

MEFOSA S.A.R.L

MIDDLE EAST NORTH AFRICA FOOD SAFETY ASSOCIATES

ميفوسا ش.م.م

مستشارو السلامة الغذائية للشرق الأوسط وشمال إفريقيا



**Expert Group Meeting on the Scope and Setting up of an Arab
Good Agricultural Practices (Arab-GAP) Framework**

Preventive Food Safety Paradigms

**Presented by
Atef Wafic Idriss
GM of MEFOSA s.a.r.l.**

Cairo, Egypt, 31 May - 1 June 2016



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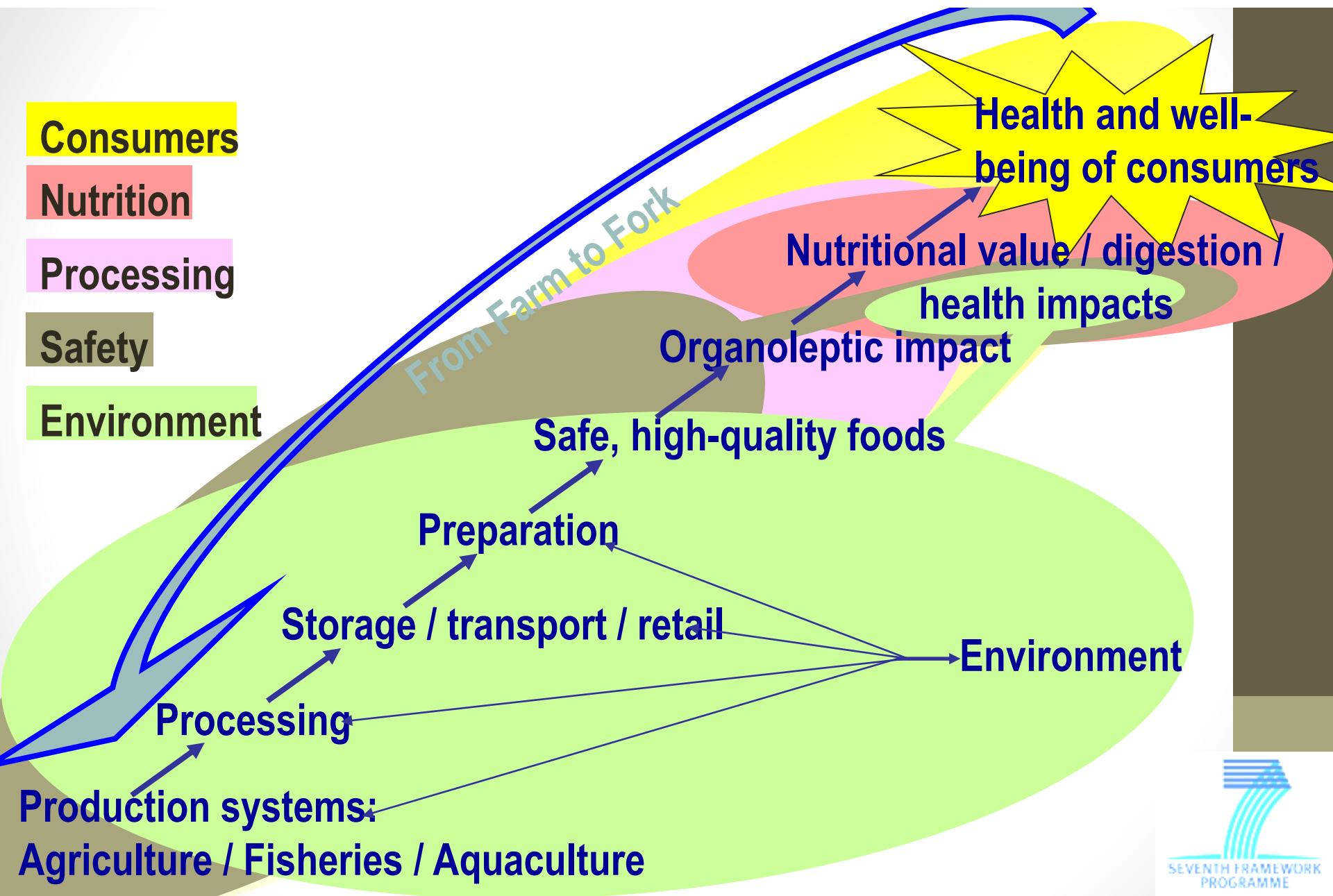
MEFOSA's VISION

Middle East North Africa Food Safety Associates s.a.r.l believes that trading in safe food and feed are a prerequisite for sustainable development, and that Arab societies should develop their own food safety prerequisites in full recognition with their socio-economic priorities, and in harmony with international standards and norms, while respecting the culture, family values and quality of life throughout the MENA region.

