



Pears Challenge 2022 ISRAEL'S DEVTECH VENTURE BUILDER

Developing Resilient and Sustainable Agriculture and Food Systems in Ghana

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January 2022

Welcoming words

The Pears Challenge was born from the realization that Israeli innovation can and should do more to address global challenges. While we in Israel have an impressive eco-system, it's hard for companies focused on developed countries to make the shift to address the challenges of low and middle income countries. The Pears Challenge is an attempt to "nurture" new technology-based solutions in hopes of growing into startups with a focus on development challenges. To ensure that we successfully bridge the gap between the needs in the field and the array of skills in Israel, we understood the need to learn an industry, understand its market and create connections.

We started planning the fifth cohort of the Pears Challenge in the midst of the COVID-19 crisis. This year's Pears Challenge, while not addressing healthcare challenges of the global pandemic, is very much focused on the challenges and needs which have been heightened by the pandemic, and to efforts to build back better in its aftermath.

The COVID-19 pandemic has taught us all the importance of building resilience to unexpected shocks and stressors, be they health emergencies or extreme weather events. In the modern world we are all vulnerable to unexpected crises. Only by developing robust and resilient systems capable of remaining strong in times of crisis will we be able to ensure continued global development. For this reason, we have decided to focus this year's Challenge on Resilient and Sustainable Agriculture and Food Systems in Ghana. In this context, resilience will mean supporting food systems in ways which strengthen their functionality and enhance their ability to remain robust, including in the face of future shocks.

This pandemic has exposed many glaring weaknesses and inequalities that characterize agriculture and food systems worldwide. The future of our global food systems is connected to the future and wellbeing of the over 500 million smallholder farmers producing 80% of the food consumed in the developing world. Many of these individuals live below the poverty line and are increasingly subject to shocks and stressors. In our vision for this year's challenge, supporting and strengthening smallholder farmers and the systems around them with sustainable technologies is essential for the future capacity of global food systems to equitably and adequately feed the world.

Another exciting and new feature in our program- and aspect of our new world - is our intentional design of the program to be hybrid. We will run sessions both online and in-person. Aside from reasons stemming from the pandemic, one of our main goals in doing so is to allow our Israel-based cohort to learn directly from and interact with our international partners on the ground. One of the core values of the Pears Program for Global Innovation is to "Innovate with respect and humility" - we believe in actively engaging people in the process of creating solutions to their challenges. We are confident that the people who understand best what is needed to address challenges are those that are directly facing them. Fortunately, we have all learned over the past two years how much it is possible to accomplish virtually. It has never been easier to run such process online. We hope to fully reap the benefits of online modalities to maximize interactions between our fellows and our partners internationally.

Finally, I would like to thank the Pears Foundation for enabling our work along the years and in this unique program – their faith in us is ultimately a sign of their faith in the ability of our fellows to develop and commercialize solutions that will have a real impact on global challenges.

I'd also like to thank all of our wonderful partners that have joined us on this journey. Your contribution up to now has been tremendous in shaping the program and we truly look forward to working with you and with our fellows in the coming year.

To our fellows, we are extremely excited to start our joint journey and can't wait to see that innovative, unique and disruptive ideas that will be developed in the coming months. We are especially eager to see how this work takes us out of our corner in Israel, and into the agriculture and food systems in West Africa. We hope in a year from now to see a new generation of Israeli technology companies with products that bring significant value to low-income populations worldwide.

Hagit Freud Managing Director





The Program

Exploration Phase

Date	Module	Sessions
January 27 18:00-21:00 (in-person)	Introduction #1: Program Kickoff event	 Introduction to the program Introduction to Ghana Team building
February 3 18:00-21:00 (in-person)	Introduction #2	 International development 101 & Technology for Development
February 4 10:30-13:30 (in-person)	Market Overview #1: Global Food Systems	 Breaking down the global discourse Understanding value chains and market potential
February 10 18:00-21:00 (online)	Market Overview #1: Global Food Systems	Climate resilience and sustainable agriculture
February 11 10:30-13:30 (online)	Market Overview #2: Agriculture in Developing Countries	 Smallholder farmers in Sub-Saharan Africa Traceability, transparency & sovereignty
February 17 9:00-18:00 (field day)	Field Day: Learning from Israeli players	Growing Cocoa in Israel, regenerative agriculture and AgriTech
February 18 10:30-13:30 (online)	Market Overview #3: Regional perspective	 West African value chains, trade and market potential Scaling-up technologies across the region
February 24 18:00-21:00 (online)	Market Analysis #1: Ghanaian food systems	Ghana's agriculture sector: systems, policies and infrastructure
February 25 10:30-13:30 (online)	Market Analysis #1: Ghanaian food systems	Staple crops, import substitution and export trajectories
March 3 18:00-21:00 (online)	Market Analysis #2: Corporate Spotlights	Cash crops, untapped potential and successful case studies
March 4 10:30-13:30 (in-person)	Market Analysis #3: Tier one problems	Cross-cutting themes, needs and opportunities
March 10 18:00-21:00 (online)	Market Analysis #4: Market deep dive workshop	 Market strength, leverage points and possibility for innovation
March 11 10:30-13:30 (in-person)	Challenge Identification	Problem identification and statement workshop
(in-person) 	Challenge Identification	Challenge 1-on-1 deep dive sessions with experts outside program schedule



