Report

Lessons from Vietnam:
Digital tools to mitigate COVID-19 impacts in agribusiness
April 29, 2020

ABOUT THE WEBINAR

The COVID-19 pandemic, related lockdowns and industry closures have had an unprecedented impact on the global economy. Pandemic-related movement restrictions affected the food supply chain too. This webinar was organized to look specifically at the likely impacts on agribusiness and discuss potential mitigation that could be provided by the increased use of digital tools. The webinar was organized around two panels: In the first one, agribusinesses discussed digital tools they were using prior to the pandemic and additional areas they recently identified where digital tools can be of assistance. The second panel of ICT industry and public sector representatives provided an overview of the infrastructure, tools and services available to (agri) businesses that can help deal with the new challenges.

PARTICIPANTS

Participants from 44 countries pre-registered to attend the webinar. The audience attending the webinar joined from 35 countries. The webinar started with 97 people and remained near that level throughout.
DISCUSSION

Panel I: Agribusinesses and digital tools panel

This panel looked at the impacts of COVID-19 on agribusiness and potential mitigation through the increased use of digital tools, beginning with an overview of where the represented companies—Ecom, Phoenix, Puratos and Nafoods—began pre-pandemic. Representatives from the World Bank and the private sector in Vietnam shared their respective challenges with and adaptations to the pandemic’s short and long-term effects on agriculture and food supply chains.

PANELISTS

1. Dung Tan Trung, Strategic Advisor to Board of Directors, Nafoods
2. Vivek Sharma, Vice President, South East Asia, Phoenix
3. Laurent Bossolasco, Asia Regional Sustainability Director, ECOM
4. Selene Scotton, Regional Cocoa Manager, Puratos Grand Place

DUNG TAN TRUNG

Mr. Trung highlighted Nafoods’ efforts to expand digital tool use into the first link in their supply chain. ERP platform they adapted and now use is a very standard tool used to track processing and distribution. Identifying the right digital tool to track seedling production and farming proved impossible, so Nafoods is now innovating and working with technology providers to address the most important part of the supply chain, fruit production. There is a significant effort to find a means to monitor and control the formation of fruit trees using artificial intelligence to guide farming practices for uniformity and traceability. The COVID-19 pandemic just emphasized the need to complete this work.

LAURENT BOSSOLASCO

Mr. Bossolasco talked about Ecom using digital tools to overcome trade disruptions brought about by the pandemic, the need to stay in touch with buyers, employees and farmers. This period has shown the value of drip irrigation systems used by some coffee farmers in Vietnam who are affected by the availability of labor due to social distancing measures. Laurent highlighted the importance of digital solutions used and controlled by farmers themselves, rather than by the extension service teams in times such as the COVID-19 time.

As a way forward, he proposed to establish equipment sharing schemes to increase adoption of digital tools in farming. This will not only demonstrate its value to more farmers, but also share knowledge, increase awareness of the possibilities stemming from agri tech implementation, and accelerate precision agri adoption and environmental sustainability of agri production. Case studies demonstrating the profitability of such business model should be more widely made available to farmers to increase adoption.

VIVEK SHARMA

Phoenix as a commodity buyer and seller was affected by Vietnam’s recent rice export ban, however digital tools allowed traders to keep in touch, exchange information, and act accordingly. Simple WhatsApp® can facilitate such exchange. At the farmer-level, connection with digital platform enables accurate information on cropping, farming, yields which is useful for buyers and even for the public sector.
On rice quality, traceability, sustainability, other tools are useful. Phoenix is considering adaptation of an existing tool to address farmer level production practices leading to sustainable rice production.

The goal is to improve farmer income by applying sustainable production practices, as increased prices for specialty rice are not a reality. In a low-margin commodity business, application of digital tools at the farmer-level can reduce production costs and increase their income by up to 20-percent. The technology also improves farmers’ access to finance because some banks may view the data provided by digital technology reliable, though this is yet to be operationalized in Vietnam.

SELENE SCOTTON

Ms. Scotton told us that Puratos Grand Place Vietnam currently uses two digital solutions in the cocoa supply chain in Vietnam - an ERP system for cocoa purchases and for tracking of post-harvest processing, fermentation and drying; another digital platform is used for annual third-party verification audits against Puratos’ Cacao Trace sustainability standard. The COVID-19 situation has pushed Puratos to communicate with farmers via Zalo and phone calls on several topics, and also to look more seriously at digital payment options to farmers in Vietnam.

