Background
The Ohio-Israel Agricultural Initiative (OIAI) of The Negev Foundation, established in 2002, is a unique bi-national program linking the food and agricultural sectors of Ohio and Israel through trade opportunities, collaborative ventures, educational programs, and joint research & development. Our mission is to create new business opportunities for food producers and agribusinesses in Ohio and Israel, for the benefit of both states.

Support
Support for the Ohio-Israel Agricultural Initiative has come from The Negev Foundation; USDA; county, city and state governments in Israel and Ohio; various agricultural trade associations; and private individuals.

Objectives
Enhance trade opportunities, technology transfer, and cooperation between Ohio and Israel in the agriculture and food industries.

- Expand commercial ties, market access, and export/import between Ohio and Israel
- Attract Israeli businesses to Ohio
- Foster greater collaboration between Ohio and Israeli government agencies, research institutions, farmers, food producers and agribusinesses
- Develop joint research and development activities

Examples of Activities and Achievements

Trade

Export from Ohio to Israel
Objective
To introduce Ohio products to potential Israeli importers, distributors and customers to enhance export opportunities for Ohio farmers, agribusinesses and food producers

Actions
- Provide personalized assistance and individual counseling to Ohio companies looking to expand their markets, educate them about export opportunities to Israel, and help actualize their business goals

Accomplishments
- Export of grains
  - Export of Ohio soybeans to Solbar, an Israeli soy protein producer
Export of organic spelt from Twin Parks Organic Farm in West Salem, OH to Israeli food buyers

Export of processed food
- Export of breakfast cereals made by Ralston in their Lancaster, OH plant to A.D.A. Food Imports and Marketing of Herzliya, Israel, which were then sold in Israel’s main supermarkets
- Export of Almondina cookies, made in Maumee, OH by YZ Enterprises, to several Israeli importers (Blue Square Group/Mega, American Quality Products Ltd., Roberto Food Ltd., and Moryam Marketing Ltd.) for distribution in Israel
- Export of green coffee by CBI (Cooperative Business International) of Columbus, OH to an Israeli distributor

Export of Ohio cattle genetics to Israel
- Cattle semen from Select Sires of Plain City, OH to dairy and beef cattle farmers in Israel to enrich Israeli cattle genetics
- Red Angus embryos from GSM of Lebanon, OH to Tene Farm of Ramat Negev, Israel, to develop a commercial breeding herd of Red Angus in Israel’s Negev desert

Export of animal feed
- Export of fish feed and marine salts made by Omega Sea of Painesville, OH to SeaShell of Zur Moshe, Israel, for distribution in the Israeli aquaria market
- Export of pet food manufactured by Bil-Jac Foods of Medina, OH (dog food) and IAMS Company of Mason, OH (cat food and dog food) to the Israeli pet food market

Export of manufactured materials and systems
- Export of synthetic hydroponic plant-growth substrate by Sure to Grow of Beachwood, OH to an Israeli distributor
- Export of water softeners and reverse osmosis equipment manufactured by Kinetico in Newbury, OH to Global Environmental Solutions (GES) of Akko, Israel

Export of dairy industry products and systems

Import from Israel to Ohio

Objective
To bring advanced Israeli agricultural technologies and systems to Ohio to increase farming efficiency and profitability

Actions
- Help Israeli agribusinesses identify potential Ohio distributors and customers for Israeli products such as advanced agricultural systems. Keep working with current Ohio distributors and clients

Accomplishments
- Import of horticulture and floriculture products and systems
  - Import of drip irrigation products, micro-irrigation accessories, water filtration systems, and water management solutions produced by the Israeli companies Netafim, Arkal, Dorot, A.R.I., ODIS, Arad, and Amiad
  - Import of fertilizer injectors from Tefen Advanced Plastic Solutions of Nahsholim, Israel
  - Import of greenhouse dehumidifying/heating systems from Agam Greenhouse Energy Systems, Ltd. of Kiryat Malachi, Israel
  - Import of flowering-plant cuttings from Israel’s Danziger Flower Farm, Jaldety Propagation Nurseries, and Cohen Propagation Nurseries
  - Import of edible food-plant live cuttings from Hishtil Nurseries Corporation of Nehalim, Israel
- Import of dairy industry products and systems
Import of systems for livestock herd management and milking parlors from Afimilk of Kibbutz Afikim, Israel

Import for the aquaculture industry
- Import of all-male shrimp larvae from Enzootic of Beer Sheva, Israel

Import of products and systems for the poultry and swine industries
- Import of equipment for the poultry and swine industries from several Israeli manufacturers via Diversified Imports

Business Attraction of Israeli Companies to Ohio

Objective
To attract Israeli food and agriculture businesses to Ohio for manufacturing, warehousing, and distribution in order to retain and create Ohio jobs and enhance the Ohio economy while providing market access for the Israeli companies.