رؤية ميفوسا

مستشارو الشرق الأوسط وشمال أفريقيا للسلامة الغذائية ش.م.م. يؤمنون بأن المتاجرة في الانتاج الغذائي والاعلاف السليمة هو مقدمة أساسية للتنمية المستدامة، وأنه على المجتمعات العربية أن تطور مفاهيمها وبرامجها للسلامة الغذائية بتفهم كامل لاولوياتها الاقتصادية والاجتماعية وبالتناغم مع المقاييس والمواصفات العالمية وباحترام كلي للخصوصيات العائلية والثقافية ونوعية العيش المشترك في المنطقة.

LAFST aims to: " capacity build on the science & technology of food regulations and compliance , and in ensuring Lebanese & MENA availability of safe and wholesome food products for all consumers while addressing food safety,security& sustainability ."



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The Sesame Case Study



Sesame seeds are a major crop in Uganda, Sudan and Ethiopia. These seeds are used as ingredients in many food products. Three of the major ready-to-eat foods containing sesame seed products, eaten in, and exported from, the Middle East are tahini, hummus and halva. There are also snack foods that have whole sesame seeds as an ingredient. Unfortunately, recalls and food borne outbreaks in many countries because of *Salmonella* contamination have been linked to these on a regular basis, which has an immediate economic impact on the manufacturers of these products in African & Middle Eastern countries because of the recall action and drop in demand for these products. The source of the *Salmonella* is not known and can occur anywhere in the food chain, but is believed to originate in the seeds themselves as occurs with alfalfa seeds and mung beans, long known also to cause illness when the sprouts are eaten. *Salmonella*, once in a processing plant, is hard to eliminate as can occur in peanut butter and chocolate operations. Thus, understanding to what degree contamination occurs on the farms (irrigation water, wild animals, infected farm workers, etc.) and how seeds become contaminated, can lead to better sanitation practices to satisfy third party audits, and a more stable income for farmers.



Major outputs

Understanding the major sources of sesame contamination by *Salmonella* through the growing, harvesting, packaging and shipping processes in sub-Saharan African countries that export sesame seeds. By solving this, we will be directly solving major public health and trading problems faced by the different regional industries, especially small enterprises that incorporate into their production. *Salmonella* isolates will be typed to show the progression of contamination along the food chain. Food isolates will be compared with clinical isolates from individuals ill after consuming products made with sesame seed products.

A well trained team to train small business operators, particularly aimed at women, on the best practices using GAPs from practices recommended by FAO and WHO and data derived from the testing (Objective 2), and to do periodic checks in collaboration with Ministries to detect the presence of *Salmonella* and *E. coli* in sesame seeds and environmental samples.

Continuous updates on HACCP issues will be maintained on the proposed website and these will be communicated across the supply chain by professional associations and farmers cooperatives.

