

CHAPTER 13 CROPLIFE AND FOOD, AGRI AND AQUA BUSINESS

OVERVIEW

For Vietnam, the time from 2021 to now was by far one of the most challenging years to date as the fourth wave of the COVID-19 pandemic hit, resulting in stringent social distancing requirements and affecting economic growth. In Quarter 3 of 2021, Vietnam recorded its first-ever negative GDP, since 2000 affecting businesses and its people significantly.¹ Facing with the challenges, the agriculture sector has had many timely and effective response solutions, demonstrating the role of this pedestal of the economy in difficult times. Ensuring the production and supply of food, food and essential goods was an important basis for the implementation of security and people's safety during the pandemic. This is most clearly reflected in the gross domestic product (GDP) in the third quarter of 2021, which reflected the rise of the agricultural, forestry and fishery sectors while an overall decrease of 6.17 per cent was estimated in comparison to the same period last year. Despite being affected by the COVID-19 pandemic, agricultural production continues to develop compared to the same period last year, specifically: rice yield increased, livestock production grew steadily, and export turnover of some agricultural products achieved good results². However, social distancing measures, interruption in domestic and international supply chains during the COVID-19 pandemic in 2020-2021 along with obvious adverse impacts of climate change in the Mekong Delta disrupted local agricultural operations and worsened burdens to smallholder farmers as well as vulnerable rural people.³

Early in 2022, Prime Minister Pham Minh Chinh signed Decision No. 150/QĐ-TTg approving “The 2021 - 2030 Strategy for Sustainable Agriculture and Rural Development - vision to 2050”⁴. The strategy helps to realize the orientation of the Resolution of the 13th Party Congress and is integrated with Vietnam's commitment to the UN Food Systems Summit and the 26th UN Climate Change Conference of the Parties (COP26).⁵

For the first time ever, the strategy of developing the agriculture sector with the promotion of innovation and clear development orientation has been touted. It strongly states the need to transform agriculture from focusing on productivity alone to also prioritizing quality, value addition, efficiency, and adapting to climate change. This transformation will also focus on solving the current limitations, and at the same time providing orientation solutions to promote more sustainable development for Vietnam's agricultural and rural areas. The goal is that by 2050 Vietnam will become one of the leading agricultural countries in the world. Vietnam will rise with a modern, efficient, and environmental-friendly agricultural sector including a state-of-the-art product processing industry.⁶

In the international context, the “2022 State of Food Security & Nutrition in the World” (SOFI) by the United Nations details the challenge of feeding a hungry world is now further exacerbated by climate change, COVID-19 and conflict – with the ongoing war in the Ukraine resulting in implications to the global food supply, impacting the state of food security and nutrition for many countries directly and indirectly.⁷

1 “Vietnam's Year in Review and Outlook for 2022”, Vietnam Briefing, Available at: <<https://www.vietnam-briefing.com/news/vietnams-year-in-review-and-outlook-for-2022.html>>, last accessed on 1st Jul 2022.

2 “The Agriculture sector promotes the role of a pedestal of the economy during the pandemic”, GSO, Available at: <<https://www.gso.gov.vn/en/data-and-statistics/2021/12/the-agriculture-sector-promotes-the-role-of-a-pedestal-of-the-economy-during-the-pandemic>>, last accessed on 1st Jul 2022.

3 “Impacts of Covid-19 Pandemic on Smallholder Farmers and Vulnerable Rural People in Vietnam”, FFTC Agricultural Policy Platform, Available at: <<https://ap.fttc.org.tw/article/2676>>, last accessed on 1st Jul 2022.

4 “Strategy for Sustainable Agriculture and Rural Development in the 2021-2030 period has been approved”, MARD Website, Available at: <<https://www.mard.gov.vn/en/Pages/strategy-for-sustainable-agriculture-and-rural-development-in-the-2021-2030-period-has-been-approved.aspx>>, last accessed on 1st Jul 2022.

5 “Vietnam pledges to realise commitments at COP 26”, Vietnam News, Available at: <<https://vietnamnews.vn/society/1095099/viet-nam-pledges-to-realise-commitments-at-cop26.html>>, last accessed on 2nd Jul 2022.

6 “Activate innovative thinking to develop ‘agriculture - countryside - farmer’”, Nong Nghiep Vietnam, Available at: <<https://vietnamagriculture.nongnghiep.vn/activate-innovative-thinking-to-develop-agriculture--countryside--farmer-d315865.html>>, last accessed on 1st Jul 2022.

