Creating Sustainable Food Supply in Arid Landscapes

Monday, 9<sup>th</sup> October 2023 &

Tuesday, 10<sup>th</sup> October 2023

Dubai World Trade Center, Dubai, UAE

### Day 1 – Monday, 9<sup>th</sup> October 2023

Time	HortiME	AgraME
09:00-10:00	Registration and Welcome	
10:00-10:15	Opening Address by <b>His Excellency</b>	Opening Address by <b>His Excellency</b> in HortiMe Room
	Promoting a Future of Abundance: Governance and Leadership initiatives for enhancing food security in the UAE and the broader Middle East	
10:15-10:45	Opening Keynote - Creating Sustainable Food Supply in Arid Landscapes	Opening Keynote in HortiMe Room
	The path towards creating a sustainable food supply in arid landscapes is multifaceted. It calls for a synergy of smart agricultural practices, technological innovation, traditional knowledge, and a robust policy framework. This session will set the tone of the event ahead and discuss on points that will necessitate a paradigm shift towards sustainable and resilient food systems that will value both people and the planet.	
	Speaker – <b>Henry Gordon-Smith</b> , Founder & CEO, Agritecture	
11:00-11:30	Case Study - Harnessing Low-Tech Innovations for Sustainable Agriculture Development	11:00-12:00
	<ul> <li>Examples of low-tech innovations that have been successfully implemented in the Middle East region, such</li> </ul>	<b>Leadership Panel Discussion</b> : Role of Leadership in ensuring Food Security

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	<ul> <li>as the use of solar-powered irrigation systems in Jordan and the cultivation of drought-resistant crops in Saudi Arabia</li> <li>Trends that will shape the future of low-tech innovations in agriculture, such as the increasing availability of affordable sensors and data analytics tools</li> <li>Challenges that need to be addressed in order to accelerate the adoption of low-tech innovations in agriculture, such as the lack of awareness and financing</li> <li>Speaker – Hassan Halawy, General Manager, Elite Agro Projects LLC</li> </ul>	<ul> <li>What are some of the main challenges that the MENA region currently faces in terms of food security, and how can international cooperation help to overcome these obstacles?</li> <li>Can you discuss some successful examples of knowledge and technology exchange between countries that have significantly contributed to improving food security? How can such models be replicated in the MENA region?</li> <li>How can governments in the MENA region modify or introduce new policies to better address food security issues? What roles do factors like climate change, economic policy, and agriculture industry practices play in this?</li> <li>What strategies or technologies can be shared across borders to improve</li> </ul>
11:45-12:30	Panel Discussion - Vertical Farming — Latest Trends and Project Updates  • Vertical farm opening in Abu Dhabi in 2023  • UAE's vertical farming research and development program being led by ADIO  • The region is expected to see a population increase of 50%	<ul> <li>agricultural productivity and sustainability, thereby enhancing food security in the MENA region?</li> <li>What are the potential implications of improved food security in the MENA region for global geopolitical dynamics? How might other nations and international organizations benefit from investing in this cause?</li> <li>Moderator – Henry Gordon-Smith, Founder &amp; CEO, Agritecture</li> </ul>
	by 2050. How is it planning to cater to this forecast?  Speakers –  • Dr. Ali Al Jassim, Chairperson, Emirates Green Building Council  • Fadi Sbaiti, General Manager, Aerofarms AgX LLC  • ADIO	<ul> <li>Speakers –</li> <li>Ahmed Al Shaibani, Head of Food Tech Valley Project, Food Tech Valley</li> <li>Habiba Al Marashi, Co-Founder &amp; Chairperson, Emirates Environmental Group (EEG)</li> <li>Nicholas Gombos, CEO, Alliance Food Security Holdings</li> <li>Dr. Dimitris Drisis, Founder, Excellwise Ventures DWC – LLC</li> </ul>

