting local farmers by connecting them to retailers and providing them with government supply contracts.

What are the main challenges to ensure food security in the UAE and in the Gulf region? And what are you doing in order to overcome them?

Our country is located in a desert region with some of the highest temperatures in the world, and this poses severe challenges to our agricultural sector – from water scarcity to limited arable land. Our forefathers managed these limitations through a responsible use of natural resources, which has enabled them to live sustainably and build a better future for us. With the increasing globalization of our country, it is up to us to build on their achievements and utilize the traditional knowledge and practices that suit our environment and needs as well as our access to modern innovations.





And that's why today, we are turning to state-of-the-art technologies and innovative cultivation methods to boost local agricultural production while enhancing the quality and variety of homegrown produce. We are exploring controlled-environment agriculture (CEA), such as vertical and hydroponic farming and smart greenhouses. Maximizing yields, optimizing resource use, and reducing emissions, these solutions help us address the critical water-food-energy nexus.

In addition, we are investing heavily in R&D in the agrifood sector. We are working on establishing a network of research centers, developing the capacities of our laboratories, and building synergies between the public and private sectors as well as with international academic and research institutions.

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Our research in the agricultural field covers several areas. Examples include exploring the impact of climate change on local agricultural production, and developing crop varieties that can adapt to local climatic conditions, such as crops resistant to drought, salinity, and heat.

We are also committed to minimizing food loss and waste, which are among the most serious challenges to our food security, through the National Food Loss and Waste Initiative (Ne'ma). Viewing food security as a holistic ecosystem, it aims to bring together all stakeholders to achieve Target 12.3 of Sustainable Development Goal (SDG) 12: Responsible Consumption and Production to reduce food loss and waste by 50% by 2030.

We believe that the best way to address this challenge is adopting a collaborative approach across all sectors. That's why we have gathered perspectives on ways to tackle food loss and waste from the government, private sector, non-profit organizations, and the public.

Through Ne'ma, we hope to inspire our community to see food as a blessing, drive home the importance of adopting sustainable food behaviors, and build a new social norm of responsible consumption.

What is the role that innovation could play in food systems transformation? And what is the UAE doing in order to foster innovation in the food sector?

In line with the UAE's vision for developing a diversified, knowledge-based economy, innovation plays an instrumental role in building sustainable and climate-resilient food systems.

Our government is committed to driving innovation in agriculture. In 2019, the Abu Dhabi Investment Office (ADIO) introduced a program to develop agricultural technologies, valued at US\$272 million. Since then, it has established partnerships with seven AgTech companies, aimed at building research and development facilities and production centers. And earlier this year, MOCCA signed an MOU with Emirates Development Bank (EDB) to offer financing solutions to modern agricultural start-ups and SMEs.

Our private sector is also leading the way in developing innovative solutions and deploying cutting-edge AgTech while setting new benchmarks for resource efficiency. Thanks to the visionary work of our companies, we are now growing strawberries, kale, quinoa, and other produce that nobody would have imagined could thrive in the middle of the desert.

An important area of AgTech that is relevant to our region is vertical farming, as it provides an ideal solution to the challenges the UAE faces. This method uses considerably less water, and has a much smaller carbon footprint than traditional farming.

In this context, Badia Farms opened the region's first urban commercial vertical indoor farm in Dubai in 2018. In 2020, the company launched a large-scale high-tech vertical farm in Dubai Industrial City with a capacity to produce 3,500 kg of fruits and vegetables per year.

And just recently, we inaugurated Bustanica, the largest vertical farm in the world, as a joint venture between Emirates Flight Catering and US-based Crop One at the cost of US\$40 million. The facility spans 330,000 sq ft but has a production output equivalent to 1,000 acres of farmland at 3,000 kg per day, using 95% less water than outdoor fields due to a circular water system.

The UAE is actively seeking to become a premier exporter of climate-smart AgTech solutions. With that objective in mind, we are building the Food Tech Valley, a state-of-the-art AgTech hub in Dubai that will provide researchers, entrepreneurs, startups, and industry experts with all the facilities they need to develop innovative, clean tech-based agricultural products and solutions that can revolutionize the food industry and advance our transition to climate-resilient, sustainable food systems.