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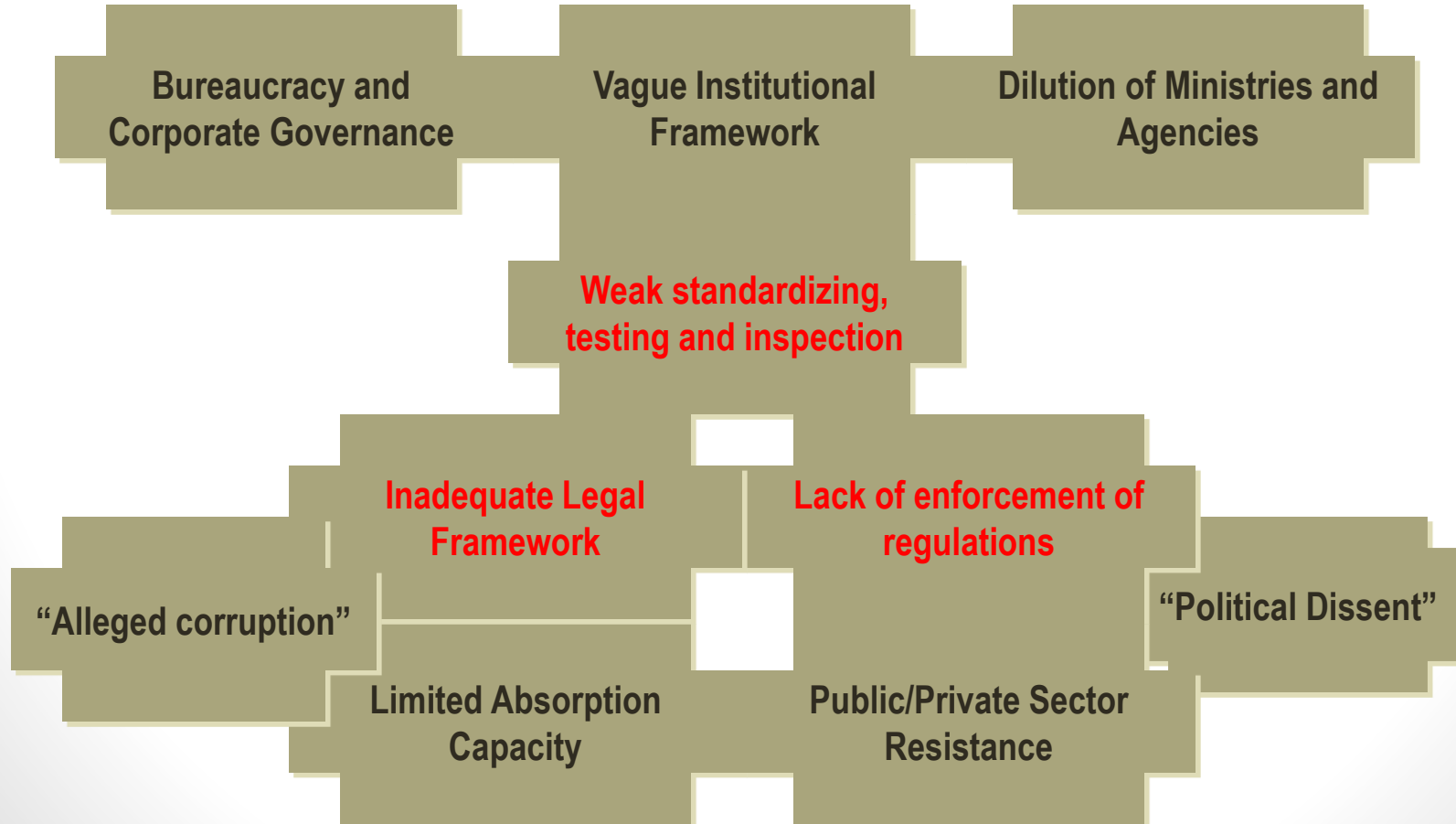
مستشارو السلامة الغذائية للشرق الأوسط وشمال إفريقيا