Actions
- Assist Israeli companies looking to enter the U.S. market and to set up a base of operation in the U.S. by presenting Ohio as a viable destination; provide joint venture matchmaking opportunities including Ohio manufacturing, distribution, warehouse facilities and logistics centers to facilitate access to profitable U.S. markets

Accomplishments
- Dairy industry business attraction
  - The herd management systems manufacturer Afimilk of Kibbutz Afikim, Israel, opened S.A.E. Afikim USA, Inc. in Massillon, OH. It serves as Afimilk’s North American headquarters, logistics center, warehouse and training center, creating new Ohio jobs and retaining others.
- Food manufacturing business attraction
  - The Mediterranean-style cheese producer Gad Dairy of Bat Yam, Israel, entered into a joint venture with Troyer Specialty Foods / Bunker Hill Cheese Company. The joint venture, named Ezra’s Dairy, manufactures Feta-style cheeses in the Berlin, OH facility, providing additional revenue to the Ohio company and creating new Ohio-based jobs.

Contract Work for Israeli Companies in Ohio

Objective
To help obtain contract research and manufacturing work for Israeli companies to be done in Ohio by Ohio-based companies, resulting in added Ohio income and jobs

Actions and Accomplishments
- Agrochemicals contract research
  - Ricerca Biosciences of Concord, OH, secured contracts and conducted agrochemical research for several Israeli companies. More research contracts are expected to come in from Israel. Revenue from contract research for Israeli companies by Ricerca is increasing, resulting in added Ohio jobs.

Outreach and Educational Activities

Conducting Workshops and Demonstrating Products

Objectives
To help Ohio farmers understand the benefit of using advanced Israeli technologies and systems; to get Ohio food manufacturers to realize the advantage of kosher certification in developing added value products and expanding market share; to expose Ohio and Israeli researchers to
activities done by their counterparts and encourage R&D collaborations between Ohio and Israel; to present Ohio-Israel trade opportunities to Ohio and Israeli buyers and manufacturers in the food, agriculture and related industry sectors and encourage trade; and to help Israeli businesses understand the advantage of using Ohio as a base of operation and a gateway to the U.S. market.

**Actions and Accomplishments**

- **Demonstration in Ohio**
  - OSU and OIAI, in collaboration with Israeli agribusinesses, established a demonstration unit at OSU South Centers in Piketon, OH. The site features the products of 13 Israeli agribusinesses (Amiad Filtration Systems, Arad, A.R.I., Arkal Industries, Dorot, Mapal Plastics, NaanDanJain Irrigation, Netafim, Paskal, Pelemix, PIP Pulsating Irrigation Products, Technoram, and Tefen Plastic Products Ltd.). Showcased technologies such as Israeli micro- and drip-irrigation, fertigation and water filtration systems are aimed at enhanced efficiency of water usage and reduction of fertilizers usage, water runoff and ground water contamination, which results in an economic advantage to the farmer. The demonstration site is open to farmers and visitors during the growing season. It is also used to showcase the Israeli horticulture technologies and products during OSU Extension horticulture training workshops offered to Ohio farmers.

- **Conducting workshops and seminars in Ohio with presentations by Israeli professionals, Israeli company representatives, OIAI’s representatives, and OSU extension**

  - **Trade:**
    - Trade opportunities with Israel workshop for “Target” OSU program
    - Trade with Israel seminars, including updates on Israeli agribusinesses, products and technologies, at business forums such as Going Global International Trade Forum, Northeast Ohio Agribusiness Forum, and North Coast Global Trade Forum
    - Presentations to Ohio food producers about opportunities to export processed foods and beverages to Israel at ODA, ODOD, DSA, and Food Export Association’s events, including Export Resources Seminar, Export Education Seminar, Food Export Seminars and Workshops, and Prepare for Export Success event
    - Seminar about trade opportunities with Israel to organic farmers
    - Seminar about international trade and policies in agriculture
    - Seminar about Israel-U.S. agricultural cooperation and trade
    - Seminars about international cooperation involving Israeli agriculture

  - **Food safety and processing:**
    - Kosher food certification and marketing seminars
    - Food security workshops
    - Food safety seminar with a focus on meat
    - Seminars about Kosher slaughtering, meat inspection and food safety
    - Workshops about the mini-dairy processing technology and equipment by Pladot company of Kibbutz Ein Harod Meuhad, Israel

