

Top Tier Impact Agriculture Roundtable Dinner

Date & Location: July 6th, 2022, Istanbul

Organized by: İlkay Demirdağ, Top Tier Impact Istanbul Ambassador

Attendees:

- Ali Şahin, Founderone Impact Fund, General Manager
- Aylin Çağlayan Özcan, Ministry of Agriculture and Forestry, Former Director General for EU and Foreign Relations
- Ayşin Işıkece, Ministry of Agriculture and Forestry, Former Deputy Minister
- Aylin Gezgüç, Founder and Chairperson, Impact Circles Foundation
- Barış Karakulukçu, İş Bank, Next Generation Entrepreneurship Group President
- Devrim Çubukçu, Eczacıbaşı Group, Executive Committee Member, Sustainability, Corporate and Government
- Emrah İnce, Technology Development Foundation of Turkey, Technology Ambassador
- Fulden Gencel, Foodback, Project Coordinator
- Güven İslamoğlu, CNNTürk, Journalist, Producer
- Kerem Akiner, Türkiye İş Bankası, Head of Agricultural Banking Marketing Department
- Kubra Koldemir, Sustainfinance, Co-Founder
- Semi Hakim, Kök Projekt, Co-Founder & CEO
- Dr. Yılmaz Arguden, Misros, Coca Cola, Anadolu Efes, Independent Board Member, Arge Consulting, Chairman

Meeting Report: Prepared by Sustainfinance (By Kübra Koldemir, Ayşe Kaşıkçı, İlkay Demirdağ)

The roundtable titled "Agriculture in Turkey" was held with valuable participants; the three main questions below were posed to attendees, and consequently, the following ideas were exchanged.

1. What are the most critical problems you have observed in the agricultural sector in Turkey?
2. How can Turkey's entrepreneurship ecosystem be developed in agricultural R&D and innovative agriculture?
3. What are your suggestions for transitioning to a sustainable agriculture roadmap?

Some general conclusions on concerns related to agriculture are as follows:

There are issues related to the efficient use of too many unorganized information/ideas, lack of skilled human resources, and technological integration;

Traditional approaches and knowledge and lack of governance are among the most critical factors affecting the productivity of agriculture.

Since there is no regular planning and efficient use of human resources, it has been evaluated that both the costs have increased, the number of people who want to work on their land has decreased, and there is not a sufficient level of budget/support/incentive/taxation system to combat all these.

Although the agricultural sector in Turkey is where almost everyone agrees on its problems and solutions, the main problem is a lack of will or motivation to take action and implement solutions. It was stated that it would not be

correct to link this issue only to the public entities and the government. This lack of motivation was also present in all institutions and individuals.

There are severe concerns for stakeholders in communicating with each other; co-operatives, for example, cannot come together and organize themselves in Turkey; hence, the planning and step-by-step work is either interrupted or not done correctly. It was further explained that this situation is happening despite an earnest effort and knowledge being put into various projects. In sum, control mechanisms and governance are inadequate, and we have a trust problem at the center of everything.

The pollution at the Sea of Marmara was cited as an obvious example. Everyone knows about it, but proper solutions are not being provided. Agriculture and pollution at the Marmara Sea are interconnected; one issue is that the soil in most farming areas is under an excessive load of nitrogen, phosphorus, and nitrate. (There are also high nitrogen-loaded soils in the Marmara Region at the moment) Similarly, it was emphasized that biodiversity was lost due to climate change. (In the same way, climate change is as severe. However, despite all the evidence, not much is being done to reverse it.)

Training qualified people also remained among the main problems. Participants shared their views on how this situation hinders product development because an insufficient number of talented people were being trained within the private sector or the Turkish national education system. In addition, systems thinking and the implication of this in agriculture are emphasized as one of the focus areas for training.

Indeed, business life has transformed; in the past, to be a successful employee, it used to be sufficient to be an expert in a subject matter. Now many additional competencies are required and mandatory, including deep knowledge of digital transformation.

In addition to the issue of trying to feed a growing population with “dirty soil, water, and air,” we also need to deal with many citizens being oppressed by income inequality due to 1) Agriculture-GFE (agricultural production cost, announced by TURKSTAT) has seen the peak of the last three years in 2022, 2) challenges related to productivity in a country where there is an indirect tax system and environment where energy is produced at such high prices (prices have increased three times in the last six months).