Ideation Phase				
March 24 18:00-21:00 (in-person)	Apprenticing the problem #1	Breaking down a complex issue		
March 25 10:30-13:30 (in-person)	Apprenticing the problem #1 - working platform	 User-centered approaches to unpack a problem 		
February 31 18:00-21:00 (online)	Apprenticing the problem #2	 "Landscaping" workshop 		
April 1 10:30-13:30 (in-person)	Apprenticing the problem #2 - working platform	 Downloading learnings and data analysis 		
April 7 18:00-21:00 (in-person)	Inspiration #1	• Brainstorming solutions and creative thinking workshop		
April 8 10:30-13:30 (in-person)	Inspiration #1	 Design criteria and methodological problem solving 		
April 28 18:00-21:00 (in-person)	Inspiration #2	Creative workshop: Biomimicry and natural systems		
April 29 10:30-13:30 (in-person)	Inspiration #2	 Creative workshop: circular economy, product lifecycle and sustainable design Mentorship sessions 		
May 12 18:00-21:00 (online)	Inspiration #3	 Un-workshop & peer-exchange 		
May 13 9:30-12:30 (in-person)	Ideation #1	 Impact strategy, investment and priorities Impact measurement and theory of change workshop 		
May 19 18:00-21:00 (online)	Ideation #2	Idea presentation and roundtable feedback sessions		
May 20 10:30-13:30 (in-person)	Ideation #2	Idea iteration and refinement workshop		

Submission of Ideation Worksheet



Creation Phase			
June 2 18:00-21:00 (online)	Venture building #1	 Context-relevant business models Selling and scaling in West Africa 	
June 3 10:30-13:30 (in-person)	Venture building #1: working platform	 Value proposition, commercial viability and lean start-up workshops 	
June 9 10:00-18:00 (in-person)	Venture building #2	 Venture building full-day wokrshop 	
June 10 10:30-13:30 (online)	Venture building #2 Working platform	Partnerships 101 & Stakeholder mapping workshop	
June 16 18:00-21:00 (in-person)	Refinement #1	 Building the tech & legal matters 	
June 17 10:30-13:30 (online)	Refinement #1	 Refining the tech: feedback sessions with tech experts and mentors 	
June 23 18:00-21:00 (in-person)	Refinement #2	Pitching workshop	
June 24 10:30-13:30 (in-person)	Refinement #2	 Pitching to partners: speed mentoring event 	
June 30 18:00-21:00 (in-person)	Wrap up	 Concluding the process and preparation for written presentations 	
*Program is subject to change Submission of Creation Worksheet			

-Review and endorsement by external panel of experts-

- July/August: Field preparation and field validation trip in Ghana for endorsed ventures
- September onwards: Horizon Access to mini-grants, monthly group meeting & bespoke support

Pears Challenge Global Partners

Pears Foundation



Pears Foundation is a British family foundation driven by a desire to demonstrate the good that philanthropy can achieve in the world. The Foundation funds several Israeli initiatives and organisations, with the goal of building the capacity of Israel's international development sector and enabling the country, and the Jewish people, to share expertise and resources with developing nations. The Pears Program for Global Innovation is proud to have the Pears Foundation as its anchor investor since the Program's inception in 2009, the Pears Challenge is generously supported by the Pears Foundation.



CGIAR EiA

CGIAR EiA is an initiative aiming to deliver agronomic gain for millions of smallholder farming households in prioritized farming systems, with emphasis on women and young farmers for measurable impact on food and nutrition security, income, water use, soil health, and climate resilience.



Embassy of Israel in Ghana

The Embassy of Israel, located in Ghana's capital Accra, works to promote trade and investment relations between the countries in severak sectors, stressing on Agriculture, Water and Sanitation, Innovation, Health, HLS and Cuper Security.



FaculTech

FaculTech is an innovation club aimed at facilitating innovation and entrepreneurship skills among undergraduate and graduate students at the RH Smith Faculty of Agriculture, Food and Environment, focusing on Agritech, Foodtech and Cleantech. They believe students must engage in innovation throughout their academic obligations and schedules, in order for them to fulfill themselves and be ready for the outside world. Therefore, FaculTech aims to build and maintain a vibrant community composed of students, staff, alumni, and others- in order to encourage entrepreneurship and inspiration among students.