7 “In Brief to The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable”, FAO, IFAD, UNICEF, WFP and WHO, Rome, FAO. 2022.

The UN Food and Agriculture Organisation (FAO) also flagged risks to food security from high food and agricultural input prices. The global food import bill is on course to hit a new record of USD1.8 trillion this year, but higher prices and transport costs rather than volumes account for the bulk of the expected increase, according to a new report released by FAO in June. Worryingly, FAO is warning that many vulnerable countries are paying more but receiving less food.⁸ To drive the implementation of FAO's Strategic Framework 2022-2031, which steers FAO's efforts to transform agrifood systems and promote a food secure world for all, the organization recently endorsed new 10-year strategies on Climate Change and on Science and Innovation.⁹ FAO sees science and innovation as a powerful engine to transform agrifood systems and end hunger and malnutrition.

Considering both local and international contexts, while Vietnam's smallholder farmers are under increasing pressure to produce more sufficient food for a growing population, there are also promising opportunities for Vietnam to strengthen our position amongst global agricultural players. Nearly 85 per cent of the world's smallholder farmers call Asia home including Vietnam, and among the unique challenges, these food heroes are facing include landholder rights; market access; availability of finance; access to technology; increasing impacts of climate change. The COVID-19 pandemic and recent geo-political conflicts around the globe have not only exacerbated many of these challenges but also created new opportunities to consider the role of innovative technologies.

In this chapter, we will discuss some key recommendations to support and promote Vietnam's smallholder farmer's access to the use of new plant science solutions, the EVFTA potential, and advanced technologies (including a One-Health approach to the agriculture sector) in effective and responsible manners.

I. STRENGTHENING SCIENCE AND EVIDENCE-BASED DECISION-MAKING ON PLANT SCIENCE PRODUCTS AND NEW AGRICULTURE TECHNOLOGIES

Relevant authorities: Office of the Government (OOG), Ministry of Agriculture and Rural Development (MARD), Ministry of Industry and Trade (MOIT), Ministry of Natural Resources and Environment (MONRE).

Issue description

Identifying the relevant science-based, innovative solutions that Vietnam needs to overcome the complex social, economic, and environmental challenges facing agri-food systems and strengthening evidence-based macro policies to speed-up their adoption.

CropLife Vietnam (CLV) supports the government's Strategy for Sustainable Agricultural and Rural Development. We believe that innovation in agriculture is key to allowing farmers to produce diverse, affordable, and nutritious food while – at the same time – reducing emissions, halting biodiversity loss, and improving rural livelihoods. Unfortunately, food systems in Vietnam and other nations are behind other sectors in adopting and scaling up technology and innovation. This will require robust innovation ecosystems to be created through multi-stakeholder engagement and collective action. To achieve this, farmers need to be given timely and equitable access to the tools they need to grow and produce efficiently. We also believe that a whole-of-government approach is needed to reinforce policies that encourage agricultural innovation, supported by a transparent, science-based regulatory system consistent with international best practice.

Potential Gains/Concerns for Vietnam

Technologies can help farmers drive efficiency, productivity, and sustainability. Examples include crop protection

⁸ "New UN Food Outlook report: World's most vulnerable are paying more for less food", FAO website, Available at: <https://www.fao.org/newsroom/detail/new-un-food-outlook-report-world-s-most-vulnerable-are-paying-more-for-less-food/en>, last accessed on 10th Jul 2022.

⁹ "FAO Council endorses new 10-year strategies on Climate Change and on Science and Innovation", FAO website, Available at: <https://www.fao.org/newsroom/detail/fao-council-10-year-thematic-strategies-climate-change-science-innovation/en>, last accessed on 10th Jul 2022.

(CP), digital and mobile technologies, advanced seeds, drones, GPS guidance tracking, and Plant Breeding Innovations (PBI). These can help transform Vietnam's agricultural sector. With plant science, in particular, scientists are developing drought-tolerant and optimised hybrid maize varieties that are vital to our region's climate and economy. The plant science industry is also pioneering new seed treatments and coatings to protect crops from pests and diseases to work in concert with improved seed varieties. Game-changing technology is emerging to help farmers adapt to unpredictable weather and disease. Through digital agriculture, pests can be identified and the best, most precise treatment can be effectively and timely determined.

