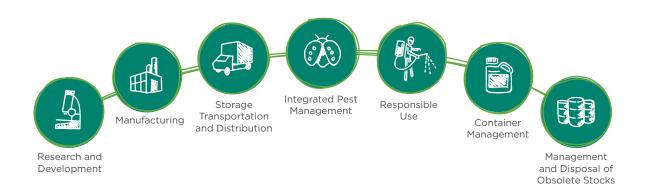
ENSURING THE SOUND MANAGEMENT OF PESTICIDES



CropLife International is the global federation representing the plant science industry, made up of six member companies that research, manufacture and sell crop protection and plant biotechnology products. The organization also serves a global network of regional and national associations which spans 91 countries.

A core activity of the global CropLife network is the promotion of stewardship – a lifecycle approach to managing pesticides from research and development, through use in the field and eventual disposal of any waste or product discontinuation:



Stewardship relies on the promotion of, and training in, best practices. CropLife International and its regional and national associations continuously work with a variety of partners to promote stewardship, and the responsible use of pesticides in the field. The industry's goal is to maximize the benefits and minimize any risk from their use.

COMMITMENT TO UN ENVIRONMENT GOALS

The theme for the fourth session of the UN Environment Assembly (UNEA4) is "innovative solutions for environmental challenges and sustainable consumption and production". CropLife International agrees that innovation is one of the most effective ways to move our world closer to poverty eradication, sustainable production and environmental protection.

A high level of investment from the crop protection industry to research and develop new products has led to a continual improvement in both the effectiveness and safety profile of pesticides over the past 60 years.

According to a recent report, "The Evolution of the Crop Protection Industry Since 1960", written by market analysts Phillips McDougall, technological advancements have helped the crop protection industry meet increasingly rigorous regulatory requirements, meet societal expectations for ever-safer products, while also helping farmers meet the growing global demand for food.

As innovators, the industry must continue to push the boundaries for ever-safer products that can also help farmers meet the immense challenges ahead with climate change pressures, increasing populations and the need to protect precious biodiversity and natural resources from expanding cultivated area.

Fundamental to these advancements in technology is a regulatory environment, including the protection of certain confidential business information, that gives companies confidence and encouragement for continued investment. Low income countries also need support to build their regulatory capacity to ensure all farmers can have access to new products.

CORE INDUSTRY ACTIVITIES TOWARDS SAFE AND RESPONSIBLE USE OF PESTICIDES

CropLife International is committed to the UN's Strategic Approach to International Chemicals Management (SAICM). Our members view their contribution to the implementation of SAICM as an opportunity to improve the sustainable use and effective management of pesticides, and to communicate about their critical importance for the delivery of the 2030 UN Sustainable Development Goals. Here are some examples of how we are contributing.

Training Farmers in the Responsible Use of Pesticides

In addition to efforts from our member companies, almost **4 million individuals** in **70 countries** have been directly trained in Integrated Pest Management (IPM) and the responsible use of crop protection products through CropLife International programs since 2005. Further, more

than **49 million** have been reached through media outreach and stewardship awareness campaigns. The training has been delivered through **over 300 partnerships** across the global network, as seen in the map below:



Fig. 1: Countries with Supported IPM/RU Programs

Here are some specific examples of IPM and responsible use training partnerships and their impact (all can be viewed in detail at www.croplife.org):



Ethiopia

In Ethiopia, a country with one of the fastest growing urban populations, smallholder farmers play a vital role in feeding the cities. But these farmers also need help protecting their crops. In 2016 CropLife Africa Middle East joined forces with the Dutch international development organization, SNV, and the Ethiopian Ministry of Agriculture and Natural Resources, to deliver a three-year training program.



Vietnam

In 2016, CropLife International partnered with the German international development organization GIZ and the Vietnamese government to train rice farmers in Vietnam's Mekong Delta. The three-year project aims to help improve productivity and profitability for 15,000 rice farming families through IPM and responsible use of pesticides. At least 300 pesticide retailers will also be trained to help farmers identify the correct crop protection products and use them responsibly.