  - **Aquaculture:**
    - Workshops about the MegaFlow systems for recirculating aquaculture by Kora company of Zofit, Israel
    - Workshops about recirculating aquaculture technologies in Israel
    - Seminar about all-male freshwater shrimp production technology by Enzootic of Beer Sheva, Israel
    - Seminar about Israel’s aquaculture
    - Seminar about computer simulation in recirculating aquaculture

  - **Dairy and Beef Cattle:**
► Dairy nutrition seminars
► Dairy replacement-heifers seminars
► Dairy genetics and breeding seminars
► Robotic milking seminars
► Seminar about cattle genetics identification and the use of Autentica DNA system by Bactochem Ltd. of Ness Ziona, Israel

Horticulture and Floriculture:
► Seminar about growing vegetables in Israel
► Seminar about floriculture in Israel
► Training workshops about growing pumpkins, strawberries, ribes, blueberries, blackberries, wine grapes, and hops
► Training workshops about drip irrigation
► Training workshops about horticulture
► Training workshop about high tunnel structures
► Training workshop for beekeepers

Agriculture, Agritourism, Rural Development, Water Management, Biosecurity, and Extension:
► Seminars about the agritourism industry in Israel
► Seminars about rural development
► Seminars about agriculture and rural development
► A presentation about Israel’s rural communities
► Seminars about water management
► Agriculture biosecurity workshops
► Agriculture extension service seminars
► Orientation seminar about Israel’s agriculture

R&D:
► Seminars about Ohio-Israel R&D collaboration opportunities through the U.S.-Israel Binational Agricultural Research and Development Fund (BARD)

Internship in Israel:
► Presentations about the agricultural student internship program in Israel

• Conducting workshops, seminars and symposia in Israel

Trade:
► A symposium about agricultural trade opportunities for Israel with Ohio and the U.S., presented at AgroMashov 2010, with 7 presentations
► A symposium about needs and opportunities in agriculture, food and energy in the U.S. , presented at AgroMashov 2011, with 10 presentations

Aquaculture:
► Seminar about the Ohio aquaculture industry
► Seminars about increasing global food supply through advanced aquaculture

Food safety and processing:
► Seminar about functional foods
► Seminar about the agricultural perspective on food production, sustainability and alternative energy in the U.S.

Dairy and Beef Cattle:
► Presentation about Ohio’s dairy industry

Horticulture and Floriculture:
► Presentations about Ohio’s horticulture and floriculture industries
Participation in Tradeshows and Conferences, Presenting Ohio Companies and Products in Israel and Israeli Companies and Products in Ohio

Objective
To provide market exposure to Israeli and Ohio companies through presentation at food and agriculture-related tradeshows in order to promote Ohio-Israel trade opportunities, expand markets and increase sales in both regions.

Actions
- Present Israeli companies and opportunities in Ohio conferences, meetings and tradeshows, including:
  - Ohio Farm Science Review (FSR) Tradeshows
  - OFA Floriculture Tradeshows
  - Ohio Farm Bureau Federation (OFBF) Annual Meeting & Tradeshows
  - Ohio Aquaculture Association (OAA) local and regional Annual Meeting & Tradeshows
  - Stinner Summit Annual Meeting
  - Renewable Energy Workshop Annual Meeting & Tradeshows
  - Ohio Produce Growers & Marketing Association (OPGMA) Annual Conference & Tradeshows
  - Central Environmental Nursery Tradeshows (CENTS) Annual Meeting & Tradeshows
  - Ohio Food Industry Expo
  - Scarlet, Gray, and Green Fair
  - Ohio Ecological Food and Farm Association's (OEFFA) Annual Conference & Tradeshows
  - RAPRA’s Global Polymer Innovation Expo (GPIE)
  - Vintage Ohio Wine Festival
  - Food Export Learn & Sell
  - Fabulous Food Show
  - Ohio Seed Improvement Association (OSIA) Annual Conference
  - North Central Ohio Dairy Grazing Conference
  - NLGCO Field Day
- Present Ohio companies and opportunities in Israel and identify new Israeli business opportunities for Ohio at tradeshows and other trade related activities, including:
  - IsraFood-Hotex International Food & Beverage Exhibitions
  - Shufersal supermarket chain’s American Month in Israel
  - Blue-Square Co-Op supermarket chain American Health Food products promotion in Israel
  - Israel Aquaculture Association Annual Conference & Tradeshows
  - Agritech Tradeshows
  - AgroMashov Tradeshows
  - Arava Open Day Agricultural Conference & Tradeshows
  - CleanTech International Summit and Exhibitions
  - Watec Israel

Participation in Workshops, Seminars, and Meetings

Objective
To present OIAI and its activities to event participants that may be helped by the Initiative in market exposure and export to Israel.

