



PEARS CHALLENGE 2022
RESILIENT AND SUSTAINABLE FOOD SYSTEMS IN WEST AFRICA

GHANA FIELD VALIDATION SUMMARY

NOV 2022 | PREPARED BY RONI LEVY

OVERVIEW

Pears Challenge -- the flagship program of the Pears Program for Global Innovation -- is a venture-builder which enables experienced and outstanding Israeli technology entrepreneurs to create innovative, financially sustainable and impact-oriented, technology-based solutions addressing the needs of emerging markets. Throughout a year long process, participating entrepreneurs explore a new market in the global south, identify a challenge they want to focus on, ideate solutions to solve this challenge and create a technology-based venture using systems thinking and user-centered design approaches.

Pears Challenge 2022 focused on developing solutions that will respond to the pressing needs of the West-African Agrifood sector, five ventures were selected to travel to Ghana for market validation: **AMMFI CarbonForestry, BetterLeaf, Cool-Harvest, RawCocoa and Symbiosis**. The market validation trip allowed the entrepreneurs to meet with potential end-users, explore initial partnerships and test their assumptions in order to further validate their concepts and begin developing the necessary foundations to continue progressing with their ventures.

The entrepreneurs spent the first four days of the two-week field visit in Accra, Ghana's capital. While in Accra, they had the opportunity to meet key partners that will provide market insights and support them in penetrating the Ghanaian market. A highlight of our time in Accra was a pitching event organized with Stanbic Bank Incubator, where the entrepreneurs pitched their ventures to leading players in the Ghanaian Agritech ecosystem and established valuable connections. The delegation also had the opportunity to visit the main markets in Accra and gain a deeper understanding on the realities of agricultural supply chains.

During the second stage of the trip, the entrepreneurs travelled to different areas throughout Ghana to visit farming communities, explore opportunities and synergies with partners and continue developing their innovations with a greater connection to the field. The entrepreneurs benefited from the warm welcome and kind hospitality of partners and communities which enabled them to develop a solid understanding of the realities on the ground, and establish connections with a wide range of potential partners, stakeholders and future customers.



HIGHLIGHTS FROM THE FIELD - RAWCOCOA

RawCocoa is developing a modular hub for collecting, handling and transforming Cocoa by-products and biomass into useful raw material, thus creating value for Ghanaian Cocoa farmers while relying on a circular 'zero-waste' model.

During the Ideation Phase, a virtual "Startup Exchange" for Pears Challenge fellows and Ghanaian Agtech entrepreneurs was held in partnership with [Kosmos Innovation Center](#), a Ghanaian innovation hub. As a result of that session, a connection was made between Ora Peled-Nakash and Nitzotz Saranga, co-founders of RawCocoa and Benjamin Agyin Turkson, CEO of [ASA Nwura](#) - a CleanTech company that is leveraging localized strategies and adaptive technologies to promote waste recovery. In Ghana, Nitzotz and Ora traveled to Ghana's Western Region and deepened their relationship with Benjamin. RawCocoa and ASA Nwura travelled together to Daboase, met with Cocoa farmers and validated the potential of Cocoa waste recovery. As a result, they successfully identified a site for a joint pilot in Beposo, and partnership discussions are moving forward.

In addition, [Solidaridad West Africa](#) organized a field visit for RawCocoa in Assin Fosu (Central Region) where they met Cocoa farmers supported by Solidaridad as well as [Emfed Farms](#), a local company producing organic fertilizer from Cocoa husks, thus further validating their idea and business potential. The visit resulted in formal discussions with Solidaridad's team, exploring collaboration and a possible pilot to establish RawCocoa hubs within Solidaridad's Rural Service Centers that span across 60 locations in Ghana.





HIGHLIGHTS FROM THE FIELD - BETTERLEAF

BetterLeaf is on a journey to transform the pesticides industry by developing a locally produced, novel, highly effective and affordable biopesticide from indigenous medicinal plants, particularly the bitterleaf plant. Bitterleaf vastly grows all around West Africa but is not yet apart of a commercial value chain in Ghana. Dani Neifeld, the co-founder of BetterLeaf and a biopesticide expert, sought to validate the potential of the plant to be grown on large scale and to assess the viability of establishing a production line of bitterleaf products.

During his visit, Dani travelled to the city of Tamale in Ghana's Northern Region where he attended the Ghana Pre-Harvest Conference and Exhibition along with over 3000 filed-crop farmers, input distribution companies and aggregators from around the country. In collaboration with the organizers, [Agrihouse Foundation](#), Dani shared his expertise with a group of farmers, held a workshop on sustainable farming and biopesticides and facilitated a focus group to get feedback directly from farmers on the viability of BetterLeaf. Dani experienced great enthusiasm from the farmers, both as end-users of the novel biopesticide BetterLeaf is developing and as potential commercial growers of bitterleaf.

