



Supporting Innovation & Entrepreneurship Turning Agri-Food Challenges into Solutions in the MENA Region

PRIMA Synergies with EU, Regional & International Organizations Workshop

Athens, Greece, Nov 21, 2019

Berytech
The Ecosystem
for Entrepreneurs

Initiated by
USJ
جامعة Saint Joseph de Beyrouth
جامعة القديس يوسف في بيروت

Accredited as
eubic
certified by eton

Agrytech
Agri-food Innovation Hub

Turning Challenges Into Opportunities



INPUT



PRODUCTION



PROCESSING &
DISTRIBUTION



MARKETING



CONSUMER

Turning Challenges Into Opportunities

CHALLENGES

- **Global Food Security Problems** , major challenges in the MENA Region
 - Population growth
 - Water / Salinization / land degradation
 - Excess Loss and waste of food along the value chain
 - Political turmoil
- **Brain-Drain** of graduates & **High unemployment rate** for educated youth
- **Poor practices** and Low productivity
- **Lack of innovation** in the sector

OPPORTUNITIES

- **Strong Human Capital**
 - Excellence in STEM education
 - Strong Diaspora
- **Striving Entrepreneurial Ecosystem**
- **Government Interest in Productive Sectors***
- **Funding opportunities***
- **Dutch Expertise**
- **MENA Market**



INPUT



PRODUCTION



PROCESSING &
DISTRIBUTION



MARKETING



CONSUMER

Promoting Innovation:



Robotics



Remote Sensing



Automation



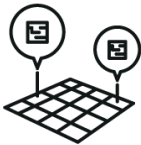
E-commerce



Traceability



Big Data



Artificial Intelligence



Sensors



IOT



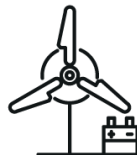
Internet



Logistics



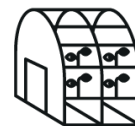
Drones



Energy Efficiency



Payments



Urban Agriculture



Supply Chain

[the above is a **NON EXHAUSTIVE** List]

Hub Tools to foster innovation



Online Platform and communication

Promoting the program, open innovation, support interventions



Outreach & Motivation

Outreach, Startup Weekends, IDEATION Days, Field Visits FYP Reviews



Prototyping facilities

Fast Prototyping Facilities
FabLab
Hardware/ Electronic Partnerships
Open to all



Acceleration & Incubation

Hosting, acceleration and incubation to support, validation, commercialization internationalization fund raising



Grants + Matching Grants

Cash grants to support MVP, acceleration and matching grant for the incubation phase



Clustering

Providing a range of support to grow the sector and lobby and support startups and SMEs
Bring in Expertise

NL Supporting partners



Kingdom of the Netherlands

Berytech

Hub Tools to foster innovation



Online Platform and communication

Promoting the program, open innovation, support interventions



Outreach & Motivation

Outreach, Startup Weekends, IDEATION Days, Field Visits FYP Reviews



IP Valorization

Promoting the program, open innovation, support interventions



Prototyping facilities

Fast Prototyping Facilities
FabLab
Hardware/ Electronic
Partnerships
Open to all



Acceleration & Incubation

Hosting, acceleration and incubation to support, validation, commercialization internationalization fund raising



Grants + Matching Grants

Cash grants to support MVP, acceleration and matching grant for the incubation phase



Clustering

Providing a range of support to grow the sector and lobby and support startups and SMEs
Bring in Expertise