In the Philippines, Puratos makes digital payments to farmers (cash advance for seeds, fertilizers, etc., payment of chocolate bonus that is paid directly to farmers twice per year) and would like to offer that to farmers in Vietnam too. Their main concern with the use of farmer-level digital applications is that these tools mostly don’t center on creating value for farmers.

Q&A

Many of the questions posed to panelists centered on the unique challenges of their individual companies, given different levels of digital solutions deployment. A question was raised around the ability of Vietnamese smallholders to implement digital solutions, as many of them have limited knowledge, capacity and disposable capital for investment in digital. Also, audience members were interested in the possibility to offer digital payments to farmers in Vietnam, given the regulatory framework and bank appetite to serve the agricultural sector.

Before COVID-19 pandemic companies already knew about how digital transformation would help to improve production and supply chain management. During the pandemic they realized full value of digital solutions application: They provide opportunities for automation, optimization, paperless/ touchless/ online transaction, real time planning/ re-planning, etc. Companies believe that after COVID-19 pandemic, digital technology application will help them to thrive and join the wider supply chains and supply networks.

Panel II: Technology ecosystem and encouraging digital tools adoption

This panel discussed existing technology innovations and infrastructure that support the deployment of digital tools in the agri sector. Work of an industry association was presented as an example of swift reaction to shorten the supply of agricultural products from farm to retailers, while representatives of ministries highlighted Vietnamese government efforts to establish an enabling environment for the private sector to use digital solutions in the agriculture sector.

PANEL
1. Denis Brunetti, President, Ericsson Vietnam, Myanmar, Laos and Cambodia
2. Phan Than Son, Chief Business Development Officer, FPT Information Systems
3. Phan Minh Thong, Member of the Executive Committee, VIDA - Vietnam Digital Agriculture Association
4. Ngo Xuan Binh, Deputy Director General, Department of Science and Technology for Economic Technical Branches, Ministry of Science and Technology
5. Trieu Thanh Nam, Deputy Manager, Commercial Policy Department, Agro Processing and Market Development Authority, Ministry of Agriculture and Rural Development

DENIS BRUNETTI

Mr. Brunetti provided an overview of technologies that are in use today and explained the importance of mobile communications that evolved over time from 2G, 3G, 4G for consumer and society connectivity to 5G, an innovation and enterprise platform bringing internet to industries, including agriculture. Future economy driven by science and innovation will make industry more productive and more sustainable, but in getting there it will be important to utilize technology tools considering the needs of the users. In the agriculture sector, due to urbanization and shift of labor from rural areas, future farms will be bigger and will use robotics, remote tractors, harvesters, which will also bring increased productivity and efficiency to Vietnamese agriculture. Wireless technology and broadband can facilitate farmer connectivity so that they can make decisions in real time (weather information, crop development, crop prices, etc.), but that requires upgrade of knowledge. Digitally upskilling the workforce is a must, not only for the agriculture sector. How quickly can digital tools be adopted in agri sector is a question, but emerging adoption of such tools in the personal lives of farmers is encouraging.

PHAN THAN SON

Mr. Phan provided an overview of FPT development and their role and support for digital economy and society development in Vietnam. In COVID-19 time specifically, their approach to address the intricacies of traditional supply chain transformation to the digital supply networks mandated a different approach and the adoption of “wartime footing” to quickly deal with the new situation. FPT’s usual approach to developing customized solutions for agri businesses that encompasses full supply chain screening to inform digital transformation strategy for the company, now had to be changed from “rescue and survive” mode to a new and speedy platform development to ensure “survive to disrupt” option for the future.

In Vietnam, 4G and 5G network coverage is available almost everywhere, even in remote areas. Farmers use smart phones to buy and sell. E-wallet (e.g. Momo) is also familiar for many people and farmers.