FairTrade Africa

Fair Trade Africa West Africa Network is one of the four member organisations of Fairtrade Africa, working with producers in Ghana, Cote d'Ivoire, and other satellite countries in West Africa. The region's activities also cover Cameroun. They help cocoa, coffee, banana, shea, cotton, fresh and dried fruit producers across the region to get better trade terms, access markets and build their capacity in social infrastructure.

Foreign Trade Administration at the Ministry of Economy

The Foreign Trade Administration at the Ministry of Economy is responsible for managing and directing the international trade policy of the State of Israel The main fields of activity include activities for the promotion of trade and export, initiating and maintaining trade agreements for the improvement of Israel's trade conditions, attracting and encouraging foreign investments and creating strategic cooperations with foreign companies. Together with the activity in Israel, the Administration operates a network of economic representatives who constitute the operational arm of the Ministry in the markets abroad.





GUPC GHANA PROMOTION CENTRE













Ghana Investment Promotion Centre

Ghana Investment Promotion Center is Ghana's foremost investment attraction and promotion agency under the Office of the President. Guided by the GIPC Act 2013 (Act 865), the Centre courts and facilitates valuable investments to stimulate economic growth, unlock opportunities and spur job creation. The Centre also provides a diligent team of resource persons to furnish investors with insight and necessary guidelines towards a successful integration into the Ghanaian World of business, and as such remains the first point of contact for all foreign investors coming to Ghana.

Herzog, Fox & Neeman

Herzog Fox & Neeman is Israel's premier law firm and has earned the reputation of market leader – evident by its recognition as best-in-class by all major legal publications and as "Israel Law Firm of the Year" by Financial Times and mergermarket, IFLR, Who's Who Legal and others. As Israel's most innovative firm, HFN is called upon to lead prominent and influential transactions in every industry – resulting in unrivalled experience in cross border and domestic transactions. HFN has developed practice specialisations by establishing dedicated teams, led by recognised experts in various fields, to provide clients with interdisciplinary solutions. HFN's forward thinking is demonstrated by the firm's establishment of a number of innovative departments, the first of their kind in Israel, with the objective of providing legal solutions for the changing global landscape. In keeping with the firm's global perspective, HFN works closely with leading firms in many jurisdictions around the world.

iDev Africa

iDev-Africa is a not-for-profit think tank working on interventions that support vulnerable communities and groups in Africa. By placing people at the centre of design, they believe that solutions to developmental problems will be more community led and transformative while strengthening local structures and leveraging them for impact. Their vision is to be a leading source of ideas, strategic support and information that aids improvements in the lives of Africa's vulnerable population.

Innohub

Innohub is a Business Accelerator, Management Consulting, and Impact Investment platform, which supports Small and Growing Businesses to become sustainable, scalable and investment ready, and match them to the capital needed for growth. Based in Accra, Ghana, their vision is to be Africa's world-class innovative business growth catalyst, and impact investment platform.

Kosmos Innovation Center

The Kosmos Innovation Center (KIC) invests in young entrepreneurs and small businesses who have big ideas and want to see their country grow. Currently operating in 4 countries, each Kosmos Innovation Center program is driven by local staff and private sector experts, resulting in a distinctive focus on commercial solutions and local knowledge. Their customized, best-inclass business support programs feature a mix of skills training, mentorship and seed funding. KIC currently operates in Ghana, Senegal, Mauritania, and the Ivory Coast.

Mega Concept

Mega Concept is dedicated to providing full consulting services to their customers in West Africa, as well as supplying them with highest quality Agricultural products and equipment from world's manufacturers and producers -some of whom supply to Mega Concept exclusively- at very reasonable prices.

Partners in Food Solutions

Partners in Food Solutions (PFS) is a growing consortium of world-class companies — General Mills, Cargill, Royal DSM, Bühler, The Hershey Company and Ardent Mills — that mobilizes and remotely transfers employee expertise to small and growing food companies in Africa. Their goals are to improve food security, nutrition and economic development by helping Africa-based food companies produce more local, nutritious and safe food at affordable prices, and increase market demand for crops from smallholder farmers. By working with processors and mills in the middle of the value chain, they intend to help improve the whole value chain — from farmer to consumer. PFS has been widely recognized by global leaders as an innovative, private-sector approach for improving food security, nutrition and economic development across Africa.

Quercus Group





The Robert H Smith Faculty of Agriculture, Food and Environment









Quercus Group is an international consulting company for sustainability based in Copenhagen, Nairobi and Singapore. They focus on sustainable trade, regional economic development and social innovation. Their expertise is collaboration, co-creation and how t

development and social innovation. Their expertise is collaboration, co-creation and how to effectively use it to address the world's most difficult challenges, helping organizations, stakeholders and people from government, business and civic society to forge future opportunities, choices and solutions that are unattainable by acting alone. Quercus Group's services help get a better understanding of what is going on, how to navigate rapid, far-reaching and unprecedented changes in all aspects of society and how to create effective change by doing it in partnership.