“Food security concerns us all, and we can only harness the full potential of innovation to tackle relevant challenges if we collaborate towards a shared vision.”

We have also launched the FoodTech Challenge, a unique competition that seeks to leverage the next wave of technology innovations to redefine food production and agricultural practices efficiently and sustainably.

We are keen to share our experience and expertise with other countries so that we can work together to achieve SDG 2: Zero Hunger. Our ultimate goal is to disrupt our food systems to be able to grow anything anywhere regardless of climate and environment.

You will host the 28th session of the Conference of the Parties (COP28). Knowing that the food sector is responsible for around 20% of the emissions, which place are you going to give to this subject? What are the engagements that you are aiming to reach? What message do you want to send to the world?

Food systems as a whole actually contribute over one-third of global human-generated greenhouse gas (GHG) emissions. Meanwhile, climate change is disrupting food supply, food availability, livelihoods, and human health, and rapidly upending the landscape for smallholder agriculture.

These interlinked challenges require us to think about how we can sustainably increase food production, adapt and build resilience to climate change, and decarbonize our food systems.





And that's why as the host of COP28 in 2023, the UAE intends to make this topic one of the priorities of the upcoming event. We seek to bring agriculture and food systems into the spotlight, and give greater visibility to much-needed climate innovation in this space. We recognize that food systems are a major part of the climate problem, but they can also be the solution.

In your opinion, which stakeholders should be mobilized in order to reduce food insecurity around the world whilst enhancing the transformation of food systems into sustainability? How can we foster these alliances?

To achieve our food security objectives and eliminate world hunger, we must engage the full spectrum of food systems stakeholders – from farmers, food producers, wholesalers, and retailers to governments, municipalities, non-profits, educational institutions, research centers, and tech and F&B companies. And we must not forget about consumers, who are the key players in transforming our current food systems into more sustainable and resilient ones through adopting responsible consumption patterns.

A prime example of a multilateral initiative in this space is the Agriculture Innovation Mission for Climate (AIM for Climate) that the UAE launched jointly with the US last year at COP26 to boost and accelerate global investments in agricultural R&D and innovation.

Our current target is to increase collective investment in climate-smart agricultural systems to US\$8 billion by the time we convene at COP27 in Sharm El Sheikh in November. And once we get there, we look forward to setting new milestones for ourselves for COP28.

Our diverse coalition of support includes more than 200 government and non-government partners from around the world, so we have an opportunity to draw on each other's unique knowledge, experience, and culture.

Other relevant global groupings include the Food Action Alliance (FAA), the Food and Land Use Coalition (FOLU), the Global Alliance for Food Security (GAFS), and the School Meals Coalition (SMC) that the UAE recently joined.

Food security concerns us all, and we can only harness the full potential of innovation to tackle relevant challenges if we collaborate towards a shared vision.



Interview

with Simon Bussy and Pierre Levy, co-founders of Califrais

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We are thrilled to share with our readers an interview with two of our panelist during WUWM 2022 Conference: Simon Bussy and Pierre Levy, co-founders of Califrais, an AI Start up to simplify the supply of fresh produce for wholesale markets.

Can you briefly introduce your company's work to your readers?

Califrais is the startup that reinvents the food supply chain thanks to Artificial Intelligence (AI). We are in charge of the brand new e-commerce site for Rungis Market wholesalers, called rungismarket.com. The service is aimed at all food professionals in France who want to simplify their supply of fresh produce while saving money: restaurant owners, of course, but also caterers, greengrocers, all types of retailers, and supermarkets and hypermarkets for example.

Califrais

“Califrais is the startup that reinvents the food supply chain thanks to Artificial Intelligence (AI).”