# Creating Sustainable Food Supply in Arid Landscapes

Monday, 9<sup>th</sup> October 2023 & Tuesday, 10<sup>th</sup> October 2023

	Dabai Wona mace	
12:45-13:15	Circularity and the Future of AgriTech: Why is UAE Setting the Global	12:15-12:45
	Standard?	
	<ul> <li>How is UAE incorporating circularity principles to create sustainable agricultural practices and technologies?</li> <li>Emphasizing the strategies and policies the UAE has implemented for long-term sustainability in agriculture, preparing not just for the nation's future but setting precedents for the world.</li> <li>Evaluating the global impact of the UAE's focus on circular agri-tech solutions, and how it is shaping the future of sustainable agriculture worldwide.</li> <li>Speaker – Yazen Al Kodamani, Deputy General Manager, Emirates Bio Farm</li> </ul>	<ul> <li>Micro-economics of Agriculture in the Middle East Region</li> <li>The economic implications of limited water resources on crop selection, irrigation practices, and overall farm profitability</li> <li>Analyze the economic costs and risks of relying heavily on food imports to meet growing domestic consumption needs</li> <li>Adaptive strategies such as resilient crop varieties, climate-smart farming techniques, and insurance mechanisms to mitigate the economic impact of climate change on agricultural livelihoods</li> <li>Speaker – Alpha Kennedy, Beachhead Advisor New Zealand Trade and Enterprise, and CEO Rabdan Holding</li> </ul>
12:15 14:00	Lunda Ducali O Nationalia	
13:15-14:00	Lunch Break & Networking	
14:00-14:30	Crop Farming – In Partnership with New Ag	IFW-Exp - 14:00-15:30
	<ul> <li>Nurturing the Future: Expanding the Horizons of Regenerative Agriculture</li> <li>Current landscape of Regen-Ag in the region</li> <li>Discuss the reasons behind the lack of extensive research such as lack of funding, difficulty in measuring long-term impacts, and complexity of system-based, rather than single-factor, research</li> <li>Discuss the need for rigorous testing and validation of regenerative agriculture techniques</li> </ul>	<ul> <li>14:00-14:25</li> <li>Presentation 1: Incubation and hatchery management         <ul> <li>How to optimize incubation to enhance poultry health, welfare, and productivity</li> </ul> </li> <li>Speaker - Edgar Orlando Oviedo Rondon, Professor, North Carolina State University &amp; US Soybean Export Council USSEC</li> <li>14:30-14:55</li> </ul>

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Monday, 9<sup>th</sup> October 2023 & Tuesday, 10<sup>th</sup> October 2023

	<ul> <li>Promising techniques in regenerative agriculture such as agroforestry, permaculture, holistic management, and cover cropping.</li> <li>Learning from past mistakes and Call to Action for the future of Regenerative Agriculture</li> <li>Speaker - Sam Bevans, Co-Founder &amp; CEO, GG Biologicals</li> </ul>	Presentation 2: Control options of relevant properties for optimal plant growth Speaker - Harald Braungardt, CEO, STEP Systems, Germany  15:00-15:25 Presentation 3: Title TBC Speaker - Claus Hensen, Schlachthofsysteme Hensen GmbH  15:30-15:55
14:45-15:15	<ul> <li>Development Plan for Climate-Smart Agriculture</li> <li>Implementation of practices such as using less water, reducing greenhouse gas emissions, and planting crops that are more resilient to drought and heat</li> <li>Climate-smart agriculture is not a one-size-fits-all solution. What and how best can be done?</li> <li>Use of innovative technologies</li> <li>Involvement of a wide range of partners, including farmers, businesses, government agencies, and non-governmental organization</li> <li>Speaker – Abhinav Kumar Garg, Director, Mahameru Innovations LLC</li> </ul>	Presentation 4: Importance of soybean quality categorization in poultry precision nutrition Speaker - Edgar Orlando Oviedo Rondon, Professor, North Carolina State University & US Soybean Export Council USSEC
15:30-17:00	Cultivd – 1.5 hour	