The Robert H. Smith Faculty of Africulture Food and Environment

The Robert H. Smith Faculty of Agriculture, Food and Environment of the Hebrew University of Jerusalem is the only institute of higher education in Israel offering university degrees in agriculture and is also home to the only Schools of Nutritional Sciences and of Veterinary Medicine. Established in 1942 as the Institute for Agricultural Sciences with 21 masters students, the Faculty today has a student body of 2,300 students.

TechnoServe

TechnoServe is nonprofit organization that develops business solutions to poverty by linking people to information, capital and markets, specifically working with enterprising people in the developing world to build competitive farms, businesses, and industries. Their work is rooted in the idea that hardworking people can generate income, jobs and wealth for their families and communities. TechnoServe employs more than 1,500 people, the vast majority of them host-country nationals working in the field. The staff combine business expertise with local knowledge, relationships, and context to help hardworking men and women generate income, jobs and wealth for their families and communities.

Trendlines

Trendlines is an innovation commercialization company that invents, discovers, invests in, and incubates innovation-based medical and agricultural technologies to fulfil its mission to improve the human condition. An intensely hands-on investor, Trendlines is involved in all aspects of its portfolio companies from technology development to business building.

Volcani International Partnerships

Volcani International Partnerships is an Israeli non-profit organization that strives to strengthen Israel's standing as a global leader of agricultural innovation and enhance its contribution to the world. As our world faces immense challenges in feeding a growing population, while ensuring the sustainability of our planet, Israel has a great role to play. VIP works to strengthen Israel's standing as a global leader of agricultural innovation and share its experience, expertise and innovation with partners around the world.

Wangara Green Ventures

Wangara Green Ventures is an impact investment company that invests in Small and Growing Businesses (SGBs) in the missing middle that are engaged in renewable energy, energy efficiency, waste management, water management, climate-smart agriculture or generally climate-friendly businesses. Wangara also supports the growth and sustainability of these SGBs by making available pre-investment and post-investment Technical Assistance Grants to assist their scale and overall Environmental, Social and Governance (ESG) impact. Wangara Green Ventures seeks to promote Ghana's economic development, job creation and industrial competitiveness through support for clean technology businesses and industries which represent some of the most promising and important sectors of the 21st century. Through the provision of financing and non-financial services,

Pears Challenge Fellows



Amir Ounallah

Amir Ounallah is an entrepreneur and a senior executive with 15 years of experience in introducing and integrating new technologies to the travel and transport industries. Amir is also the co- owner and manager of Bustana, a family business growing and marketing agricultural products from the lands of Jerzeel valley at the foot of Mount Precipice since the 1850s. Amir believes that the first step in changing the current food system begins at the farm. As such, by using his own farm as a pilot, Amir is dedicated to researching and introducing new agricultural technologies and concepts that can help transform more conventional farms into adopting sustainable and regenerative farming methods. Amir lives with Rania and their two children, Nour and Yasmine, in the city of Haifa.



Andrey Bakhmat

Andrey Bakhmat is a multidisciplinary specialist with over twenty years of experience in telecommunications. Andrey took part in the building of mobile networks in Mexico, Tanzania, Palau, and other developing regions of our planet to provide services in rural areas for low-income individuals. Andrey has skills in business development and project management, along with extensive experience in sales and marketing. After relocating to Israel two years ago, Andrey has since been focusing on data science projects. He believes that technologies can and should help solve the primary challenges of humanity - such as hunger, poverty, digital divide, global warming, and others. Andrey lives with his wife Daria and son Ivan in the city of Rishon LeZion.



Avner Rogel

Avner Rogel brings over 20 years of experience in the Israel Defense Forces, where he aided in solving complex problems, adapting and assimilating advanced technologies among end users. Avner served and commanded for over 10 years a body engaged in applied field research in aspects of soil, vegetation and climate. After retirement, Avner co-founded a startup called Hydroponics Network In the field of urban agriculture. The company seeks to build urban communities of hydroponic growers among underprivileged populations, stemming from the belief that a healthy urban life is the basis for a sustainable society. Avner is a husband to Smadar, father to Jasmine, Amir, Neta and Yaara and lives in Haifa. He is a member of the "Hand in Hand" community that seeks to promote coexistence among Jews and Arabs. Additionally, he practices sketching in order to understand the world better and must meet the sea once a week to maintain peace of mind.