This is a very innovative service for several reasons:

- the Rungis wholesalers have joined forces in an unprecedented way to create a very complete (over 8,000 products in 120 categories) and detailed catalog, which is updated in real time directly by them,

- customers can place an order for all the products they want very simply on rungismarket.com: this is a unique digital gateway to the market offering access to the wealth of Rungis,

- the customer then receives a single delivery containing all his products, as well as a single invoice,

- and all this with a very high level of reliability, ultra competitive prices (which are of course adapted according to customer volumes), and in record time since we take orders until midnight and deliver from 6am in Paris and its surroundings, and a few hours more for the rest of France.

You have been working with wholesalers for 8 years. Was it easy? How have wholesalers responded to your services? What are the main «pain points» for wholesalers today to be able to take full advantage of digitalization?

We have built our business through regular contact with the Rungis wholesalers who have seen us grow over the past 8 years and who have always supported us. We have custom-designed all our tools and operational processes to meet their specific needs and operating conditions. The proposed digitization requires a small investment in time and resources from them at the start, to be trained in the technological tools in particular, but it is well worth the trouble! With the rungismarket.com service, the entire European market is open to wholesalers thanks to the STEF group, a partner in the project and in charge of delivery from Rungis.

How do you think Califrais can improve the supply chain? What is your expectation of impact in the years to come?

The technological innovations of rungismarket.com are created within the LabCom LOPF (Large-scale Optimization of Product Flows): an R&D laboratory that brings together Califrais and the LPSM, one of the largest applied mathematics laboratories in the world with 200 members, and prestigious academic supervisors such as the CNRS, Sorbonne University and Université Paris Cité.

The innovative tools designed are based on AI algorithms that enable wholesalers to better control their flows, for example, thanks to access to demand forecasts, or intelligent recommendations on the best storage strategies for perishable products.

These algorithms model all the constraints of the problem: delivery times, use-by dates for perishable products, demand stochasticity, available storage volumes in warehouses, all while considering a very large number of products simultaneously. One of the main objectives of this technology is to optimize massive flows, in order to have the right products at the right time to satisfy customer needs, and reduce food waste. The food donations made possible could then reach 10,000 tons annually by 2024. Lastly, the pooling of logistics and transport, especially with fleets of electric or natural gas-powered trucks, will considerably reduce traffic from Rungis, with an estimated saving of 30,000 tons of CO2 by 2024.

Califrais operates the digital marketplace rungismarket.com. Do you think it will radically transform the sector?

The new rungismarket.com service has already made more than 10,000 deliveries throughout France in just 6 months. The activity is accelerating rapidly with a hyper-growth that is taking hold. And for a good reason: the service is very innovative, with



prices that defy all competition. Customers are naturally flocking in, and more and more outside national borders. The ambition is to guarantee an outstanding quality of service while maintaining very strong growth, to contribute to the economic development of Rungis and its wholesalers, and to transform the B2B food supply chain sector with better control of these massive flows and a significant reduction in food waste.

How can innovation help make the agri-food value chain more sustainable and efficient?

We believe the impact of AI in the food supply chain will be huge. We are the first to bridge the gap between the latest advances in machine learning and the functioning of a wholesale food market. Califrais' PhD students and all the professors we work with have reviewed all the scientific literature on the subject, and our solutions significantly improve the current state of knowledge.

The medium-term objective is to improve the economic and ecological competitiveness of the different actors in the value chain, the security and resilience of the food supply, and to reduce food waste while decarbonizing the flows.





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Interview

with Seta Tutundjian

Seta Tutundjian, global thinker and advocate for transitioning to circular food systems and regenerative economy in water-scarce regions, and panelist during our WUWM 2022 conference shares her insights about circular economy for the fresh food sector.

As a circular economy and food systems expert could you please briefly define to our readers what means « circular economy »?

The term circular economy refers to a system that mimics nature so no waste or minimal waste is generated, and the way the system operates regenerates natural ecosystems. The three principles of a circular economy is eliminating waste be it biological waste or material waste, maintaining resources in use for the longest possible period and when that is no longer possible we recover and recycle them, and regenerating nature. We do that by redesigning our products, processes and systems to close waste loops and work in harmony with nature. Circular economy applies to all sectors including the food sector.