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Dubai World Trade Center, Dubai, UAE

17:00-17:30	<ul> <li>Next Steps in Vertical Farming: Innovations and Strategies in Lighting Technology         <ul> <li>Limitations traditional lighting present in vertical farming systems</li> <li>Development of spectrally adjustable LEDs and their role in improving crop yield and reducing energy consumption</li> <li>Role of machine learning and IoT devices in dynamically adjusting lighting parameters for optimal plant growth</li> </ul> </li> <li>Speaker – Olav Scholte, Commercial Lead - Agriculture lighting, Signify</li> </ul>	16:00- 17:30 Women in Agriculture (DANA Global) — 1.5 hour
17:30	Close of Day 1	

#### Day 2 – Tuesday, 10<sup>th</sup> October 2023

Time	HortiME	AquaME
09:00-10:30	Registration and Welcome	
10:30-11:00	Crop Farming – In Partnership with New Ag	Rise of RAS (Recirculating Aquaculture Systems) in the Middle East Region
	The Role of Strategic Investments in International Trade and Geopolitics for Enhancing Global Food Security	The rise of RAS in the Middle East is a topic of significant interest, particularly due to the region's harsh climate, high consumption of seafood, and need for sustainable, local food sources. Here are three key points that will be covered in this
	In an increasingly interconnected world, how do we ensure that everyone has enough to eat? This topic delves into the complexities of global food security through the lens of international trade,	<ul> <li>Discussion on how RAS technology has been adapted to suit the unique needs of the Middle Eastern climate and water scarcity issues</li> </ul>

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Monday, 9<sup>th</sup> October 2023 & Tuesday, 10<sup>th</sup> October 2023

	geopolitics, and strategic investments. With an exploration into how foreign direct investments and trade policies influence the availability, access, utilization, and stability of food supplies, we'll shed light on the intricacies and implications of geopolitical tensions on global food supply chains. Furthermore, we will also investigate how innovative investments in sustainable farming and agriculture technologies could potentially reshape the future of food security, addressing questions of equity, sustainability, and resilience amidst the challenges of climate change, political instability, and a growing global population.  Speaker – Dr. Dimitris Drisis, Founder, Excellwise Ventures DWC –	<ul> <li>Explore how RAS can meet the local demand for seafood and the potential economic impacts</li> <li>Sustainability of RAS and how it fits into the broader global context of sustainable seafood production</li> <li>Speaker - Michele Gallo, Head of Aquatic Research Facilities Design, AquaBioTech Group</li> </ul>
	LLC	
11:15-11:45	Microalgae: Their huge potential in biostimulation and demonstrated effectiveness  Speaker – Murat Karagöz,	<ul> <li>Advanced Technology and Aquaculture – Solutions for innovation in Aquaculture</li> <li>Implementing a smart production technique that integrates the Internet of Things (IoT), big data, and artificial intelligence to manage aquaculture facilities, equipment, and machinery either through remote control or autonomous robot control, facilitating all aspects of production and management operations</li> <li>Reducing the involvement of middlemen by harnessing active data insights to provide direct insights and interactions</li> <li>Introducing solutions to enhance the efficiency of the value chain, laying the foundation for a food production system that is not only sustainable but also restorative in nature</li> </ul>
12:00-12:30	From Oil to Soil: The Role of Regulatory Frameworks and Efficacy Evidence in Building the Middle Eastern Biostimulants Market	Prospects for impact investing in aquaculture in the ME region  Opportunities for growth Responsible governance

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Monday, 9<sup>th</sup> October 2023 & Tuesday, 10<sup>th</sup> October 2023