PHAN MINH THONG

Mr. Phan from gave an overview of VIDA’s mission – to advocate for digitalization of Vietnamese agriculture and support its digital transformation to ensure global competitiveness. As a successful agricultural commodities producer, Vietnam needs to ensure its products continue to be relevant on the global market and are produced on modern digitized farms, ensuing higher value products originate here. An example of VIDA’s quick response to support its members was a swift reaction to digitally connect farmers with domestic retailers to ensure uninterrupted supply of products in the stores, but also prevent spoilage of products that would otherwise remain on farms due to distribution and logistics disruption when social distancing measures were introduced. For the future, VIDA needs to ensure training delivery to its member to increase diffusion of digital tools in the agricultural sector and creation of smart farms and smart processing facilities.

NGO XUAN BINH
Mr. Ngo from Ministry of Science and Technology reminded us of the development of agricultural sector in Vietnam and its rapid transformation from the time when farmers received right of land use and the ownership of their production. Today there are seven ecological zones in Vietnam and an attempt is made to diversify agri products and develop agri production in most suitable zones. Digital technology in agriculture in Vietnam is still in limited usage in remote areas, but the interest and support from the Government for digital tools diffusion is there.

The Government has a number of policies to attract businesses to invest and transfer technology in agriculture, and support is provided through direct financing, tax and land allocation (e.g. Law on Science and Technology, Law on Technology Transfer, Law on Investment, Decision 677/2017, Decree 57/2017); additionally there are number of supporting programs in which the Government co-finares R&D costs, training, establishing databases and open data as well as application of digital technologies to supervise, connect and reduce human labor to improve efficiency.

TRIEU THANT NAM, Agro Trade, Ministry of Agriculture and Rural Development

Mr. Trieu from Agro Trade, Ministry of Agriculture and Rural Development, described how Agro Trade uses digital tools to assist agribusinesses in agriculture production, food processing and trade promotion. They are working to secure access to markets for Vietnamese food producers and use of digital tools in three areas: To gather information on production and market trends to help firms to plan their activities and markets to target, disseminated to companies via monthly bulletins; to ensure quality products from designated planting areas reach markets; to facilitate trade and logistics enhancement. Agro Trade finds digital tools vital for firms and the authorities, which is evidenced by the rapid penetration and usage of e-government services.

When Vietnam did not have enough food and jobs for its people, technology application helped increase yields and create more jobs, and today Vietnam has become a leading global exporter of several agricultural products. Now, application of technology will help address issues of low quality, environmentally taxing, low value-added products. This will bring about a shift in the workforce capacity - farmers will be required to develop new skills for high-tech environment.

Q&A

The audience asked questions about promising agricultural and financial technology opportunities in Vietnam, as well as how lessons from other countries can be captured for replication. Others asked about existing Government support and policy measures to encourage and incent digital solutions diffusion in the agriculture sector. The audience was also eager to hear speakers’ views on how to reduce impact on employment when applying technology at a higher rate in the agribusiness sector.

CONCLUSION

The webinar was concluded successfully with a good turnout and excellent participation from the audience. Key themes that emerged from the discussion were:

- The pandemic has highlighted the need for digitized supply chains in agriculture sector
- Companies have been using and relying more on some digital applications ERP and in a few cases some farm-level applications. Digital tools that are used range from simple “chat” groups to artificial intelligence.
- Issue: Most companies have not found farm-level applications that are useful for both companies and farmers. Panelists noted that the applications cannot integrate with their existing systems and don’t demonstrate a value proposition to farmers. Still, they are exploring the options available (some companies pursuing the development of digital solution that will enable farm-level interactions themselves) and expressed that applications have to provide clear value to farmers to be used by farmers, a “farmer return on investment”

- More successful tools help to reduce farmer production costs. User experience is key to uptake.

- Government of Vietnam has seen some benefits from the e-government platform during COVID-19 and is supporting technology adoption. Technology is also used to enable access to export markets and inform production decisions, based on demand of these markets.

- New technology and related infrastructure (5G) and the ability to customize it to the user are key attributes for products of tomorrow. Technology innovations and infrastructure that enables delivery of customized tech support to smallholders exist, but it is still a challenge to create customized services for smallholders and integrate them in the companies’ digital supply chain management solutions.

The organizers have captured the most popular discussion points and will look into them more deeply in upcoming events of this type and thank the panelists and audience for their participation.