Actions
- Participated and presented OIAI in various events, including:
ODA, ODOD, DSA, ITAC, and Food Export Association of the Midwest sponsored seminars such as Export Education Seminar, Export Resources Seminar, Manufacturing Export Resources Conference, Food Export Seminars, and Prepare for Export Success Seminar

BioScience Consortium of Northeast Ohio meetings

Northeast Ohio Food Chain Network meetings

Northeast Ohio Agribusiness Forum meetings

Southeast Ohio Agribusiness Forum meetings

Going Global International Trade Forum meetings at Braintree Business Development Center

Going Global International Trade Forum meetings at Kent State University (KSU) Tuscarawas

North Coast Global Trade Forum meetings

SBDC (Small Business Development Centers) at HKIC (Heights Knowledge & Innovation Center) meetings

NOITA (Northern Ohio IT Association) Tech forum

JumpStart Entrepreneurial Network meetings

Beachwood Chamber of Commerce events

Business Global Gateway Series meetings at CSU and at Beachwood Business Development Center

Business Gateway meetings by CSU and Shaker LaunchHouse

Annual Wayne Economic Development Council (WEDC) Ag Tour event

BioOhio Annual Conference, and BioOhio Suppliers & Service Providers Expo

NorTech Advanced Energy Speaker Series’ Biomass to Energy Symposium

Northeast Ohio International Business Network (NEOIBN) events

Ohio Agricultural Internship in Israel
Objective
To train Ohio college students in advanced agricultural technologies, preparing them to enter the Ohio job market with better skills

Actions
- Gave presentations about the OIAI Agricultural Student Internship program in Israel at OARDC and Hocking College, met with and interviewed interested students
- Administered the aquaculture internship program in Israel for Ohio college students

Accomplishments
- A total of 7 students of the Fish Management & Aquaculture Program at Hocking College, Nelsonville, OH, participated in the aquaculture internship program over a period of several years, training in Israeli Kibbutz fisheries. The program resulted in the students working in the Ohio aquaculture industry upon graduation.

Conducting Missions of Agriculture, Agribusiness and Food Professionals Between Ohio and Israel
Objective
To exchange technical knowledge between professionals in both regions, enhance trade opportunities, and facilitate Ohio–Israel export/import activities

Actions and Accomplishments
- Organized and facilitated professional delegations, buyers missions, and trade missions from Ohio to Israel, including:
- Feeder calf delegation
- Cattle genetics delegation
- Aquaculture delegation
- Dairy industry delegation
- Green industry delegation (horticulture and floriculture)
- Agritech trade missions
- Arava Open Day delegations
- AgroMashov trade missions
- Ohio legislators trade mission (the agribusiness-related meetings and site visits)
- Food export and contract research trade mission
- Cheese company representatives visits
- Trade delegations in conjunction with AgroMashov International Agricultural Tradeshows
- Trade delegations in conjunction with Agritech International Agricultural Tradeshows

- Organized and facilitated professional delegations, buyers missions, trade missions and visits of officials from Israel and Israeli institutions to Ohio, including:
  - Cattlemen missions
  - Cattle grazing and herd management visits
  - Cattle veterinarian visit
  - Cattle genetics and beef diagnostics company representative visit (Autentica/BactoChem)
  - Calves nursing system (SNS) inventor tour
  - Cattle traders buying mission
  - Kosher slaughtering expert visit
  - Dairy genetics expert visit
  - Dairy industry delegation
  - Robotic milking expert visit
  - Herd management and milking parlor systems company representatives business and R&D visits (Afimilk and Afimilk MCS)
  - Mini dairy company representative visits (Pladot)
  - Dairy company representatives tour and business visits (Gad Dairy)
  - Aquaculture delegations
  - Automatic feeding company representative tour (ConFeed)
  - Vaccines for aquaculture company representatives site visit (Kovax and Solkor)
  - Irrigation systems, accessories, and water filtration company representatives visits (Technoram, Netafim, Arkal, Dorot, ARI, ODIS, Arad, and Amiad)
  - Fertigation company representatives visits (Tefen)
  - Greenhouse dehumidifying/heating systems company representatives visits (Agam Greenhouse Energy Systems, Ltd.)
  - Biosecurity delegation
  - Green industry (horticulture and floriculture) delegation
  - Soil-less growth substrate company representatives tour (Pelemix)
  - Seed company representative visit (CY Seeds)
  - Food buyers missions (organized with ODA, ODOD/DSA, and the Food Export Association) (Tiv Taam, Shufersal, Roberto Food Ltd., American Quality Products Ltd.)
  - Soybean buyer visit (Solbar)
  - Water management expert visit
  - Agriculture and rural development reporter/editor visit
  - Extension and rural development expert visit
Organizing Agricultural and Agribusiness Tours for Ohioans to Israel

