

THE CROPLIFE NETWORK IN THE REGION OF AFRICA AND THE MIDDLE EAST

CropLife Africa Middle East A.I.S.B.L. is the regional association representing the leading global manufacturers of crop protection products (pesticides), seeds and biotechnology products and more than 26 national associations spread throughout Africa and the Middle East. CropLife Africa Middle East was registered as an international non-profit organization in Brussels in November 2002. The association is legally fully independent but maintains a strong link with the global CropLife network.

At the end of 2017 the association consisted of:

10 company members





A decentralized hub structure that follows respective sub regional regulatory harmonization efforts and initiatives has been found to be most effective for the coordination and implementation of the CropLife activities and initiatives. Two Regional Directors, Les Hillowitz, based in Johannesburg, South Africa and Yao Bama, based in Abidjan, Cote d'Ivoire are responsible for East and Southern Africa, and West and Central Africa hubs respectively. In addition to this, the team is supported by Stella Wafukho, Director Regulatory Affairs and Stakeholder Relations, and Manon Mireille Dohmen, our Professional Trainer. Stella is based in Nairobi, Kenya and Manon is in Accra, Ghana. On February 1, 2017 Samira Amellal joined the team as Executive Director. Since 1 January 2018, Samira is the new Director General / CEO of the association. Samira is based in Casablanca, Morocco.

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Message of the Director General

Dear Reader.

After almost 20 years leading CropLife Africa Middle East, I would like to look back for a moment, to review some major milestones and share some thoughts with the readers of this Annual Report.

I think I have been privileged to join the African industry team - at the time called the Africa Middle East



Dr. Rudolf Guyer visiting a recycling plant in South Africa

Working Group (AMEWG) - at a time when the Global Crop Protection Federation (GCPF) decided to embark on a global restructuring and created with the brand CropLife® a new corporate identity aiming at a more positive image for our industry. The decision to move away from a reactive and defensive communication approach and to engage and interact much more proactively with the civil society was taken at the change of the millennium. It was the result of a growing industry challenge and critique by global civil society representatives following some major industry crisis events that had taken place previously. The fire in Bhopal in India, Seveso in Italy and later the Sandoz fire in Schweizerhalle in Switzerland, but also the growing public opposition against the introduction of transgenic crops, yet another "unwanted technology" developed by our member companies, led to the conclusion and decision that such a change was imperative. It was at this time when the global leadership of CropLife asked and encouraged me to establish CropLife Africa Middle East as a new regional industry association and by doing so, give the African continent and the many African national industry associations, their own and stronger voice on the various global platforms where pesticide issues were and continue to be debated, challenged and increasingly regulated. On 23 May 2002 the founding General Assembly took place in Amman, Jordan and with the publication of the Articles of the Association in the Moniteur belge on 31 October 2002 the association was formally created.

During the first 6 years our newly created regional association made a major effort to convince national associations to change from their old country specific name to the new global brand CropLife and to adopt the new corporate identity. With a few exceptions this effort was successful. Particularly important in my view, is the fact and reality that in Africa today the name CropLife represents the entire Plant Science Industry, especially at the level of national and regional authorities. This has been of great help in our various advocacy efforts in recent years. National associations were linked to the regional association with a free license agreement giving the national association the right to use the new global brand CropLife but at the same time these national associations had to subscribe and commit to a number of standards, especially with respect to Intellectual Property Rights and also to abide by the then so-called FAO Code of Conduct for the Distribution of Pesticides. The newly created regional association continued to offer stewardship support primarily delivered as "Safe Use Training" and targeting small holder farmers but also engaging increasingly on the issue of obsolete stocks under the Africa Stockpile Programme (ASP).

Until 2010, most of our contributing member companies, namely the global leaders and research based multinational companies, reduced their own presence on the African continent significantly. As a consequence, the interest and possibilities of these member companies' staff to engage and contribute in association matters was reduced. This made it increasingly difficult for our regional and national associations to perform our activities and to achieve our goals. It was this development that made us look out for support and allies especially in the area of stewardship activities. We realized that with our own limited industry resources and staffing we never ever would be in a position to train the millions of small holder famers on the African continent in the correct and responsible use of the needed herbicides, insecticides and fungicides. For this reason, and increasingly successfully, we started to position our association as a partner for the cooperation with development organizations and also as a partner for public private partnership projects.

Another consequence of this reduced presence and engagement by multinational companies was that many markets were left unattended and poorly served with much needed pesticides. This increasingly attracted many new players to these markets. Players, who were not members of the national CropLife association and in many cases also engaged in illegal trade and offering poor quality and fake products. As a consequence, the activities of our association had to be expanded. We no longer could concentrate on stewardship activities alone, but had to deploy significant resources to fight illegal and fake pesticides and also to engage much more on the strengthening and enforcement of the legal framework for pesticide registration at the country level.