Ben Biron

Ben Biron is an entrepreneur and a musician. Over his career he has founded and managed several companies which were subsequently acquired. Ben has a product oriented persona, which stretches to multiple areas of interests. He is an electronic music producer, a dj and a soccer player. Ben has a holistic view on problem solving - he takes from all life experiences in order to think and come up with specific decisions. Ben enjoys creating solutions and expressing himself through craft. He earned his Bachelor's degree in Marketing from Wingate University in North Carolina, and later studied 2 years of Evolutionary Biology at the Open University of Israel.



Ben Katzir

Ben Katzir has been an agronomist and organic farmer for many years. He has worked on various projects, for various NGOs in many developing countries, such as Ethiopia, Nepal, Malawi and Haiti. He additionally works as a tour guide for 11 African countries, and believes in the developing power of responsible tourism. Ben is currently working on his PhD in the field of sustainable development at Tel Aviv University under the guidance of Prof Ram Fishman.



Dafna M. DiSegni

Dafna is an Applied Economist (PhD. University of California, 2004), who specializes in Natural Resources Management, Industrial Organization and Economic Development. Her research and projects are primarily designed to bridge environmental conservation and economic development through sustainable financial and economic mechanisms. She currently works as a financial consultant and has been affiliated since 2016 with Tel-Hai College as a Senior Lecturer (Associate Professor). She has been teaching Economics since 2004 at academic institutions in Israel and in California (UC Davis). In the last decade, Dafna has been involved in several projects to support policy design. In effort to decrease human footprints of energy production and move toward renewable energy resources, she kicked-off with a national project on spatial planning of Wind-Turbines in Northern Israel (financed by the ministry of Energy and Infrastructures of Israel) and spans her activity into the development of financial measurement approaches to strengthen Sustainable Impact Investments in the energy sector and beyond (supported by EU ERASMUS+ plan).



Dan Eran

Dan Eran is a creative, goal-oriented business developer with strong management skills and ambition. Skilled at designing and executing strategies leveraging deep product, services and marketing capabilities to an operational business in multiple market segments. Dan has a proven track record with leading M&A initiatives, from initial engagement, legal and technical due diligence process to commercial negotiation – all the way to closer. He has the strong capabilities needed to lead and manage large scale, complex, multi-facet projects. leading multi-disciplinary teams as well as direct reports. Dan's goal and biggest passion is to harness his experience for a goal that brings prosperity and equality in a sustainable way. He holds a Bachelor's degree in Economics, and M.Sc, Environmental Studies, MBA from Tel Aviv University with an internship in technology management entrepreneurship & innovation.



Dan Spiegelmann

Dan Spiegelmann is an experienced industrial designer and passionate thinker. He has worked as a product designer for leading design consultancies both domestically in Israel and abroad. Currently he teaches design at Shenkar College and runs his own design studio, providing exclusive design and consultation services according to each client's unique needs. The studio works with startups, entrepreneurs & product leaders to deliver disruptive category leading products, offering design services in projects ranging from industrial products, furniture and spaces to art-direction and brand identity. Fluent in the entire chain of development from ideation all the way to product delivery, Dan is an expert in the development and design of mass produced goods. With a Bachelor's degree in Industrial Design from the Bezalel Academy of Art and Design, skilled in hands-on design, 3D CAD modeling, manufacturing processes, strategic problem solving and user-centric thinking. He strives to create intelligent and meaningful products, setting out to produce not only something different, but also something better. Dan lives with his wife Shira and dog Jessie in the city of Ramat-Gan.



Dani Neifeld

Dani Neifeld is the founder and former CEO of Biomor Ltd which developed novel plant protection products for use in organic farming. The company worked to develop products such as Timorex Gold, an award winning product (Agrow Award 2013). Prior to being aquired, Biomor won first place among 200 companies partially funded by the Chief Scientist Office (Israel) as part of the technology incubator scheme. In the following years, Dani established AQUAMOR – his second startup – developing therapeutic drugs for aquaculture. Aquamor, now called STK Aquamor Technologies, has become the Veterinary Unit of the Stockton Group (STK). In the last few years Dani has been involved in various aspects of sustainable agriculture with close ties to GLOBAL G.A.P, Rain Forest Alliance and others.



Dor Oppenheim

Dor Oppenheim is an ecopreneur on a mission to transform the food system from an extractive, destructive and polluting industry, to a regenerative food system – healing soils, people, communities and landscapes. He has worked in the past on developing agricultural robots using A.I. technologies for large scale monoculture when he realized that making industrial agriculture more efficient is not the way forward. Since, he's been actively searching for solutions to scale regenerative agriculture and bring products to market that follow those principles. He is the CEO and co-founder of ReGen Food Co., a children's food company that heals soils, and develops healthy food products for our children and for our soils. Dor believes working on the challenges of small scale farmers and developing tools and technologies to enhance their work can help shift the entire industry towards regeneration, and support farmers in becoming better stewards of the land. Dor lives with his wife Nitsan and their amazing dog Miyoko in Bat Galim, Haifa. He loves saying hello to his fellow sea creatures every morning while snorkeling in the Mediterranean.



