



Lectures and Discussions Program

Tuesday, October 29, 2024

Opening Event

- Professor Eyal Shimoni, Chair of the Steering Committee, Head of the Israel 2050 Food Security Program at the Samuel Neaman Institute
- MK Avi Dichter, Minister of Agriculture and Food Security
- Mr. Yuval Lipkin, Head of the Food Security Directorate, Ministry of Agriculture and Food Security

Plenary Discussions Food Security - A National Challenge / Urgent Need | Food Security = National Security

- Strategic Models for Food Security Programs – Review and discussion on global preparedness
- National Security Council's concept for the structure, organization, execution, and oversight of the national food security program
- Presentation of recommendations from the "National Food Security Roundtable"
- Western Negev Cluster – Regional Opportunities. "Agri-Tech innovation program"
- From Planning to Execution – The Role of the Business Sector as a Fast and Effective Engine for Implementing the National Food Security Program

Sessions Policy

Moderator: Mr. Victor Weiss, National Security Council

- Decision Makers – Call for action, creating public awareness, consciousness, and advocacy
- Government Ministries – Inter-ministerial cooperation, CEOs roundtable
- From Idea to Execution – Economic issues, funding the national food security program
- Local/Regional Authorities – Quick and connected response on the ground



Emergency - A Nation in Crisis

Moderator: Mrs. Galit Cohen, INSS (Institute for National Security Studies)

Managing Food Security in Emergencies

- Emergency reserves, supply chains – risk analysis, food and raw material reserves, global food chains
- **War of Iron Swords:**
 - Learning and preparation - analysis of war insights for readiness for future challenges (multi-front war, natural disasters)
 - Ways to address public needs, food supply (accessibility, costs)
 - Returning to normalcy - mechanisms and means for rapid and proper recovery
- **Emergency infrastructure for functional continuity**
 - Human resources – shortages/accessibility, movement
 - Supporting infrastructure for continued production – mobility of means, business sector
 - Emergency stocks – characterization and logistics of supply chains
 - Energy for agriculture and the food industry, emergency storage, agro-voltaic, local electricity supply
 - Priorities in recovery – what to produce first, which production lines to activate
 - Enabling regulation, support for investments aimed at sustainability and emergency preparedness
 - Emergency = opportunity. Preparedness and resilience allow for rapid recovery and growth

Technologies for Emergencies

- Robotics as a solution to workforce issues
- System shutdowns



- Energy sources
- Communication
- Mobility of means
- Technologies for functional continuity
- Emergency management

FOODTECH - Technology and Innovation for Food Security

Moderator: Dr. Tami Miron, Fresh-Start Food Tech Incubator

- "The Genome of Food Security" – FoodTech technologies aimed at food security
- Emergency Food – Tasty, nutritious, available, durable. Unique technological solutions. Production in emergencies
- Goal-Oriented Development – What technologies are needed? Who are they being developed for?
- Food Tech Technologies – Addressing humanity's challenges and problems
- New raw materials in the food industry / high-quality food ingredients
- Sustainable processing
- De-globalization of food chains, the challenge for island nations, border closures
- Sustainability as a significant component in food innovation
- Aquaculture, Desert Tech, Blue Economy
- International R&D cooperation, information, and agreements for food security

Investments, Leverage, and Opportunities

- Encouraging investors and collaborations
- The South as a food supply area – strengthening agriculture, industry, production systems, human capital
- Strategic plans for growth and renewal – support, grants, organizations, managements, business sector



Solutions

- Alternative proteins and their importance in promoting food security issues
- Climate implications on livestock and technological solutions
- Alternative proteins / molecular proteins
- Food security as a lever for regional and social development – development of the South and North – economic, social, regional
- Sustainable agriculture – incentives, planning, strengthening local production
- Amending import reforms – long-term import agreements with "resilient" countries (climate and governance)
- Improving the economic capabilities of farmers and industry
- Grants for farmers, agriculture as a preferred profession
- Agriculture as a national project – national strategy in partnership with the community
- Human capital – a program to encourage young farmers (training, academic studies, support, integration of innovation)

GLOBAL Food Security on a Global Scale

- Technological innovation as a strategic tool for Israel - "A Light unto the Nations"
- Assisting the needs of other countries, a catalyst for positioning Israel as providers of technological solutions to world problems
- "Made in Israel" - Global Food Security
- Integrating the local food industry into the global food industry through an innovation approach to food security
- Methodology of emergency management – Israel as a model country for the world (climate, geography, natural resources, security situation)
- Collaborations, emergency agreements, integration of supply chains