India

CropLife International, CropLife Asia and CropLife India partnered with two local NGOs in the Adoni region of Andhra Pradesh, India, to provide IPM training, responsible use and the secure storage of crop protection products to 128,000 farmers.



Honduras

CropLife Latin America formed a partnership with the United States Agency for International Development (USAID) to train Honduran farmers in good agricultural practices and responsible use of pesticides. The aim was to help lift 108,000 rural Hondurans out of extreme poverty by teaching farmers how to protect their crops from pests and disease.



West Africa

CropLife Africa Middle East entered into a two-year partnership with the World Cocoa Foundation to train professional Spray Service Providers (SSPs) in Ivory Coast, Ghana, Nigeria and Cameroon. Spray Service Providers are dedicated professionals, trained to provide advice on IPM and, where needed, apply crop protection products. Over the course of the program 3,220 SSPs were trained benefiting more than 40,000 smallholder cocoa farms.



India

CropLife India partnered with an Indian tech firm, RML Information Services (RML), to customize a phone app called MyRML for Indian farmers to get easy access to agricultural information on their smart phones. The app helped CropLife Asia send stewardship materials around best management practices to 1.4 million farmers in 50,000 villages across 18 states in India. MyRML "speaks" nine languages, and has information on 450 crop varieties, 1,300 markets and 4,000 weather locations.



Protecting Pollinators

The crop protection industry is committed to initiatives to protect pollinators. In 2015, the project **MadhuSandesh** was launched in India by CropLife Asia to connect bee keepers and farmers through an app which enables two-way communication on the location of hives and crop protection activity on registered farmer's property. There are other industry-led initiatives on bees including **Beesmatter** in Canada, **Beeconnected** in Australia and **Polinizadores** in Latin America.

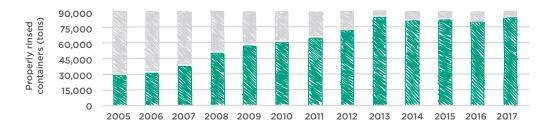


Empowering Women

Women play a critical role in agricultural growth in developing countries, and female empowerment is an important aspect of CropLife International training programs. Grace Amma, who became the first female Master Trainer in her region as part of the CropLife International Adoni project, said: "It is good that women are becoming leaders. I teach men and women and what I am doing is very helpful to farmers." Go to croplife.org to see more about Grace Amma and other stories of women benefiting from CropLife training projects.

Safe Disposal of Plastic Pesticide Containers

The crop protection industry has collected and safely disposed 781,000 tons of plastic pesticide containers since 2005.



Source: CropLife International with data from industry-led container management programs

In 2017, 80,000 thousand tons of plastic were collected, with more than 55 percent being recycled into end uses such as fence posts and car battery cases. Additionally, more than 11,000 tons of other packaging material were collected.

So far, the crop protection industry has helped establish pesticide container management programs in 58 countries across the world, as seen in the map below:



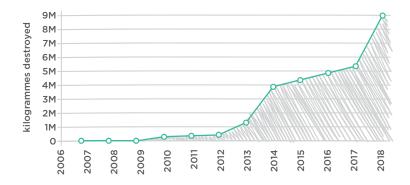
Fig. 2: Countries with Industry-led Container Management Programs

Our CropLife International roadmap describes the steps a country can take to establish a new container management program. Find out more and see container management case studies at www.croplife.org.

Removal of Obsolete Pesticide Stocks

The crop protection industry has voluntarily contributed to multi-stakeholder programmes to remove obsolete pesticide stocks. Between 1991 and 2003, the crop protection industry participated in over 25 projects in 20 countries, leading to the safe disposal of an estimated 3,000 tons of obsolete pesticides.

Since 2005 the focus has been on the African Stockpiles Programme, which included national governments, FAO, World Bank, as well as NGOs (PAN UK, PAN Africa and WWF). The program was established to remove all obsolete pesticides from the continent and help prevent their future build up. This, and subsequent activities with FAO and the World Bank, will have removed around 9,000 tonnes by the end of 2018, as demonstrated in the graph below. A new phase of this work will run 2019-2025, working with partners to clear more obsolete pesticides from Africa. A core focus of the work will be prevention of any accumulation in the first place.



