Promoting international cooperation and information exchange for tackling environmental pollution caused by pesticide packaging

Collection and disposal of empty pesticide containers does not only create an environmental impact but also contribute to protecting the health of farmers and communities in agricultural areas, preserving water quality, reducing soil and air pollution, and moving towards agricultural production that meets higher safety standards. On the occasion of the "2024 International Container Management Symposium" co-organized by the Plant Protection Department (MARD), CropLife International, EuroCham, and CropLife Vietnam in Ho Chi Minh City, the Environment Magazine interviewed Dr. Andrew Ward – Stewardship, Director of CropLife International and Dr. Tan Siang Hee – Executive Director of CropLife Asia on solutions to tackling pollution caused by empty containers in different countries around the world, including Vietnam.

✓ ***Could you please update us with the current context of container management in the world, including plastic waste in agriculture? Is there any international experience that can be applied to Vietnam?***

Dr. Andrew Ward – Stewardship, Director of CropLife International: In 2023, the global container management collection rate (average) was 66%. We do not know of any other industry which has a higher collection rate. However, we are not satisfied with this and are looking to establish new Container Management Systems and increase the effectiveness of already existing systems. The sharing of experience is vitally important and therefore, the global community of Container Management Systems, representing 69 countries are urged to share data and experiences so as to help each other grow. Such information was previously shared with China in a similar event organized in 2022, which has afterwards become an incredible container management success story. Therefore, there is a huge amount of global experience which can be called upon and be applied to Vietnam in the future.

✓ ***At CMS 2024, in addition to Container management, the Extended Producer Responsibility (EPR) and Innovations in Container Management are discussed to figure out opportunities and how they influence the container management in the future. As a co-host of the symposium, could you please elaborate on these topics discussed at the event?***

Dr. Andrew Ward – Stewardship Director of CropLife International: Extended Producer Responsibility (EPR) and Innovations in container management will affect container management, potentially helping to increase the scale and effectively of Container Management Systems. Globally, EPR provides a legal context for industries to support packaging collection. CropLife advocates for a particular consideration for empty pesticide packaging management which does have a level of risk and so is different to the management of other plastics. EPR fees from across the crop protection industry can be allocated to establish Container Management Systems which we have seen grow in many countries to also manage other types of agricultural plastics. Innovations in container management are numerous and can include innovations in how we communicate with farmers and their families, sorting machinery, crushing or shredding machinery and then innovations in mechanical or chemical recycling.

▲ *Dr. Andrew Ward – Stewardship Director of CropLife International*

✓ ***Vietnam is among the top rice exporters in the world with a vast area of agricultural production. Each year, the agricultural industry generates hundreds of tons of pesticide containers, along with post-use chemical residues. What do you think about the current situation of pesticide management in Vietnam?***

Dr. Tan Siang Hee – Executive Director of CropLife Asia: Vietnam's position as one of the top rice exporters globally places a spotlight on the country's agricultural practices, including pesticide management. The issue of pesticide containers and chemical residues management is an important one that requires sustained attention and work – not just in Vietnam, but around the region and world.

In recent years, there have been positive developments in Vietnam's approach to pesticide management. CropLife Asia, in collaboration with the Vietnam Government's Plant Protection Department (PPD), signed an Memorandum of Understanding (MoU) to establish a national Sustainable Pesticides Management Framework (SPMF). This framework underscores the commitment of both parties to enhance pesticide management practices, particularly through the promotion of responsible pesticide use, improved farmer education, and establishment of empty container collection systems.

We are actively engaged in promoting solutions such as the Empty Container Management (ECM) program, which focuses on the safe disposal and incineration of post-use containers. While progress has been made, continued efforts in strengthening regulatory frameworks, increasing public-private partnerships, and boosting on-the-ground training for farmers are crucial in addressing the environmental impact of pesticides and ensuring the long-term sustainability of Vietnam's agricultural sector.

✓ ***At present, the collection of empty containers must comply with regulations subject to the environmental protection law; Decree and Circular giving guidance on its implementation, and specifically Article 3 in Joint Circular No.05/2016/TTLT-BNNPTNT-BTNMT. From CropLife's perspective, how do you think these regulations have addressed the issue of container management? What limitations need to be overcome in years to come?***

Dr. Tan Siang Hee – Executive Director of CropLife Asia: The regulatory framework in Vietnam, including the Environmental Protection Law and the guidance provided through Decrees and Circulars such as Joint Circular No.05/2016/TTLT-BNNPTNT-BTNMT, reflects the government's strong intent to manage the disposal of pesticide containers responsibly. These regulations are a significant step forward in addressing the environmental impact of pesticide use, particularly by setting clear requirements for the collection and disposal of empty containers.

From CropLife's perspective, while these regulations have laid an essential foundation, their effectiveness hinges on consistent enforcement, on-the-ground implementation, and widespread farmer engagement. The framework needs to be supplemented with more robust infrastructure to support collection points and disposal systems, especially in rural and hard-to-reach areas where many of Vietnam's agricultural activities take place.

Looking ahead, some limitations that need to be surmounted include increasing farmer education and awareness on proper container disposal, enhancing the accessibility of collection points, and developing incentive mechanisms to encourage broader participation. Public-private partnerships, such as the collaboration between CropLife Vietnam and the government, can play a crucial role in filling these gaps by driving innovative solutions and expanding outreach to farmers. These efforts will be critical to make sustainable progress in container management over the coming years.

✓ ***What are your expectations for the outcome of CMS 2024? Do you have any recommendations for government units to address pollution caused by empty containers in the world as well as in Vietnam?***

Dr. Tan Siang Hee – Executive Director of CropLife Asia: CMS 2024 creates an important platform for fostering collaboration and driving meaningful discussions on the global challenges related to pesticide container management. My expectations for CMS 2024 are focused on advancing the dialogue around innovative, scalable solutions for sustainable container management and fostering stronger partnerships between the public and private sectors. I anticipate that the event will highlight best practices from around the world and inspire new commitments to reducing pollution caused by empty containers.

▲ *Dr. Tan Siang Hee – Executive Director of CropLife Asia*

In terms of recommendations for government units, both in Vietnam and globally, I believe a multi-faceted approach is essential to effectively address the pollution caused by empty pesticide containers, specifically:

Firstly, strengthening regulatory frameworks: Governments should look at enhancing existing regulations and ensuring that they are aligned with international best practices in container management. This includes adopting clear guidelines on collection and safe disposal.

Secondly, expanding infrastructure for collection and disposal: Establishing more accessible collection points, especially in rural areas, and creating efficient incineration facilities will help prevent improper disposal and reduce environmental pollution.

Thirdly, public-private partnerships: Governments should actively engage with the private sector, including organizations like CropLife, to leverage expertise, resources, and technology. Collaborations can drive the development of innovative, eco-friendly solutions and ensure effective implementation.

Fourthly, education and awareness campaigns: Governments should continue investing in farmer education programs that emphasize the importance of proper container disposal. This includes promoting stewardship programs like the Empty Container Management (ECM) initiative, which has been successful in several regions.

Fifthly, incentivizing participation: Introducing incentive mechanisms to encourage farmers and other stakeholders to actively participate in container collection and disposal programs can significantly enhance their effectiveness.

The focus must be on sustainability. Ensuring that Vietnam and other countries continue to develop their agricultural industries goes hand-in-hand with prioritizing environmental protection and responsible pesticide management at the same time.

Thanks for joining us in this interview.

PHẠM ĐÌNH