Since about 2010 a renewed interest and "the comeback of most multinationals" to the most important countries and markets in Africa and the Middle East has been observed. This was the beginning of the most successful period for our regional association. Our small regional team was strengthened and also in more and more national associations we now have at least one or even more full-time association professionals. Our overall strategy was developed and continues to be based on three main strategic imperatives and components:

- Stewardship support for a responsible use of pesticides following the global cradle to grave life cycle stewardship strategy.
- Advocacy and support for the improvement of the regulatory framework of pesticides at the national level.
- Advocacy and especially communication to small holder farmers to combat the still growing use of illegal and fake products in our region.

There is not sufficient space here to review in detail the progress made in recent years. Highlights in stewardship were without doubt the obsolete stock removal and more recently our flagship activity with the Spray Service Provider concept being implemented with other stakeholders. Also, regarding the regulatory imperative we have made significant progress since we started to promote the "Principles of Regulations" as a good governance framework for pesticide management at national level. It has indeed been encouraging to observe how in recent global events increasingly self-confident and vocal African country delegations presented their own case against the global anti pesticide network or also against politically motivated European legislative developments related to pesticides, developments

that potentially would have a negative impact on the competitiveness of African export countries.

In conclusion I think that our current regional CropLife network is well equipped to cope with ongoing and future challenges of our industry. We are particularly satisfied and proud to be treated as a trusted and respected partner both in the area of product stewardship and responsible pesticide use when we cooperate with external organizations with the shared goal to improve incomes and livelihoods of small holder farmers but equally when discussing and engaging with national and regional authorities on global policy issues such as Highly Hazardous Pesticides (HHPs), Pollinators, Endocrine Disruptors, MRLs as potential trade barriers, and others.

I am confident that our rejuvenated leadership team will continue to build on these achievements and further strengthen the CropLife network in Africa Middle East for the benefit of all stakeholders, for farmers, for the national economies, for the consumers and of course also for our CropLife member companies.

At this point I would like to thank first of all my regional team with the three Regional Directors, Ali Mohamed Ali, Les Hillowitz and Yao Bama who were part of the above described CropLife journey since the beginning. In 2010 this team was strengthened with the part time support by our Professional Trainer Manon Dohmen who decisively contributed to the development and implementation of the Spray Service Provider Concept in recent years. Another decisive resource was added when Stella Simiyu Wafukho joined the team as Director Regulatory Affaires and Stakeholder Relations in 2014. Without the committed and tireless support by all colleagues the above described achievements would not have been possible.

Rudolf Guyer Director General CropLife Africa Middle East

Message of the President

Dear Reader,

My time with CropLife Africa Middle East is not as long as the 20 years of Rudolf Guyer. But my presence on the Board and then as the President during the last 9 years has given me many opportunities to reflect on the many challenges our industry is facing in Africa and the Middle East and on



Eric Bureau

the best ways to address them through an efficient professional industry association.

Over the years I have witnessed the development of CropLife Africa Middle East as a credible and reliable partner for regulatory authorities, international and local organizations, governments, public and private stakeholders. The CropLife name enjoys a high reputation across the continent and CropLife is regarded as the partner of choice for all initiatives related to crop protection product regulations and usage.

This is undoubtedly the result of tireless efforts of Rudolf Guyer and the CropLife AME team in so many

areas: Stewardship (IPM, responsible and safe use, management of empty containers, management of obsolete stocks), regulations with the aim of regional harmonization, promotion of IPR and the fight against counterfeits and other illegal pesticides, communication, etc.. During the last 5 years, the number of partnerships with international development organizations and other stakeholders has dramatically increased, allowing CropLife AME to reach out to tens of thousands of smallholder farmers and demonstrating the professionalism of our Association.

A lot has been done... a lot remains to be done.

At this time of management change, I want to express my heartfelt gratitude to Rudolf Guyer for the great achievements of CropLife AME under his leadership and his relentless efforts to make the voice of our industry more audible and credible.

I also want to welcome Samira Amellal as our new Director General. No doubt that she will continue the good work already done and develop CropLife further as as an ambassador for the plant science industry across Africa and the Middle East.

Yours sincerely,

Eric Bureau President of the Board of Directors



From left to right: Bama Yao (Regional Director WCA), Ali Mohamed Ali (previous Regional Director NAME), Michel Chartouni (Hub Chair NAME), Rudolf Guyer (outgoing Director General), Sarwat Sakr (Chairman CropLife Egypt), Stella Simiyu Wafukho (Director Regulatory Affairs and Stakeholder Relations). Samira Amellal (the new Director General) and Les Hillowitz (Regional Director ESA).