NL Supporting partners



Kingdom of the Netherlands

Berytech

Creating an Innovation Hub



INPUT



PRODUCTION



PROCESSING &
DISTRIBUTION



MARKETING



CONSUMER

Activities & Outreach



STARTUP FUNDING



PROTOTYPING FACILITIES



BUSINESS COACHING



CUSTOMER ACCESS



INDUSTRY CONNECTIONS



FOLLOW-ON MENTORING

Berytech

Startups Activities



Startups in Agri-Food Innovation



INPUT



PRODUCTION



PROCESSING &
DISTRIBUTION



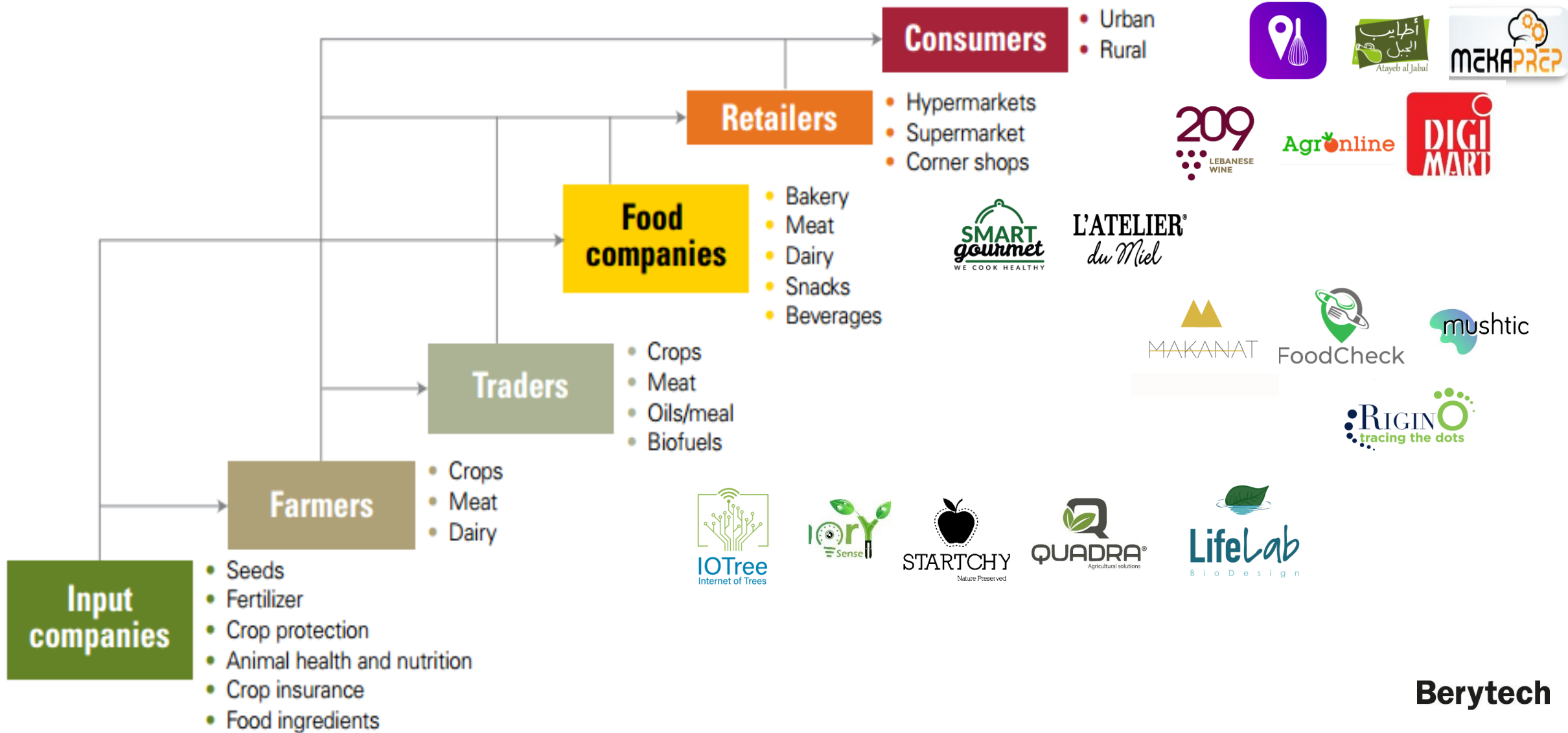
MARKETING



CONSUMER

Agrytech
Agri-food Innovation Hub

The Agriculture & Food Value Chain



Some of our Supported Startups



Helping Farmers traders and exporters reducing fruits waste and generating more revenue.



AI and Machine learning Smart Trap to provide direction to Farmers for smarter pest management.



Waste Water Composting Units to optimize reuse of water for agriculture



Innovative cooking techniques
100% Natural Meals
Up to 6 Months shelf life / no preservatives



Small scale smart Fruit Sorting machines adapted to local and regional context



Biodegradable Styrofoam substitution based on Mushroom and agriculture waste



Providing Opportunities to freelance caterers / Ethnic preserves
Increase revenues in underused industrials kitchens & rural cooperatives



Farm to Processing Traceability solution adapted to local context, with impact on export

Dealing with Challenges & Scaling Impact



INPUT



PRODUCTION



PROCESSING &
DISTRIBUTION



MARKETING



CONSUMER

“Connecting the Dots” / Main Challenges Faced

Disconnect between Agriculture & Technology/Engineering Sectors: No Clear Understanding (or interest) of Current Status, Challenges and Potential Solutions



Private Sector Resistance: Resistance towards posing challenges, and initiating partnerships with potential entrepreneurs for solving challenges



Public Sector Policy & Relationship with Innovation: No clear strategy, lack of resources /Budgets, poor understanding of sector needs in regards to digitization and innovation



Mechanism of Financing for the sector: at all levels
Research and valorization, investing in precision agriculture tool, digitization of Info sharing, digitization in Trading etc.



Lack of Structured Pipeline for Innovation from Universities: Scarcity of Joint Faculty applied research, Lack of Student Orientation towards innovation, R&D, poor IP and TT policies.

Translating them to actions

Promoting Partnerships with NGOs- Post Challenges
to generate interest / Applications

Promoting Spin-off as pilot activity with small group of companies engaged in innovation / Open Innovation concept

Working with Universities on selection number of **research projects that can be commercialized - pushing policies towards IP valorization**

Holding more Agri-Food Ideation Camps / HACKATHONS to promote the concept of Smart Agri-Food Innovations



Arabspacial.org
Lebanonspacial.org



Scaling Up Impact!



- **Bridging:**
 - Lead a movement of support in the MENA Region Focused on innovation in the **Agriculture, Water and Energy Nexus**.
- **Scaling:**
 - Leading a **movement for integration** of frugal and social innovation to ensure impact amongst all agri-food players small and big
- **Accelerating:**
 - Development of a **regional accelerator with international connections** and networks in the private and public spaces.
- **Funding:**
 - Support the creation of a **specialized VC fund** for Agri-Food Innovations



THANK YOU
www.agrytech.org



Ramy Boujawdeh
Deputy GM, Berytech
Phone: + 961 4 533040 | Cell: +961 78 888 902 |
rboujawdeh@berytch.org

Berytech
The Ecosystem
for Entrepreneurs