Currently most of our global economic system is built on a take-use-dispose approach, where we extract renewable and non-renewable natural resources from nature to produce products and services generating waste, pollution and greenhouse gas emissions in the process. We then use the product, and once we finish with it, we dispose of it as waste. The consequence of this system is that our natural ecosystems are being depleted at alarming rates; levels of greenhouse gases in our atmosphere are reaching points that can lead to catastrophic outcomes; our landfills are overflowing; our soils are being depleted; and our waterways and marine system is overloaded with nitrogen and phosphorus. We are basically living beyond the means of our planet! A circular economy strives for a system that will bring us to a point that we are living within our planet's capacity without compromising the economy, the prosperity of people, or nature.

Why do you think is important for the food systems to become circular?

Our food system is no different than the other sectors in that it is built on a linear, extractive module. And this applies to both how we produce food, and how we consume food. Our current food system is a key driver of deforestation, biodiversity loss, climate change, soil destruction, water depletion and pollution, as well as poor health and poverty. We use 40% of earth's land and 70% of freshwater resources to produce food, fiber, and feed. In the process we use large amounts of fertilizers, pesticides and herbicides which are polluting our air, land and water. We also use many other products to package and store our foods particularly plastics, glass, cardboards and metals. But then we go and waste 40% of that produced food between harvest and consumption and most of that wasted food ends up in landfills. In many landfills, organic waste can be as high as 50% of landfill waste. As waste decomposes it releases methane gas, a gas that traps heat in the atmosphere 28 times more than carbon.

“The term circular economy refers to a system that mimics nature so no waste or minimal waste is generated, and the way the system operates regenerates natural ecosystems.”

In fact, food loss and waste contributes 10% of greenhouse gas emission and is the 3rd largest CO2 producer. It also releases liquids, which mixes with nearby items such as medicines and batteries. This is a natural occurrence in counties where waste is not segregated, this leads to a poisonous slime that contaminates the land and can enter the waterways.

A circular food economy seeks to prevent food waste from occurring, and if there is surplus food then redistribute it while it is still fit for human consumption. The remaining organic waste is then recovered and recycled in ways that convert it into products be it animal feed, pharmaceuticals, materials, bioplastics, compost and energy. A circular food economy also seeks to ensure that food products are produced in ways that regenerate natural ecosystems and that the food is more diverse and healthy to humans. Finally, a circular food system also considers the packaging dimension. Packaging is critical for ensuring food safety and reducing food waste, but we need to use the most sustainable packaging and ensure that a recovery and recycling system for packaging is established. There is much room for innovation in packaging and that must be done while maintaining food quality and safety.

How can we promote and implement circular and regenerative approaches within food systems?

First of all, we need to appreciate the systemic nature of the food system. With this comes the realization that without considering all the different elements and involving the various actors, it will be difficult to redesign our system to be more circular. Hence, a major milestone is mapping the system, building alliances, establishing common targets and objectives to redesign food products and services to be circular, and supporting and strengthening collaboration during implementation.

The other key point is measurement, transparency and traceability. Measurement of our food loss and waste to not only understand waste quantities and where it occurs, but also to typify that waste and identify what is causing and driving it. This will help us design effective prevention and redistribution interventions, as well as identify the best valorization options for unavoidable waste. Transparency and traceability of supply chains is important to help ensure that food is safe and regeneratively produced.

Creating an enabling environment is another key aspect. An enabling environment refers to ensuring that there is mass public awareness of the challenges of the current linear systems and the vision on where we need to go and the generated benefits and opportunities. It refers to having a regulatory framework that facilitates the rescue, recycling and conversion of surplus food. Also establishing finance mechanisms that accelerate investments in food loss and waste reduction, packaging innovation, and regenerative food production. Another key aspect is building human capacity to ensure that the skill-base required for such a transition is available.





How can wholesale markets become fully circular, and what would that look like? Which could be the main “steps” to take towards circularity?