Hazard-based vs Risk-based Management Approach on CP

Removal of crop protection products

We are aware that MARD is reviewing CP products registered in Vietnam with the intention of implementing a policy to tighten their management. CLV and its members appreciate this direction. We recognise that the roster of CP products registered for use in Vietnam has grown too large, is littered with chemicals that are outdated and rarely used, and has become a worrisome management issue for MARD. CLV members have, in recent years, voluntarily withdrawn from this list outdated products, those with low biological efficacy, and those that do not meet the requirements of production or non-business. In addition, we are continuing to introduce new-generation products, including bio-pesticides and CP solutions, which are increasingly safer and more efficient.

However, we would like to emphasise that decisions purely focused on hazards or quantity are incomplete. These could lead to the removal of safe, effective, and critically-important weed/insect/disease management tools from the toolbox of Vietnam's 25 million farmers. This would have a devastating impact on the nation's agricultural sector, consumers, and economy. According to a 2018–2019 study assessing the value of agrochemical technology in Vietnam's crop market, the estimated net impact of not having essential chemical pesticides will be a 19.2 per cent fall in output (most significantly in rice and fruits); a US\$2.7 billion drop in GDP, affecting three million jobs; and a USD 281 million increase in total product costs.

Therefore, we call on the government and MARD to ensure that the cutting-off of CP products is properly assessed by scientific experts through a consistent and scientifically-rigorous process in line with internationally accepted methods and standards while taking into account the agronomic realities in Vietnam. Introducing risk-based assessment is one of the most impactful approaches to reduce the risk of CP products. However, more can also be done to raise awareness of CP best practice and to educate people on proper CP use.

GHS and PHI on CP Registration

Circular 21¹⁰, effective since 1 August 2015, includes Article 6 which poses a potential threat to Vietnam's farmers, economy, environment, and consumers. Particularly, point (dd) of Article 6 states:

- Banning and not allowing the registration of crop protection products with active ingredients or finished products falling under GHS Category 3 & 4 for use on vegetables, fruit trees, and tea plants; or
- Chemical pesticide subject to pre-harvest interval for more than seven days being used on vegetables, fruit trees, and tea plants.

These criteria are arbitrary cut-offs based purely on one dimension (hazard and PHI). As such, they are incomplete, may not reduce risks to the user, and are not in accordance with international standards that follow risk-based assessment methodologies.¹¹ This regulation is not based on scientific grounds and Vietnam is the first country in the world to adopt such an approach. This regulation limits or bans the number of technologies available to Vietnam's vegetable, fruit, and tea farmers. In doing so, it reduces their competitiveness and restricts their access to the most advanced tools and safest options to combat pests and diseases and to overcome climate-related issues.

¹⁰ Circular 21/2015/TT-BNNPT dated 8 June of the Ministry of Agriculture and Rural Development on pesticide product administration.

¹¹ "EPA Overview of Risk Assessment in the Pesticides Program". Available at: <<https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/overview-risk-assessment-pesticide-program>> and "EFSA: Cumulative risk assessment of pesticides". Available at: <<https://www.efsa.europa.eu/en/news/faq-cumulative-risk-assessment-pesticides>>, last accessed on 20 January 2021.

Recommendations

- Reinforce policies together with stakeholders that encourage agricultural innovation supported by a transparent, science-based regulatory system consistent with international best practice while taking into consideration the agronomic realities in Vietnam.
- Cooperate with stakeholders to deliver the latest innovations that can help farmers overcome increasingly complex economic and environmental challenges through case studies or the demonstration and responsible use of agricultural technologies that accelerate innovation and mitigate the risks of pesticides.
- Prioritise the review and amendment of Circular 21 on pesticide product administration towards the introduction of risk-assessments and a science-based approach. The use of CP products should not be restricted by arbitrary criteria such as GHS classification for cut-off or PHI for restrictions on specific crops.

II. STREAMLINE AND ACCELERATE THE IMPLEMENTATION OF A COMPREHENSIVE REGULATORY FRAMEWORK ON AGRICULTURAL INPUT PRODUCTS

Relevant authorities: Ministry of Agriculture and Rural Development (MARD), Ministry of Health (MOH), Ministry of Industry and Trade (MOIT), Ministry of Finance (MOF), Ministry of Natural Resources and Environment (MONRE), National 389 Committee

Delay and Lack of Functionality in GM Crop Registration

Issue Description

Vietnam has developed a science-based, sufficient, and simplified legal framework for GMOs for both trading and local cultivation. This can be considered an advanced policy model for other countries in Asia. Therefore, the functional implementation of Vietnam's legal framework on GMOs is crucial to ensure biotech adoption in the region, to promote the benefits of agricultural biotechnology, and to support the government's move toward sustainability and food security.