Trade, Environment and Future Trends



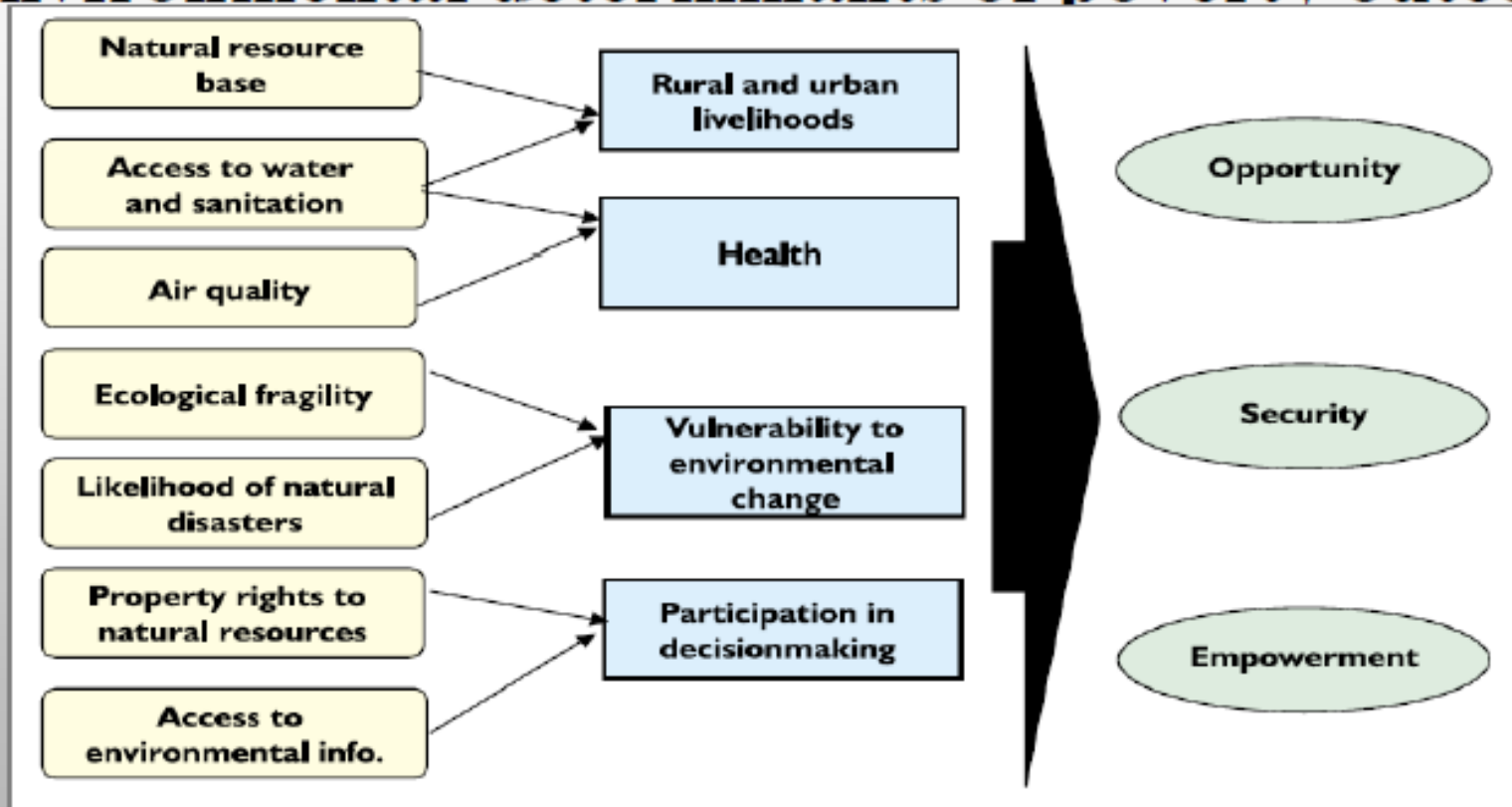
In MENA Food Security/Safety & Market Access has been hindered by different impediments

Internal Impediments Include





Environmental determinants of poverty outcomes



Environment Strategy for the World Bank Group

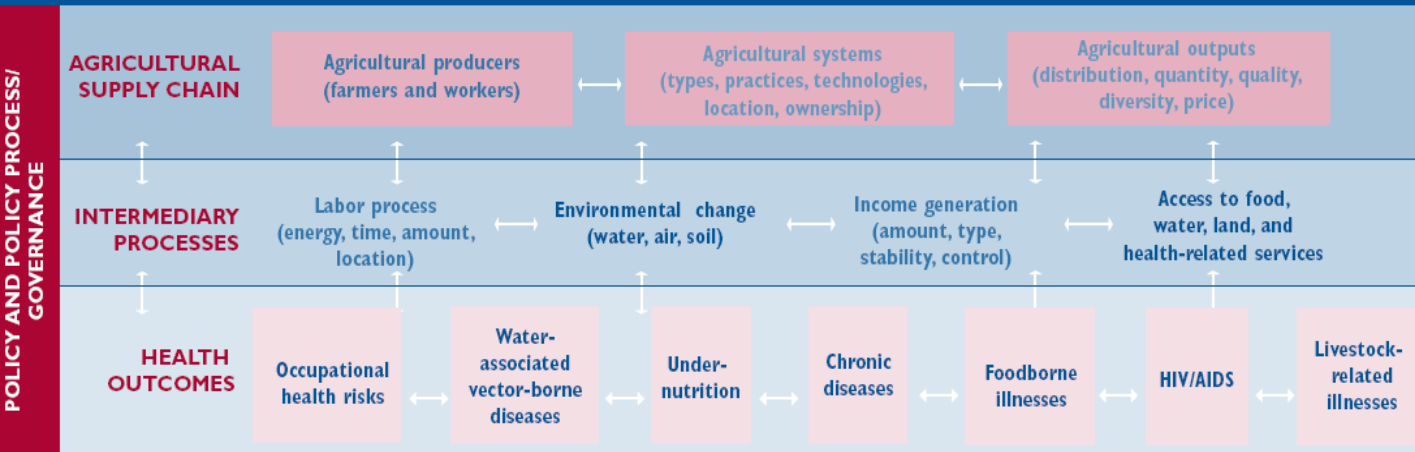
Progress Report/Discussion Draft April 2000



Consumers Concerns and Environmental Drivers

- Consumers' concern for food safety has been enhanced by recent widely publicized food poisoning incidences
- Food processors increasingly will be required to comply with strict quality assurance procedures such as HACCP, ISO-9002, and ISO 14000
- Desire for more nutritious and healthy foods is growing, particularly for low fat, low cholesterol foods and "organic" foods. Organically grown and natural food is considered superior by an increasing number of consumers and they are willing to pay premium prices for such products. Organic product markets are growing by 25 percent per year in the United States and Europe.
- Products carrying "fresh or natural" labels attract high consumer attention.