Wholesale markets are the entry point to the major consumption points, which gives them the power to drive production downstream to be regenerative, diversified and delivering health food products. Also, the sheer quantity of food that goes through the wholesale market means that the quantities of food loss can be huge, and localized in one spot, which facilitates developing interventions to prevent, redistribute and valorize organic waste. The structure of the wholesale markets in the way it deals with so many of the different actors of the food system enables it to act as a facilitator platform that brings these actors together to set common objectives and build alliances.

“Wholesale markets can act as catalysts for outreach and public education and for building a skill-base towards circularity.”

Main steps towards circularity will be adopting a target-measure-act approach, whereby circularity goals are established, followed by carrying the required measurement upon which interventions are identified and pursued. Measurements should be beyond quantities to look at typifying the waste, where and why is it occurring, and what can be done. Improving transparency and traceability is another key milestone, as is adopting policies that encourage their customers and partners to be more circular. Lastly, I believe in the phrase “knowledge is power” and given the size of the wholesale markets and the number of actors it deals with on a daily basis, wholesale markets can act as catalysts for outreach and public education and for building a skill-base towards circularity.

Can you describe the EPIC tool you have developed? and can the EPIC tool be a solution to make wholesale markets circular?

We, at Thriving Solutions, are dedicated to developing innovative solutions to advance food and nutrition security through facilitating the transition to circular and regenerative food systems. We aim to do that by working with various food manufacturers, suppliers, wholesale markets, retailers, service providers and municipalities to eliminate waste loops within the food value chain and help organizations begin their journey towards a circular business model.

To guide this transition process we created our flagship service EPIC which stands for Engage, Prepare, Implement and Celebrate. EPIC draws on best practices in the field to guide our work. We start engaging every level of an organisation to build a common understanding of what a circular food system is and how it differs than the linear system, agree on organizational goals, and take stock of the current situation. This is followed by a preparation phase where missing data and measurements are collected according to international standards and industry methodologies; hotspots are identified, possible solutions assessed, and a customized action plan is agreed on. Consequently, we support our clients during the implementation phase. At every step, during the process we provide capacity building to create the needed skill-base, and make sure that successes and milestones are captured and celebrated internally and with the wider society. The EPIC program aims to provide a replicable tool to facilitate companies’ and cities’ transition to a circular module.

An all-inclusive additional layer to the service has been curated in partnership with two other local start-ups called EPIC+. EPIC+ enables institutions to not only reduce waste but also to calculate associated carbon emissions. This service also allows for the collection, categorization and measurement of organic waste and diverting unavoidable waste that cannot be redistributed or valorized for agricultural or industrial purposes to convert it to compost.

In Events:



WUWM attended the 50th Committee on Food Security organized by the Food and Agriculture Organization of the United Nations (FAO)

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Fabio Massimo Pallottini, WUWM European group Director, represented WUWM at the 50th Committee on Food Security (CFS), that was held in Rome from October 10-13, 2022. Hosted by FAO and supported by the International Fund for Agricultural Development (IFAD) and the World Food Programme (WFP) the CFS 50 saw a record number of high-level officials and delegates (40 ministers, deputy ministers and secretaries of state from around the world attended the conference). More than 1,500 delegates from civil society, the private sector and various stakeholders participated live or online.

Mr. QU Dongyu, Director-General of the Food and Agriculture Organization of the United Nations (FAO) highlighted the role of FAO and other UN agencies in addressing the short- and long-term challenges of food insecurity, especially for family and smallholder farmers as well as the most vulnerable communities. Mr. Dongyu called for the urgent transformation of global and national agri-food systems for greater efficiency, inclusiveness, resilience, and sustainability and to accelerate progress towards the Sustainable Development Goals (SDGs).