FOOD SEC & TECH ISRAEL

Food Tech, Agri Tech, Nutri Tech

The Global Food Security & Nutrition Resilience Conference

October 29-30, 2024
Sapir College, Negev, Israel

From Innovation to Action



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Health and Nutrition

Moderator: Professor Ronit Endvelt, University of Haifa, former Head of the Nutrition Division at the Ministry of Health

- Food technologies for health
- Preserving nutritional tradition - Reverse Technology
- Traditional food versus "technological" food - natural food versus processed food
- Microbiome – the gateway to food security
- Novel Food, sustainable food, superfood/whole food – the impact of new food on humans
- Nutri Tech - innovation, Food Tech for food security
- Food industries
 - Health of produced food as a measure of profitability/value of companies
 - "Whoever eats my food will be healthier"
 - Health as a measure of profitability
 - Food security index – credit points for industries for contributing to food security
 - Nutrition research and R&D funded by food companies
- Local raw materials/local production
- Dedicated research and development – according to needs, goal/task-oriented
- Levers for changing food consumption culture and influencing public behavior
- Healthy choice = Easy choice
- Culinary and culture - "Changing the plate" – educating for food consumption according to food security characteristics, healthy lifestyle
- National infrastructure supporting health and nutrition
- National nutrition plan – technology, health, sports



Social Issues in Food Security

- Food sovereignty, nutritional justice, class and inequality, vulnerable populations
- Health disparities affecting the food security of the population
- Food security in disadvantaged populations
- Involvement of the Ministry of Health in the food basket, food price regulation
- Healthy nutrition for all – managing food security in Israel (National Council for Food Security, National Authority for Combating Poverty)
- National database to assist in emergency management. National information repository for the nutritional values of food
- Food rescue as an economic, social, and health tool
- Food rescue in emergencies
- Food Surplus Donation Law
- Community resilience - food security as a central component of national and social resilience

Climate and Environment

- Food Security 2050 – Climate change in Israel and the world – what will life look like?
- Food Tech becoming Climate Tech
- Sustainability and climate
- Soil, water, energy sources/renewable energy

Economy and Industry

Moderators: Mr. Aviv Chatzbani, Director of the Association of Food Manufacturers in , the Manufacturers Association of Israel

Mr. Oz Katz, Former Head of the Industries Division, Ministry of Economy

- Economy and industry - management under conditions of uncertainty. Sustainable business approach
- Radical tools for changing the global food chain

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Bio-economy - innovative economic models in the food sector, circular economy

- Local production - importance, feasibility, the conflict between global and food independence
- Involvement of international/foreign entities in food corporations and supply chains
- Food consumption culture - the role of the food industry in public health. Levers for change – local production, changing the "plate," financial models

AGRITECH Agriculture

Moderator: Professor Hinanit Koltai, Academic Director and External Relations, Agricultural Research Organization - Volcani Institute

- Agriculture in Israel 2050 - Needs versus possibilities
- Agriculture in changing climate conditions/Eco-agriculture
- Agriculture as a central factor in food security
- Strengthening agriculture in routine and emergencies
- Future crops - what is right to grow: agricultural and livestock crops
- Dealing with future pests
- Automation and digitization in agriculture
- Advanced alternatives for food production: alternative protein and cultured meat
- Climate, soil, water, and resource limitations
- New tools in agriculture - integrating technologies
- Encouraging automation and digitization in agriculture
- Genetics, varieties, AI-based developments. From development to production
- Innovation and technology development for workforce, water, and energy challenges in emergencies
- Improving the economic capabilities of farmers and the industry
- Grants for farmers, agriculture as a preferred profession

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Innovation in Food Security

Moderator: Ms. Ronit Eshel, Head of the Climate Technologies and Industry Innovation Division, Innovation Authority

- FoodTech advancing food security - multidisciplinary technological response to food security challenges
- Precision agriculture
- Bio Convergence - multidisciplinary response to food security challenges - synergy of science, research, industry
- Climate and Artificial Intelligence – AI. The southern region and the Gaza envelope

Food Waste

- Reducing food loss/waste
- What goes to waste? The origin of Israeli garbage
- Preventing waste at the consumer level
- Saving agricultural produce
- Food rescue as an economic tool

AI & BIG DATA in Food Security

- Predictive capabilities - what can be learned about the future?
- Changes in traditional professions due to the need for food security, what new professions will emerge?
- National and global information systems, artificial intelligence, digitization in creating supportive frameworks for food security

Preliminary program only. Program updates and a list of speakers will be published on the conference website.