Eran Brezner

Eran Brezner is a veteran technology leader who has co-founded and led several initiatives and startups. With his background combining business-oriented thinking (MBA), technology competence (MSc Computer Science), strong execution abilities, pragmatic approach and people management skills, Eran continuously succeeds to dream of, define, develop and deliver successful software based systems and products. As a co-founder and CTO of the AgTech company Supplant, Eran headed the development of a smart irrigation system based on IoT technology and advanced algorithms from the initial conceptual idea to a field proven product bringing real value to real users. As a dedicated marathon runner, completing 13 full races in his life, he is aware of the hurdles along the way and well prepared for long lasting, demanding challenges.



Faris Jahshan

Faris Jahshan is a senior geomatics expert. As a graduate of the Technion Haifa, Faris Holds an M.Sc. of Mapping and Geo-information, a B.A. of Computer science, and a B.A. of Mapping and Geo-information. Faris brings over 15 years of work experience in development and project management in Geomatics, Location-based services, and IT projects.



Haim Lahovitzky

Haim Lahovitzky is a marine ecologist, currently managing the Applied Marine Biology lab at the Haifa University, while graduating with his Master's in Marine Biology. He received his BA in Marine Biology from the Rupin Michmoret Academic Center where he also served as the head of the Students Association. In this role, he managed and initiated projects within and beyond the field of his studies. Haim displayed a creative vision, which characterizes the projects he managed. He believes in theory allied to work, and as a result of his belief, Haim, together with his brother, founded a startup aimed at streamlining and enabling savings in agricultural irrigation, while he simultaneously conducts ecological experiments in his lab. Haim is experienced in social communication, resilient to stress and displays managerial knowledge. He lives in Haifa with his partner Ayala, their cat Archie and their new dog Sophie. On weekends, he likes to go for walks in the woods and look for mushrooms, and with the sea permitting, enjoys scuba diving and other water activities.



Itamar Willenz

Itamar Willenz is a multi-disciplinarian with an investment, entrepreneurship, and project management background. He is passionate about understanding the world's most urgent issues and the ways in which they can be solved. Itamar was a co-founder of an AgTech startup that develops automated hydroponic farming units for the home grower. Since 2018, he has been part of a group of investors and entrepreneurs who invest across multiple asset classes; he initially joined to research Israel's AgTech & FoodTech industries. Recently, Itamar started exploring his next challenge focusing on the broader Climate tech sector and sub-sectors, and joined an Israeli impact VC as an Entrepreneur in Residence. Itamar lives in Tel Aviv with Inbal, his son Omer, and Mizi, their cat.



Kisanet Abraha Araya

Kisanet Abraha Araya grew up in Mekelle, Tigray. She is a Civil and Environmental Engineering graduate from the Technion and is currently earning her Master's in International Development at the Hebrew University. During her studies at the Technion, she joined Engineers Without Borders, where she contributed to several projects and learned the importance of working with communities. Kisanet is interested in creating solutions that help developing communities, especially in the agricultural and environmental field. She believes that advancing agriculture will lead to solving the biggest challenges developing communities face, such as hunger, poverty, and illiteracy. Kisanet believes that in order to create self-sustained projects, they have to be profitable and business oriented.



Nitzotz Saranga

Nitzotz Saranga is an industrial designer, explorer & entrepreneur based in Tel Aviv, specializing in nature-inspired materials and morphological research. She is the proud owner of a design studio – "Studio Pitz" - a space for independent projects and collaborations with companies and organizations such as BGU and Orcam. Her projects have been presented in exhibitions in Israel and abroad, including Arte Laguna Prize in Venice. Currently, Nitzotz is involved in several startups and continues her path of research and collaboration, while simultaneously developing her environmental venture "Green PlanEat" - a community garden2.0, that aims to reconnect people to where their food comes from, educate about food waste, and create a community around food growing and urban farming. She is passionate about exploring and discovering, takes inspiration from nature and her travels, and is passionate about the environment. Nitzotz is a graduate of Bezalel Academy of Arts and Design - holding a Bachelor's of Design with honors (CUM LAUDE) in Industrial Design. She additionally served in the IDF's 8200 unit, and has a background as a QA engineer and RF technician for different HiTech companies.



Oded Arbel

Oded Arbel is an agriculturist and manager with extensive experience in Agricultural projects in developing countries, including the Philippines, Nigeria and Ivory Coast. During his career as a manager and consultant with Netafim, he worked with farmers in developed countries and learned to love and appreciate farmers. He has since decided to harness his knowledge and experience, especially in the Cacao industry, to bring the farmers knowledge and practices that will improve their income. Oded currently lives in Kibbutz Hasolelim in the north of Israel, and continues to grow Cacao seedlings for research purposes.