Another issue is that production in plant agriculture does not have enough support mechanism systems— only 5 percent of the subsidy budget is available for plant agriculture – for example, a small farmer does not have a regular income and cannot do proper planning. There are no regulatory laws in the system and no appropriate training to support the agriculture of plant-based products.

Our participants felt that “Our farmer is alone.” With the idiom “The one who does not have a trace in the field, has also no face on the table” cited in a publication by the Wheat Industry Association, it was referred that the problem was systemic/structural.

We are faced with a significant loss, both financial and timewise. It was pointed out that sustainable agriculture is the foundation of a sustainable food system. Working towards sustainable agriculture and food production is a strategic and national issue and an indispensable condition to move forward.

Additionally, the participants discussed how to develop the entrepreneurship ecosystem of Turkey to promote agricultural R&D and innovation:

Participants discussed how we find ourselves in an era where the new “fertilizer” of agriculture is data and how we can now monitor agricultural areas simultaneously with satellites these days. Therefore, an infrastructure should be urgently built to integrate more technology into the field.

Moreover, there is an issue with funding and subsidies for the agricultural sector in Turkey. The budget share allocated to R&D in Turkey is 0.96, and only 3% of this share is given to agriculture (OECD average is 2, EU average is between 1.98-2). Although Turkey is at the forefront of plant and animal production, for 50% rate of financial support provided within the European Union to agriculture, in Turkey, this rate was mentioned to be only 5%.

Remarkably, only 15% of the 150 unicorns in the world's sphere of influence are in agriculture. Therefore, a clear definition of processes and outputs and climate-friendly agricultural policies for each region should be matched with sustainable food practices. It was emphasized that real incentives should be established and not remain only on paper. Funds should be directed to where they are needed and reach the users.

We need a transition to new ways of doing sustainable and regenerative agriculture. This should also lead to reverse migration. There was an emphasis on the importance of attracting young people back to villages as new living spaces and, therefore, also protecting the older adults who had been left behind. Projects integrating farmers, entrepreneurs, financial institutions, corporations, and academia must be developed for the transition.

Although, as per law, many pesticide types have been banned, it is still common to use them due to habits. This reminded us that our earth is a victim of unwritten verbal rules and rituals. Therefore, it was recommended we go through a complete mindset transition. (including thought processes, practices, values, loyalty to the land, etc.).

Finally; as suggestions for the transition to a sustainable agriculture roadmap were being evaluated, the following findings came to light:

It is vital to highlight innovative agriculture, data, and human capital. It was stated that as digitalization and integration increase, it would be possible to transition to a food system that is more sustainable. Then resources will be used more effectively and sufficient for the next generation.

It was essential to increase the welfare of village residents in the region by raising their awareness of the climate impact of their agricultural activities. We should transition to protect the principles of permaculture and regenerative ecosystems. We should ensure the implementation of waste-free, minimalist production techniques and encourage young entrepreneurs to be called for this duty.

Nevzat Özer from the TEMA Foundation was cited during the roundtable mentioning issues caused by inappropriate land use and inappropriate agricultural techniques: "Turkey loses 1 millimeter of soil every year, and 1 centimeter in 10 years. For a one-centimeter-thick soil layer to form again takes at least 300 to 1000 years."

As the climate changes, agriculture and land approaches should also change. We may have managed to farm for 10 thousand years, but the climate will not be the same for the next 10 thousand years.

The final conclusions have been made based on all this information while accepting that monoculture and unsustainable agriculture practices will make us dependent:

- New climate-resistant species and breeds should be studied;
- The transition to soilless agriculture and geothermal energy should be accelerated in regions not suitable for agriculture;
- Certain agricultural areas should be left to rest from time to time;
- Water adequacy should be determined depending on the region, and agricultural patterns should be created accordingly;
- More technology should be integrated into the field;
- Entrepreneurs should be prevented from being pushed out by the system;
- Producer associations should be revived;
- The establishment of cooperatives should be supported;

- Systematic support should be offered to entrepreneurs and farmers;
- Initiatives for structural and regional problems should be seen, announced, and good examples shared and disseminated;
- Activities should be organized routinely to diversify, strengthen and inspire initiatives and make healthy, nutritious, and clean food accessible and affordable.