Conceptual Framework of the Linkages between Agriculture and Health

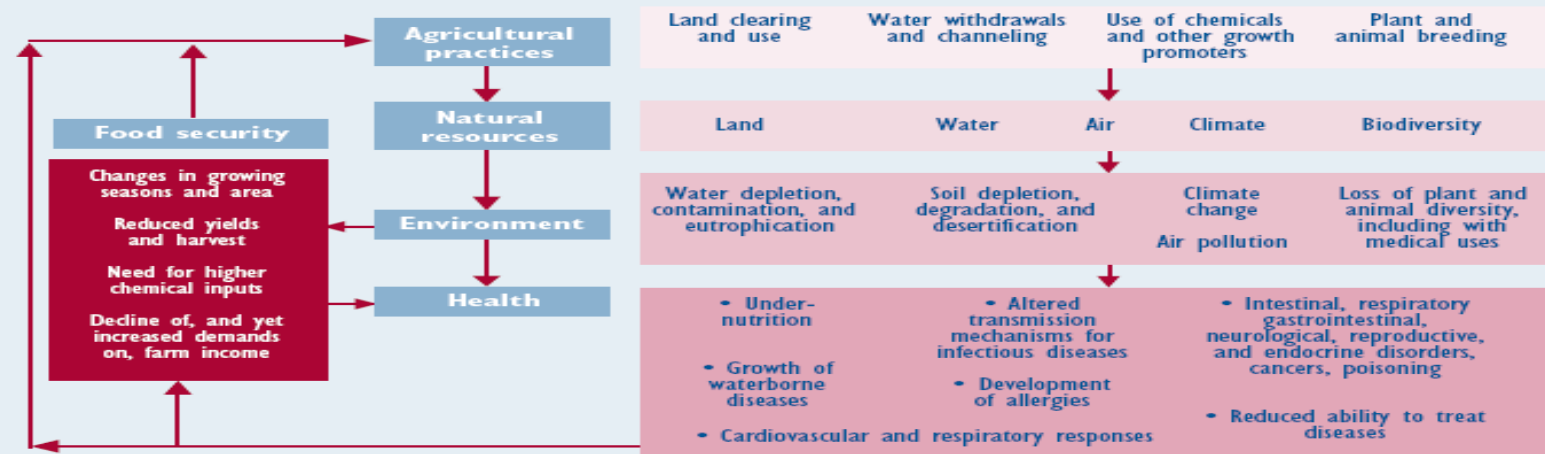




IFPRI, Agriculture, Environment,...: Toward Sustainable Solutions f130506

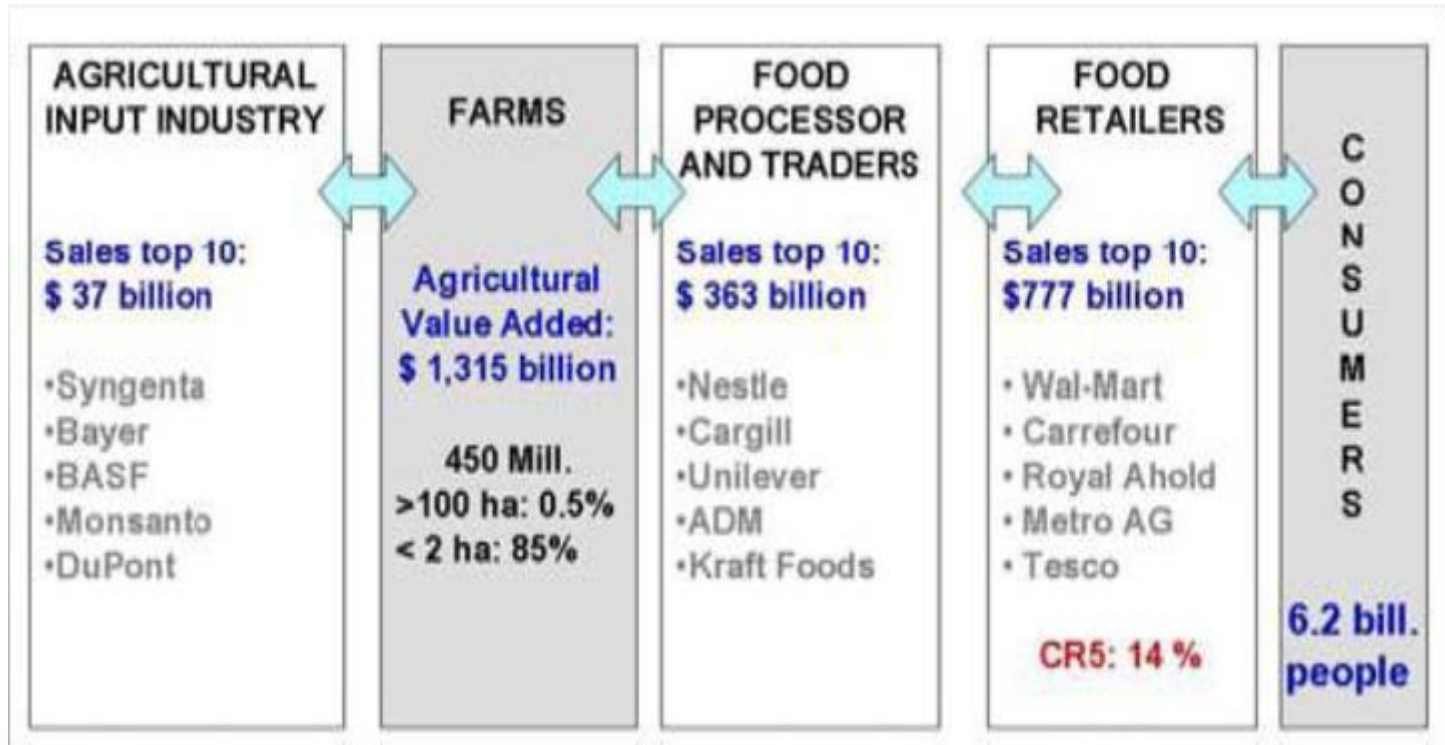
- To implement sustainable solutions, more specific knowledge of the linkages between agriculture, environment and health is needed... health impacts are relatively identifiable, better knowledge of the chronic health problems that arise from unhealthy agricultural practices is required.
- Policies should be enforced and also examined and possibly retooled to ensure that they are maximizing human health benefits. Although any positive health outcomes would be revealed only over the long term, such approaches are needed as human health becomes a higher priority in agricultural decision making. After all, agriculture relies on the productivity of the environment for its survival, and humans rely on agricultural productivity for their survival.

Links between Agriculture, Environment, Food Security, and Health





FUTURE TRENDS: A “Corporate View” of the GLOBAL AGRI FOOD BUSINESS CHAIN



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Science Capacity Building Concerns



• Who We Are

- Members of LAFST are a group of **food scientists, food technologists, food industrialists, food science professors and students, and related professionals** interested in promoting production of high quality processed foods.
- Also it includes professionals concerned with **food safety and quality, nutritional value of foods, and improving food standards and specifications.**
- Members of the executive committee are listed on the website.



LAFST was established in Lebanon in 1996 (A/D 264) with the aim to;