Ophir Nevo

Ophir Nevo is a business development professional whose organizational and interpersonal skills help him create new opportunities. He has focused on linking Israeli innovators with the international agriculture industry with a specific interest in the cannabis market. Ophir's life philosophy was influenced by his BA in Economics and Business, which has given him the understanding that any organization, movement, or new idea needs both a social and a monetary justification. Ophir is the Founder and Owner of the Israel Cannabis Association, a business development provider for Israeli technology companies in their global growth stage. Using structured sales methods and automation enables him to reach a wide range of business opportunities for his customers, therefore generating more with less. He plays team sports at the beach, practices yoga and mediation, and mostly enjoys life. Ophir lives in Tel Aviv with his girlfriend Omer and their dog Mikey.



Ora Peled Nakash

Ora Peled Nakash is a user researcher in the tech industry with over 15 years of experience. Her formal education in engineering and industrial design equip her with a variety of tools to observe and improve human experiences in complex technical domains. She is passionate about applying technology for improving the condition of the planet, and is focused on finding solutions for preserving life at sea. She is a scuba diver, open water swimmer & reserved Naval Officer. Ora lives with her partner Ori, their two daughters and a cat in Ramat David- a small Kibbutz in Je'ezrael Valley.





Rachel Gabrieli

Rachel Gabrieli is the head of The Beef Cattle Department within the Israeli Ministry of Agriculture and Rural Development, extension service. With over 27 years of experience in breeding her own beef herd, mentoring farmers, and developing precision technologies, she is still passionate about her work! Every day in the field working shoulder to shoulder with the farmers reveals insights into existing and future challenges. The cause and consequence knowledge gap that hinders farmers from addressing problems in real-time, was the inspiration for her main development: the automatic, online activity monitoring system and the related algorithms indicating oestrous, calving, health problems and calf's suckling. Recent developments in remote sensing platforms facilitated Rachel's latest innovative tool – pasture biomass assessment, grazing preferences and vegetationcows' relationships, which in turn opens the gate for sustainable grazing management. Rachel loves animals and her house hosts rescued dogs, cats, ferrets and chickens.

Raz Ayzex

Raz Ayzex is the Co-founder of Engineers Without Borders of Ben Gurion University, where he led more than 40 engineers to develop innovative solutions to promote the quality of life in Israel and around the world through human-centered engineering projects. Raz currently works in the semiconductor industry as a Verification Chip Design Engineer, bringing his background in machine learning, Robotics, and embedded SW development. He has a B.Sc in electrical and computer engineering from Ben Gurion University, and in his spare time, he works to promote organic waste treatment in the urban space in Israel through building composters networks powered by local communities.



Yaara Cain

Yaara Cain is a Systems Architect and Team Leader in the field of information systems, holding a Bachelor's degree in Industrial Engineering and Management from Ben-Gurion University. During her studies, she participated in a volunteer delegation in Ghana, where she collaborated with a local organization, specifically on a project to integrate girls in the STEM field, a topic that is very close to her heart. In her work she is passionate about creating a bridge between humans and technology. Yaara also initiates and participates in social initiatives in various fields, including social cinema in south Tel Aviv, where free screenings are open to the public in order to make cultural activities accessible to all. In recent years, Yaara has moved to a small community in the north near the Lebanese border where she has discovered that apart from her deep connection to nature and plants, there is a treasure to be found in living on the outskirts of the center of the country. Therefore, she intends to continue living there and contributing to strengthening the area. In her free time, she likes to watch documentaries, travel and try to apply the principles of the Slow Movement in her life.

Yair Fuchs

Yair Fuchs is a product manager, designer, user researcher, and entrepreneur. He completed his Master's degree in the 'Design and Innovation Management' track at Bezalel Academy of Art and Design, Jerusalem, and holds his Bachelor's degree in Industrial Design. As a lead initiator of the TIPA project in Senegal, he worked with the Israeli ambassador to assist local smallholder farmers in implementing sustainable farming practices. Until recently he served as the CPO and co-founder of a small Agtech startup, where he led the product from concept to MVP with active users. The initiative aimed to revolutionize the field of urban agriculture and create a new segment of urban-micro-farmers. Fuchs is keen on implementing human-centered design practices and design-thinking methodologies as an improved problem-solving approach.



Yair Hadash

Yair Hadash is a successful entrepreneur, spending the past ten years establishing and managing real estate projects in the U.S. and Israel. His focus has shifted to social projects for young people in Haifa during the past five years. He believes beautiful and world-changing ideas must sit in the framework of economic feasibility to receive validation and come out into the world. Today, he is invested in a new agritech venture, which is based on innovative and groundbreaking cooling technology developed over the past six years by his father, with the goal of addressing the many pains the agricultural industry faces today.