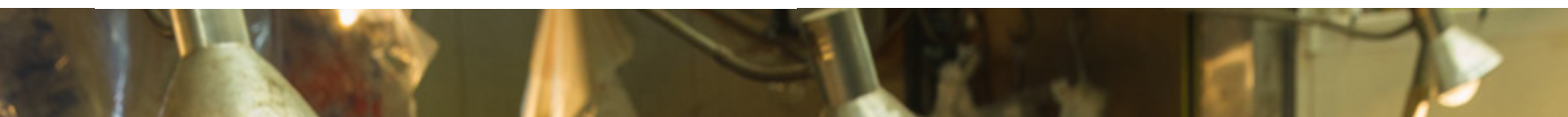
“The CFS called for the urgent transformation of global and national agri-food systems for greater efficiency, inclusiveness, resilience, and sustainability and to accelerate progress towards the Sustainable Development Goals (SDGs).”

A number of CFS agencies and actors, including UN Secretary General Antonio Guterres, the Presidents of the Economic and Social Council (ECOSOC), emphasized the need for rapid and joint action to address hunger and malnutrition, with the CFS being key to bringing together key stakeholders to align policies.

During the meeting participants discuss how to accelerate and revitalize action towards the SDG-2 (Zero Hunger) based on the seven key issues affecting food security and nutrition identified by the report recently released by the High Level Panel of Experts (HLPE). According to the HLPE there are seven key priorities that must be urgently addressed to ensure food security:

1. Building resilient and equitable supply chains for food security and nutrition
2. Strengthening urban and peri-urban food systems in the context of urbanization and rural transformation.
3. Analyze conflict and fragility in food systems.
4. Revitalizing climate policies for food security and nutrition
5. Recognizing the role and rights of food system workers
6. Creating a meaningful interface for diverse food security and nutrition knowledge systems, technologies and practices.
7. Emerging and re-emerging infectious diseases and other biological hazards that threaten food security and nutrition.

In light of the urgent need to achieve SDG 2, all of the actors aligned to the need of strengthening and adopt a multi-stakeholder and systemic approach to address food insecurity, malnutrition, and unsustainable agriculture. Praising the need to support coordinated and multisectoral national policies, laws, programs, regulatory frameworks, investment plans, and regional food security and nutrition initiatives.



In WUWM's World

- On the **4th of October**, WUWM attended the "Action and Implementation Sub-Group" of the EU Platform on Food Losses and Food Waste.
- From the **5th to the 7th of October**, WUWM attended the "Asia-Pacific Symposium on Agrifood Systems Transformation" organized by FAO.
- On the **5th of October**, WUWM was a panelist at the Regional Conference on Food Loss and Waste Reduction in Europe and Central Asia "Enabling the change" organized by FAO.
- From the 10th to the **13th of October**, WUWM attended the Committee on Food Security (CFS) 50, organized by FAO.
- On the **12th of October**, WUWM attended the event "The Best Foods are the Least Safe: Working Group for Safe Food in School Meals" (SFSM), organized by the School Meals Coalition.
- On the **18th of October**, WUWM attended the Stakeholder Workshop on the Sustainable EU Food System Initiative dedicated to "Economic Operators - Trade, transport and logistics, wholesale, and retail, food services, and financial services providers", organized by the Directorate-General for Health and Food Safety of the European Commission (DG SANTE).

▪ On the **19th to 21st of October**, WUWM Abu Dhabi conference : "Global food security in the XXIs: Risks, challenges and solutions to ensure resilient and sustainable fresh food supply chains" was hold in Abu Dhabi (UAE).

▪ On the **20th of October**, WUWM attended the second meeting of the EU Platform on Food Losses and Food Waste.

▪ From the **25th to the 27th of October**, WUWM attended the International exchange forum on sustainable public food procurement 2022: Overcoming challenges and learning lessons from local government, organized by FAO in collaboration with the German Institute of Development and Sustainability (IDOS).

▪ On the **26th of October**, WUWM attended the Open Consultation from the EAT Forum, organized by EAT.



About WUWM:

We aim to facilitate access to healthy diets for everyone in the world by delivering more sustainable, inclusive, and high-quality fresh food supply systems. We exchange ideas, share best practices and cooperate with our partners in international organizations, governments, businesses, and the public.