12:45-13:15	<ul> <li>How do we address potential challenges in shifting from an oil-based economy to one focusing more on agriculture and biostimulants?</li> <li>How can regulatory frameworks ensure that the burgeoning biostimulant market in the Middle East is both safe and sustainable?</li> <li>How crucial is the role of evidence-backed efficacy in the acceptance and use of biostimulants among Middle Eastern farmers? How can we build consumer trust in these products and how can regulatory frameworks assist in this process?</li> <li>Role of Biostimulants in Sustainable Agriculture in the Region</li> <li>Effectiveness of biostimulants in improving crop yields, quality, and stress tolerance</li> <li>Synergy with Fertilizers in enhancing nutrient uptake, boosting crop yields and minimizing environmental impact</li> <li>Speaker – Narjisse Mahmoudi, Managing Director Nutribiotek, OCP GROUP</li> </ul>	<ul> <li>Impact investing</li> <li>Contribution to UN/SDG's</li> <li>Speaker – Philippos Papageorgiou, VP Operations (National Livestock &amp; Fisheries Development Program), Ministry of Environment, Water and Agriculture, KSA</li> <li>12:30-13:00</li> <li>How to improve the use of soybean meal and full-fat soybeans in poultry nutrition</li> <li>Speaker - Edgar Orlando Oviedo Rondon, Professor, North Carolina State University &amp; US Soybean Export Council USSEC</li> </ul>
13:15-14:00	Lunch Break & Networking	
14:00-14:30	<ul> <li>Water conservation in horticulture</li> <li>Water-Saving Horticultural Practices – Includes mulching to reduce evaporation, the use of water-retaining soil amendments, timing irrigation to reduce evaporation losses, and the adoption of drought-resistant plant varieties</li> </ul>	Development of Poultry Production in The Emirate of Abu Dhabi and the Available Investment Opportunities  • The current situation of poultry production in the Emirate of Abu Dhabi

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Monday, 9<sup>th</sup> October 2023 & Tuesday, 10<sup>th</sup> October 2023

	<ul> <li>Role of education, policy support, and community engagement in water conservation</li> </ul>	<ul> <li>Reasons for the increase in production.</li> <li>The Efforts to raise production.</li> </ul>
	<ul> <li>Discuss how training programs for farmers, gardeners, and</li> </ul>	The next direction for the poultry sector in the emirate.
	landscapers can improve water usage practice	Investment opportunities.
	Evaluate the role of policies that incentivize water-saving	оррогом
	practices or that regulate water usage in times of scarcity	Speaker - <b>Dr. Hussein Hosiny Hussein Hassanin</b> , Animals Production Expert, Abu
	Speaker – <b>Mark</b> , Engage Crop Solutions	Dhabi Agriculture & Food Safety Authority (ADAFSA)
14:45-15:15	The Environmental Impact of Hydroponics and Aeroponics: A Sustainable Solution for Food Production  • Potential for hydroponics and aeroponics to help mitigate climate change  • Challenges and limitations of hydroponics and aeroponics  • Future of hydroponics and aeroponics in food production	Agriculture and Animal Wealth  • Efforts to develop conservation policies and enhancing commercial exploitation to narrow the food gap  • Integrated management for prevention of livestock diseases and epidemics  • Strengthening tools and resources for the management of ongoing programs
15:30-16:00	<ul> <li>The crucial role of organic farming in the UAE's food security</li> <li>Discuss how organic methods can improve soil health, biodiversity, and contribute to a more sustainable food production system</li> <li>Highlight the social benefits, such as healthier food options, community engagement in local food systems, and the potential for organic farming to contribute to rural development</li> <li>Discuss existing policies, areas of improvement, and the need for further research and development in this sector</li> </ul>	Panel Discussion - Sustainable Animal Agriculture as a Business Venture in the Middle East: An Economic Perspective  • Considering the arid climate and limited freshwater resources, to what extent can animal farming be economically feasible and scalable in the Middle East? What specific strategies and technologies could be used to overcome these challenges and ensure the economic sustainability of this industry?  • How does the demand for locally produced livestock products influence the sustainability of animal farming?  • What policy or regulatory changes could stimulate growth in this sector?

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Monday, 9<sup>th</sup> October 2023 & Tuesday, 10<sup>th</sup> October 2023

17:00 Close of Conference
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