Objective
To share technologies and establish contacts for further collaboration and trade

Actions and Accomplishments
- Recruited for, organized and conducted agricultural and agribusiness trips (agro-tourism) for Ohioans to Israel, facilitating technology exchange between agriculture professionals in Ohio and Israel
  - Farmer to Farmer mission
  - Agribusiness mission
  - Agricultural mission
  - Agricultural tour of Israel (with Ohio Farm Bureau)

Joint Ohio-Israel Applied Research

Objective
To develop and test food and agriculture-related products through Ohio-Israel joint applied research and development in order to enter the market, benefiting companies in both regions.

Actions
- Connect companies, institutions and individuals involved in applied research & development to collaborate on projects of mutual interest, fund such projects, or direct parties to funding sources

Accomplishments
Past OIAI-funded Ohio-Israel applied research projects:
- Functional foods using soybean specialty products - The research opened up opportunities for production of soybean specialty and health food products using soy additives, and helped in the researchers obtaining BARD funding for further R&D and potential contracting with an Ohio saponins manufacturer.
- Plant disease bio-control - The results of the research may help in manufacturing safe pesticides.
- Improvement of cattle genetics - The research paved the way for export of Ohio cattle genetics to Israel to produce better quality meat.
- Greenhouse technology - The study pointed to the benefit of Israeli greenhouse technology to increase productivity in growing high-value products

Current and future Ohio-Israel R&D opportunities:
- Develop a reduced-salt feta cheese (Gad Dairy of Bat Yam, Israel and OSU)
- Test Agam greenhouse dehumidifying/heating system under Ohio conditions (Agam Greenhouse Energy Systems Ltd. of Kiryat Malachi, Israel and Foertmeyer & Sons Greenhouse of Delaware, OH)
- Test Afimilk/AfiLab systems for dairy herd management (Afimilk of Kibbutz Afikim, Israel and OSU)
Test Afimilk MCS system in milking parlors (Afimilk of Kibbutz Afikim, Israel and OSU)
Develop beverages with probiotics (Ganeden Biotech of Mayfield Heights, OH and an Israeli beverage company)
Develop engineered nano-material products for Israeli water treatment (MetaMateria of Columbus, OH and an Israeli company)
Develop root-system geothermal heating products to function under Ohio conditions (Roots Ltd. of Kfar Netter and an Ohio company)

Planned Future Activities
Building on past experience, continue with current activities and add new projects aimed at improving, enhancing and expanding economic development, trade opportunities, productivity, and job creation for Ohio food producers, agribusinesses and farmers. These planned activities include:

- Participate in more conferences and tradeshows in Israel and Ohio
- Bring Israeli buyers to Ohio to meet with Ohio suppliers and producers to facilitate Ohio to Israel export
- Bring Israeli experts to Ohio and send Ohio professionals to Israel for technology transfer
- Bring Israeli businesses to explore Ohio as a gateway to the U.S. and a business location
- Increase the number of Ohio food companies exporting to Israel and help maintain activities of current exporting companies
- Facilitate opportunities for development of Ohio’s agriculture using technology from Israel (e.g., horticulture, floriculture, dairy, and aquaculture)
- Expose more Ohio agriculture administrators, educators in academia and extension services, trade associations, federal, state and local governments, and farmers to technology and expertise that Israel can offer
- Facilitate more workshops and seminars on Israeli technologies
- Present more Israeli agriculture companies and technologies to Ohio farmers at tradeshows
- Help DSA organize an Ohio to Israel trade mission
- Create trade relationships between Ohio and Israeli agricultural and food companies through recruiting Ohio companies to present in tradeshows in Israel, have an Ohio trade delegation attend the tradeshow to scout for Israeli companies and introduce the Ohio companies
- Enable Ohio companies to be presented in Israeli tradeshows and to participate in trade missions to Israel
- Continue assistance to Ohio and Israeli companies and universities interested in bi-national R&D by direct matchmaking, and by directing to relevant funding sources (e.g., BARD and BIRD)
- Continue with efforts to lift the Israeli ban on exporting feeder calves from Ohio to Israel

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