Potential Gains/Concerns for Vietnam

Vietnam has several opportunities regarding regulations on genetically modified (GM) crops. The first is a strategic opportunity to benefit from over two decades of global commercialisation. This will help Vietnamese farmers to deal with real-world production challenges such as pest and weed control. One example is the use of GM corn as an effective integrated pest management (IPM) tool that resists Fall Armyworm. According to a recent study, GM varieties out-performed conventional varieties in terms of yield by 30.4 per cent and reduced the cost of production by between USD 26.47 and USD 31.30 per ha. The GM maize technology also reduced pesticide use. The average amount of insecticide applied to the GM corn crop was significantly lower (78 per cent, or 0.08 kg/ai per ha) than the average value for conventional corn (0.36 kg/ai per ha).¹² While GM corn is approved for cultivation in Vietnam, unfortunately, in recent years, there has been a lack of variety registration approvals issued and growers only have access to old germplasm.

The second opportunity is to allow the production of GM maize for animal feed to reduce reliance on foreign suppliers. According to the Department of Livestock Production¹³, the most common imported raw material is corn with more than 9.6 million tons. Due to the impact of COVID-19, and especially the recent Russia-Ukraine conflict, the prices of many raw materials have increased. Compared to March 2021, many feed materials have increased significantly in price. Specifically, the price of corn kernels is 10,200 VND/kg (up 29.3 per cent); soybean

¹² "The impact of using genetically modified (GM) corn/maize in Vietnam: Results of the first farm-level survey", Graham Brookes & Tran Xuan Dinh, Available at: <<https://www.tandfonline.com/doi/full/10.1080/21645698.2020.1816800>>, last accessed on 30 January 2021.

¹³ "Vietnam spent more than 9 billion USD on importing animal feed ingredients", MARD website, Available at: <<https://www.mard.gov.vn/en/Pages/vietnam-spent-more-than-9-billion-usd-on-importing-animal-feed-ingredients.aspx>>, last accessed on 10 July 2022.

meal is 16,500 VND/kg (up 33.4 per cent); corn residue is 10,300 VND/kg (up 23.1 per cent); and wheat is 9,850 VND/kg (up 49.5 per cent).

Therefore, apart from MARD's macro-direction to convert some inefficient arable land to crop production for feed material, one necessary solution is to encourage and accelerate the registration and introduction of new plant varieties, including GM crops, to provide farmers with enough tools to allow them to better adapt to climate change. This will, in turn, help to improve productivity and household incomes.

Recommendations

- Accelerate the GM approval process to comply with current regulations to ensure that there are no restrictions on animal feed imports, encourage the cultivation of GM corn by issuing Variety Registrations for Traited Hybrids, and gradually reduce import dependence.

The Implementation of New EPR Regulations on Waste Management (Collection and Disposal of Used Pesticide Containers)

Issue Description

CLV supports policies on Extended Producer Responsibility (EPR) for recycling and waste treatment activities to minimise negative impacts on the environment, enable greater sustainability, and realise the country's vision of a circular economy. EPR is an approach in which the responsibility of the producer of a product is extended to the disposal stage of the product's lifecycle. Decree 08¹⁴ and Circular 02¹⁵, effective since 10 January 2022, provide detailed guidance for the implementation of the law and regulations on EPR-related matters. The producers and importers of pesticides/crop protection product containers are subject to the Waste Treatment Obligations.

Potential Gains/Concerns for Vietnam

After the issuance of Decree 08, and following the guidelines of MONRE and the EPR Committee, CLV members have been making a report and contributing fees to the Environment Protection Fund. However, technical guidelines on the collection, transportation, and disposal of empty pesticide containers are not specified in Decree 08. In order to implement an effective and sustainable EPR scheme, clear and functioning guidelines are needed to protect the health of farmers, their communities, and the environment. This will help to demonstrate the benefits of the new regulations while also making use of efforts and resources contributed by the government and private sector.

Recommendations

- Provide clarification/guidelines on the process of collection, transportation, management, and disposal of used CP containers – CLV would like to become a member of the EPR's working group in charge of pesticide-packaging-related issues. Empowered by our network, and together with organisations specialising in the collection and disposal of pesticide packaging around the globe, we can contribute more information and experience related to enforcement in a sustainable and long-term way.

¹⁴ Decree 08/2022/ND-CP dated 10 January of the Government on elaboration of several articles of the Law on Environmental Protection.

¹⁵ Circular 02/2022/TT-BTNMT dated 10 January of the Ministry of Natural Resources and Environment detailing a number of articles of the Law on Environmental protection.