Yifat Reuveni

Yifat Reuveni is an entrepreneur, researcher, academic director EU IFI (Innovative Finance Inclusion), project manager, adjunct professor (Hebrew U. Jerusalem B.school, TAU B.school, Bezalel) and beneficiary of EU grants. Additionally, she is the former JDC Head of Social-Finance Innovation and Recanati Business School's Development Unit. Yifat holds a B.A. in Economics and Philosophy and an M.A. in Communication Technologies at Hebrew University. She earned her Ph.D. on the new economy at McGill University, Montreal, Canada. She mentors entrepreneurs and is involved in numerous initiatives to promote social entrepreneurship. Current academic activities consist of participation in an international research group on sustainable finance (Oxford-Helsinki), writing social-finance case studies and leading and managing the Horizon 2020 ENI project on regional economies based on food industries.

Yoni Haran

Yoni Haran is a social and technological entrepreneur expert in smart infrastructure and distributed systems. Accomplishments of his include serving as the former CEO of Engineers Without Borders Israel, and founding "Sustainergy", leading sustainable projects such as: the algae-outbreak in Latin America and its waste to energy transformation and decarbonizing south-of-Israel utility grid with smart decentralized city-based microgrids. He additionally serves as the CEO and Co-founder of the award-winning startup Village in a box, developing technology for Resilient, Zero-carbon, Circular, and Self-Sustained cities of tomorrow.

Mentors in Residence

David Sampson Issaka







David Sampson Issaka is from Ghana and is an agricultural agronomist with two years of field experience as an agricultural extensionist with the Department of Agriculture where he focused on the challenges in the agricultural sector, and assisted farmers in rural communities with technical advice, including training on innovative agricultural technologies to help maximize production. David also worked with "Tieme Ndo" Social enterprise as an agronomist/business development trainee in the Northern part of Ghana that worked to offer training for rural farmers on Good Agronomic Practices (GAP) and climate smart agriculture , with the goal of improving access to farm inputs and technologies to increase their crop yields - reducing poverty and hunger and increasing financial independence. He considers hard work, honesty, and proactivity as fundamental in creating a change in our society. David is passionate about the adoption of innovative technologies in improving the agricultural field and the world at large. David is currently a research Masters student at the Hebrew University of Jerusalem, Rehovot campus, with the aim of better understanding the mechanisms behind biodiversity patterns which is crucial for conservation and restoration of natural systems.

Ebenezer Quandoh

Ebenezer Quandoh is a food scientist and technologist with invaluable experience in food chemistry and processing and food product development in the research field and industry. He has worked within the industry as a processing manager with Nature's Treasure Foods (producers of granola snack bites from locally grown and available fruits and food crops), and served as a volunteer researcher at Food Research Institute on a project focused on volarization of senescent plantain for post-harvest reduction and food product development. Currently, he is an MSc. Nutritional Sciences student at the Hebrew University of Jerusalem with research interests focusing on application of basic scientific principles to understand the functionality of food and interaction with the body. Ebenezer's ultimate career goal is to contribute to nutrition and food security by picking up academia/industrial to pursue research interests, train and create scientific-based, innovative and sustainable solutions.

Elizabeth Jeliz Adom

Elizabeth Jeliz Adom is an agriculturist, biotechnologist, and potential entrepreneur. She has is passionate about mentoring and coaching, especially the youth, which reflects her experience as a secondary biology teacher. She has had the opportunity as an assistant consultant on capacity-building programs to educate farmers and value chain players on HACCP, GAP, traceability systems, and IPM to enhance productivity. She describes herself as wet clay as she is always ready to adapt to any environment she finds herself in, being courageous, self-motivated, and a team player. She holds a Bachelor's degree in Agricultural Biotechnology from Kwame Nkrumah University of Science and Technology, and is currently studying her Master's in Nutritional Sciences at the Hebrew University of Jerusalem. Elizabeth is fascinated about learning new food and nutrition assessment tools to improve access to good services and productivity in her home country.

Victoria Kwarteng

Victoria Kwarteng is a second year student at the Hebrew University of Jerusalem Rehovot campus earning her MSc Plant Science, who hails from Ghana in West Africa. She is an enthusiastic and leadership driven lady who believes the World can only survive food crises through modern Agricultural technologies and the involvement of youth, especially women. She is diligent and committed to the passion of uplifting young women's interest in agriculture through collaboration with agritech stakeholders. Victoria served as a research assistant in Ghana Atomic Energy Commission and worked for two years as a laboratory technician in Tulwe Biotechnology of Ghana. She is currently pursuing her research work in tomato parthenocarpy in the Arazi Lab under the mentorship of Dr. Tzahi Arazi in the Volcani Institute of Agriculture of Rishon LeZion.

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Reach out to us with any questions!

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Pears Challenge 2022 ISRAEL'S DEVTECH VENTURE BUILDER