- Satisfy the professional needs of the increasing number of food scientists and technologists in Lebanon
- To have an Association of their own, focused on their interests and needs that is non-political, non-profit association



Goal of **Lebanese Association of Food Scientists & Technologists** is to assist in the development of the **food industry** with particular emphasis on **food quality , food safety , & security** . This is achievable through the support of its **members in establishing a scientific community among them locally , regionally and globally** , to better share knowledge in:

- Scientific advancements
- New technologies
- New regulations and legislation
- Meetings, conferences and workshops
- Job opportunities



What We Do

The Association holds a variety of activities during the year in the form of meetings, conferences and workshops at different institutions, universities and syndicates; the following are topics of a sample of these activities held since 1996:

- What is the role of a food technologist
- Food quality control and nutrition facts
- Food laws in Lebanon
- New UHT processing of Middle Eastern foods (workshop)
- How to start your own food business (workshop)
- Food standards in Lebanon
- Pest management in food establishments
- Chemistry and technology of frying oils
- FDA filing documents for low-acid foods (workshop)
- Bioterrorism Acts and the food supply chain
- Technical capabilities of Government laboratories
- Use of probiotics in food manufacturing
- Speakers at these activities include Lebanese and International scientists, industrialists, Government officers, and UN experts.
- Quality Program of the Ministry of Economy and Trade