Elsewhere, since the 1990s, 15,000 tonnes of obsolete pesticide stocks have been collected and destroyed in OECD countries by CropLife national associations in partnership with local governments and others.



Fig. 3: Countries with Obsolete Pesticide Stocks Collection

CropLife International has also produced a document entitled "Obsolete and unwanted pesticide stocks: practical guidance on safeguarding, disposal and prevention" published in 2017 to assist stakeholders tackle the problem.

Training Material and Guidelines on Pesticide Safety

CropLife International has developed a number of guidelines, training manuals, posters and leaflets for use in stewardship programs, in addition to guidelines around the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). These are freely available on the CropLife International website and can be translated and adapted to local conditions. The material promotes the responsible use of crop protection products within an IPM strategy where pest management interventions are only used when needed, and if crop protection products are used they are handled and applied safely and effectively.

Tackling the Anti-Counterfeit Pesticide Market

While the amount of counterfeit and illegal pesticides is unknown – given illegal activity can't be accurately measured – reliable third-party publications demonstrate that the problem is growing. The industry is therefore committed to work with law enforcement agencies to stop counterfeit pesticides before they reach countries, the market or farmers.

CropLife International is a member of, and in regular contact with, all major international anti-counterfeiting organizations including the Interpol Intellectual Property Crimes Action Group, Business Alliance to Stop Counterfeiting and Piracy, REACT, Anti Counterfeiting Network and OECD Task Force on Charting Illicit Trade.

In user markets, we are focused on farmer awareness-raising, promoting the integrity of legal distribution and advocating local licensing and joint regulatory and police enforcement actions. Efforts are integrated wherever possible with existing CropLife stewardship programs to educate farmers on counterfeit and illegal pesticides.

Globally we are focused on promoting information linkages across borders on the trade of illegal pesticides. We are also developing international consensus and momentum with law enforcement to tackle the issue of counterfeits and in providing facts to their trans-national investigations. Among intergovernmental institutions we promote the full enforcement of existing legislation and improvements in legislation (especially for penalties) to target the growing trade in counterfeit and illegal pesticides.

In all markets, we are increasing voluntary due diligence through programs such as Know Your Customer and Know Your Supplier. These programs are based on all supply chain stakeholders knowing who is legally involved in trading pesticides.

Promotion of the International Code of Conduct on Pesticide Management

The International Code of Conduct on Pesticide Management is the FAO/WHOs' voluntary standard and point of reference for sound pesticide management practices and CropLife International members are committed to abide by the provisions of it. In 2013, the Code was revised to clearly reference public health and align with current best management practices and CropLife International developed an e-learning tool to help the industry understand it. So far more than 10,000 people have used the online tool to increase their knowledge. In addition to use by the crop protection industry, the tool has been referenced positively by core stakeholders including the FAO/WHO Joint Meeting on Pesticide Management.

The Code calls for regulating crop protection products based on risk, not hazard. If a risk assessment finds that risk mitigation measures are insufficient to ensure that the product can be handled without unacceptable risk to humans and the environment – they should be withdrawn from the market, in line with the Code guidelines.

In support of this approach, CropLife International's member companies recently completed their voluntary portfolio review, evaluating more than 6,400 crop protection products. Any products meeting the Code's HHP hazard criteria have undergone risk assessment, risk mitigation and, where the risk remains too high, the product has been withdrawn from the market.

CropLife International is also encouraging global stakeholders to adhere to similar risk management measures and has a longstanding commitment to building capacity for risk assessment in developing countries.

Our Commitment to Data Transparency

Before any pesticide can be approved for use, all safety data related to human health and the environment must be submitted to regulatory authorities for their review.

It is considered one of the most stringent product approval processes in the world taking an average 11 years to take a product from discovery to commercial use. Most of the data submitted to the regulatory authorities is already available to the public.

In addition, CropLife International and its member companies have made a global commitment to enable more public access to safety data related to their pesticides. The initiative stems from the industry's commitment to transparency, responsibility and sustainability.