Back in Accra, Dani strengthened his already established partnership with [Kofrica Mega Concept Ltd.](#), a leading agriproducts distribution company in Ghana and a partner of the Pears Challenge. Together, they visited a production lab of biorational products and validated the assumption that local manufacturing facilities are available and capable of producing the Betterleaf biopesticide at scale. In parallel, BetterLeaf explored a potential collaboration related to research and development with the University of Ghana's West African Center for Crop Improvement.

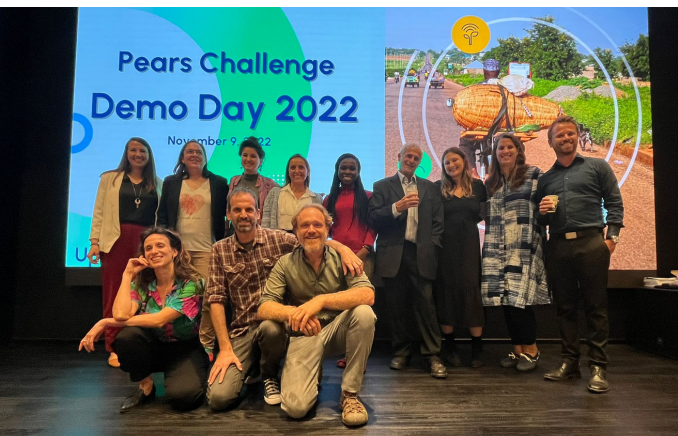
HIGHLIGHTS FROM THE FIELD - AMMFI CARBONFORESTRY

AMMFI CarbonForestry is developing a FinTech platform that integrates cutting-edge remote-sensing technologies, Agro-Forestry algorithms and financial instruments to turn nature values into financial income for tree-crop farmers and processors.

After many discussions with relevant stakeholders prior to the trip, Dafna DiSegni, the founder of AMMFI CarbonForestry, decided to focus on Ghana's Cocoa and Cashew value chains. She set out to visit the tropical forested region of Ghana, including the areas of Assin Prasu, Kumasi, Brong Ahafo, Sunyani, Techiman and Wenchi. In each of these locations Dafna examined the characteristics of natural ecosystems and how they interact with agricultural production, the management and agricultural practices of Cocoa and Cashew farming and attributes, challenges and attitudes of farming communities.

In collaboration with Solidaridad West Africa, Dafna had a formal encounter with the Chief of the Assin Prasu community, in which she gained the community's blessings to further collaborate. Dafna's principle assumption that farmers can increase their income through AMMFI's platform was not only validated, but proved to be underestimated than initially assumed. If implemented according to plan, Ghanaian Cocoa and Cashew farmers could potentially double and even triple their yearly income using AMMFI's platform.





GOING FORWARD

Upon the return of the entrepreneurs from the field we held the concluding event of the 2022 Pears Challenge - our Demo Day. Stakeholders from our greater community in Israel including investors, mentors and field practitioners came to hear our seven graduating entrepreneurs pitch their ventures.

Going forward, the entrepreneurs will continue to process the knowledge and insights they gained in Ghana, nurture the relationships they built and plan for their next steps.

In the coming months, the Pears Program will continue to support their efforts to maximize the knowledge gained and turn their ideas into functioning, impactful and financially-viable technologies. The ventures will be seeking additional funding to develop their prototypes and return to Ghana to pilot their new technologies in the field in collaboration with the great partners and communities they met during this visit.

THANK YOU

None of this would have been possible without the support of our stakeholders and partners in Ghana. Thank you to all who hosted us in their offices and welcomed us into their field activities. We are grateful for your time and hospitality:

The Israeli Embassy in Ghana, Israel Trade and Economic Mission to Ghana, Ghana Investment Promotion Center, Stanbic Incubator, Solidaridad West Africa, Kofrica Mega Concept Ltd., COCOBOD, Agrihouse Foundation, Niche Cocoa, Raanan Fish Feed, Ghana Tree Crop Development Authority, Fairtrade Ghana, ASA Nwura, University of Ghana - West Africa Centre for Crop Improvement, Cocoa Research Institute of Ghana, AforLynk, GIZ, Agrimercarb, Pentecost University, Emfed Farms, Environmental Protection Agency Ghana, Green-Gro Ltd., Ghana FinTech and Payment Association, Forestry Commission - Ministry of Lands and Natural Resources, Kuappa Kokoo Cooperative and Innovations for Poverty Alleviation.

We would like to express our profound gratitude to **Mr. Kirk Amoah** from The Israel Trade & Economic Mission to Ghana, who had supported us since we started planning the field trip, guided us and introduced us to many of the stakeholders. We are grateful and appreciative of your kind assistance and support.



The Pears Program for Global Innovation is a not-for-profit and nongovernmental organization whose mandate is to increase Israel's contribution to international development and humanitarian aid through technology-based innovation and financially sustainable solutions.



The Pears Challenge is sponsored by the **Pears Foundation**, 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 organizations, 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.