INTERNATIONAL UNION of FOOD SCIENCE AND TECHNOLOGY

Global Challenges for Food Science and Technology

- 70% increase of the world food supply estimated to feed 9 billion people by 2050
- Agriculture is projected to account for up to 50% of total green house emissions by 2030
- Food waste harms climate, water, land and biodiversity - 1/3 of the total food production!
 - total cost \$750 billion annually
 - 1.3 billion tonnes of food waste per year

FEEDING THE PLANET

INVESTMENT FOR A SAFE FOOD SUPPLY



IUFOST

INTERNATIONAL UNION of FOOD SCIENCE AND TECHNOLOGY

Strengthening Global Food Science & Technology for Humanity

- More than 300,000 food scientists and Technologists worldwide
- Scientific expertise at the global level
- Over 75 national food organizations
- Unparalleled networking

Develop

- Professional development on a global level
- Education and training
- Regional conferences and symposia
- World Food Congress
- Scientific Information Bulletins
- Journals, books, newsletters

Grow

International Academy of Food Science and Technology

Regional Groups - Association Latinoamerica y del Caribe de Ciencia y Tecnologia de Alimentos (ALACCTA), European Federation of Food Science and Technology (EFFoST), The Federation of the Institutes of Food Sciences and Technology in ASEAN (FIFSTA), Western African Association of Food Science and Technology (WAAFoST), Middle East and North Africa Association of Food Science and Technology (MENAFoST)

Special Interest / Disciplinary Groups - International Society of Food Engineering (ISFE). International Commission on Microbiological Specifications for Foods (ICMSF), International Symposium of Properties of Water (ISOPOW), International Society of Nutraceuticals and Funcational Foods (ISNFF), International Food Research Collaboration (IFRC), International Society Food Applications Nanoscale Sciences (ISFANS)





INTERNATIONAL UNION of FOOD SCIENCE AND TECHNOLOGY

Food Security – IUFoST Training Modules:

Introductory • Intermediate • Advanced

Available modules:

- Food Safety
- Quality Assurance
- Food Laws and Regulations
- Shelf-Life of Foods
- Minimally Processed Foods
- Thermal Processing
- Food Dehydration and Drying
- Food Freezing
- Food Packaging
- Food Nutrition
- Food Science/Technology Information Sources
- Numeracy Guide

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Recommendations and Conclusions



Some Recommendations

- 1) Food Safety should be a regional program.
- 2) Built on private public shared vision , and full research partnership.
- 3) With the collaboration of Agro-economic regional stakeholders .
- 4) While focusing on consumer concerns ,addressing health and food safety priorities.
- 5) Providing a preventive approach from the intention of consumption all the way through Agricultural and Environmental sustainable development initiatives .
- 6)With a Regional Common Agricultural Policy.
- 7) And a Pan Arab Food Safety Institute.
- 8) Upholding quality and related TQM,ISO & HACCP principals.
- 9) Through a real win- win private / public partnership.
- 10) Confronting the challenges of poverty, desertification, global warming, & other environmental challenges.
- 11) While considering other global concerns and the actions of the global Agri-food chain.
- 12) While empowering Arab SME's with appropriate technologies & capacity building.

توصيات

- 1) السلامة الغذائية مشروع اقليمي
- 2) يحتاج لتضامن رؤية القطاع الخاص والعام
- 3) على أن يتضمن تعاون الفاعلين في الاقتصاديات الزراعية الاقليمية
- 4) مرتكزا" على حاجات المستهلك وتطلعاته الصحية
- 5) مؤمنا" رؤيا وقائية ابتداء" من نية الاستهلاك، كما الزراعة حتى البيئة وبصورة مستدامة
- 6) عبر تفعيل السياسة الزراعية العربية المشتركة
- 7) ومؤسساتها الضامنة للسلامة الغذائية
- 8) مع التركيز على البرامج العالمية ISO 22000 بما فيها برامج تحديد النقاط الحرجة (HACCP)
- 9) عبر مشاريع مشتركة فيما بين القطاعين العام والخاص
- 10) لمواجهة تحديات الفقر، والتصحر، والانحباس الحراري كما التغيرات المناخية عامة...
- 11) بما يتلاءم مع تطورات واستحقاقات العولمة وعمل الشركات العملاقة في سلسلة الغذاء
- 12) مع عدم التعاقل عن حاجات المؤسسات الوسطى والصغرى.



الخلاصة













في زمن العولمة أصبحت المواصفات والقوانين الغذائية تتغير بانتظام مما يحتم تنسيق ومواءمة هذه القوانين بهدف الالتزام بها ومواكبة التشريعات الاجرائية التنفيذية المتعلقة بسلامة الغذاء .

مما يقتضي على جميع العاملين والمتحالفين في امور السلامة الغذائية ,العاملين في المجال الوطني، كما العاملين بالشأن الاقليمي مواجهة تحديات منظومة السلامة الغذائية بروياً وبعمل منسق وهادف حيث أن الاجراءات التفاعلية، وحتى اجراءات ردات الفعل الحازمة، لم تعد تفي بمستلزمات السلامة الغذائية ومقتضيات المهنة في نظامنا العالمي الجديد. لقد اضحت منظومة السلامة الغذائية العلمية مبنية على اجراءات متقدمة تهدف الى وضع الاولويات الوقائية المسبقة في أساس برامج السلامة الغذائية حملية للمستهلك ووقاية له.

ويعمل القطاع الخاص على مواكبة منظومة السلامة الغذائية هذه، ويحاول تعزيز تحالفاته مع المجتمع الأهلي، والاكاديمي، والقطاع العام بهدف تعميق مفهوم السلامة الغذائية في منطقة الشرق الأوسط وشمال افريقيا، ويهدف الالتزام بخارطة طريق وقائية، وبقواعد السلامة الغذائية العصرية، استجابة" لهذه المنظومة العلمية، وتحقيقاً" للأمن الغذائي .

على منطقة التجارة الحرة العربية الكبرى تكثيف وتنشيط عملها المشترك لمواجهة التحديات وتحقيق البنية التحتية المواكبة لاجات السلامة الغذائية العصرية واتفاقات منظمة التجارة العالمية ومواصفات دستور الغذاء (الكودكس) والتزاماته.

Diverse Industry and Association Collaboration

Romer Labs	 <p>The worldwide expertise in mycotoxin solutions</p>
Decagon	 <p>Decagon Devices, Inc. Measure the World!</p>
Green Spriny	 <p>ShenZhen Lvshiyuan Biotechnology Co., Ltd</p>
Hyserve	 
Dickson	
Phoenix	 <p>Mapping Livestock Cropping</p>
Equiplad	 
Landell Mills	 <p>DEVELOPMENT CONSULTANTS</p>
 <p>Association AGRIPOLE</p>	 <p>الوفيق Alwafik للإنشاء الاقتصادية الزراعية</p>



Logos include:

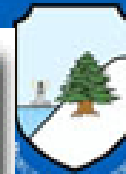
- UCCIAAC General Union of Arab Chambers
- Green wedge s.a.l.
- العزيم Othaim
- GARDENIA GRAIN D'OR
- CONSUMER'S LEBANON جمعية المستهلك لبنان
- Syndicate of Lebanese Food Industries
- QUALEB
- YATAN HURRIYET EKMEK TÜRKİYE ZIRAAT ODALARI BİRLİĞİ TZOZ 1963
- everyday... e... safe restaurant
- Rafaat Hallab 1881 THE TASTE OF LEBANON
- AFS
- شبكة المنظمات العربية غير الحكومية للتنمية Arab NGO Network for Development



Broad Technical & Academic Collaboration



AUB
American University of Beirut
الجامعة الأمريكية في بيروت



BAU
Beirut Arab University



LEBANESE INTERNATIONAL UNIVERSITY



معهد البحوث الصناعية
INDUSTRIAL RESEARCH INSTITUTE



Université Antonine

KSTATE
Kansas State University

Universität Bremen

MICHIGAN STATE UNIVERSITY



RHU
Rafik Hariri University
جامعة رفيق الحريري



Regional Collaboration/Across Agencies

codex alimentarius commission



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS



WORLD HEALTH ORGANIZATION



THE GLOBAL COMPACT



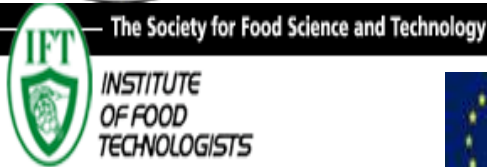
Regional Office for the Eastern Mediterranean



AMIDEAST
امد إيست



EUROMED



ainia



فريدريش ناومان
Friedrich Naumann Foundation





Thank you

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