REGULATORY MATTERS

In our efforts to contribute to the creation of an enabling regulatory environment for pesticides in our region, we focused on the importance of conducting risk assessments and on the need to implement appropriate risk mitigation measures as the basis for sound and science based regulatory decision making at the country levels. We also engaged and actively participated with more resources at various global stakeholder events and in dialogues related to the use of pesticides.

Pesticide Risk Mitigation Approaches

During the three Africa and Middle East sub regional meetings, a series of workshops were organized about sharing approaches for prevention and mitigation of pesticide risks in the context of Highly Hazardous Pesticides (HHPs). Country representatives identified priority problems for risk mitigation and developed initiatives to address them over the next few years including container management, strengthening legal frameworks for chemicals management and training in responsible use of pesticides among others.

Emphasis was placed on risk assessment, highlighting the scientific procedures to reduce or prevent the exposure to one or more chemicals through hazard



assessment, hazard characterization, and exposure assessment for human health and environment, and the implementation of appropriate risk mitigation measures.

Implementation of GHS

In the same regional dialogues, CropLife Africa Middle East (AME) shared practical steps in the implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), linked to FAO labelling guidelines for pesticides. A number of countries including Zambia, Kenya, Jordan and South Africa have embarked on implementing GHS and are at various stages. This has encouraged other countries in the spirit of harmonization to consider initiating steps for GHS implementation, something to watch out in 2018.

Review of Regulations

Our other contribution was on the ongoing review of pesticide regulations in countries where we enhanced knowledge about WTO provisions on Intellectual Property Rights (IPR) and the need for their inclusion in respective regulatory frameworks to spur innovation. This resulted in consideration by countries to revise regulations in compliance with WTO provisions. Still on development of regulatory frameworks, AME countries were interested in the registration of biologicals. an increasingly emerging topic in the development of pesticides and use. In all the regional workshops, we showcased examples from other countries and regions on the registration of biologicals for their consideration. In the coming year, countries will focus on establishing and enhancing

regulatory frameworks for biologicals where they are absent and where they currently exist.

Impact of EU cut off criteria in pesticides' regulation

We worked with countries in the region on enhancing the understanding of how the hazard approach in pesticide regulation can impact exports into the European Union. Specific emphasis was on the MRLs & Import Tolerances and Endocrine Disruption (ED) criteria, among others. Resetting MRLs and import tolerances at the limit of detection of 0.01 ppm for the respective pesticides under discussions, would potentially impact 75% of exports of agricultural commodities valued at 11 billion Euros in Sub-Saharan Africa. This information was part of the key messages by country delegates during WTO - SPS meetings where some of these issues were deliberated. Still on this topic, at the end of the year, EU announced a Stakeholder Survey and Public Consultation for both EU and non-EU stakeholders to provide feedback on the European Commission Regulations 396/2005 and 1107/2009, an exercise also known as REFIT or Regulatory Fitness and Performance. The aim of the exercise is to ensure that the two regulations deliver results for citizens and businesses effectively, efficiently and at minimum cost. This process thereof will continue into next year.

At the global level, CropLife Africa Middle East also contributed to ongoing discussions covering several regulatory issues during the following meetings:

- Strategic Approach to International Chemicals Management(SAICM) intersessional meeting (Feb 2017, Brasilia). CropLife shared its contribution towards the sound management of pesticides, highlighting the Spray Service Provider in Africa Middle East, Container Management in Brazil and the Obsolete Stocks program, implemented jointly with governments, FAO, World Bank, PAN UK, PAN Africa and WWF as examples.
- The **Third Global Minor Use Summit (GMUS-3)** in Montreal in October in setting the roadmap for resolving challenges faced by growers of minor crops in accessing crop protection tools and the need for international harmonization of regulations.
- Contributed to increasing the visibility and participation of our industry at **Third United Nations Environment Assembly (UNEA3)** in December 2017, Nairobi on the theme "Towards a Pollution Free Environment". This was through the organisation of the first-ever Business Symposium under the banner of the Global Business Alliance for the Environment (GBA4E), where the private sector showcased initiatives to achieving a pollution-free planet.
- Contributed to enhancing the understanding by over 70 participants drawn from various stakeholder groups in 8 countries on the impact of potential changes to International Estimated Short-term Intake (IESTI) equation and the setting of MRLs for respective economies. This topic was also discussed at the Codex Committee on Pesticide Residues (CCPR) in April 2017.

SPRAY SERVICE PROVIDERS (SSPs) ACTIVITIES

SSPs TRAINED IN AFRICA

Mali

No new SSPs trained in 2017 Total SSPs: 36

Cote d'Ivoire

No new SSPs trained in 2017 Total SSPs: 1578

Ghana

26 new SSPs trained in 2017 Total SSPs: 1527

Nigeria

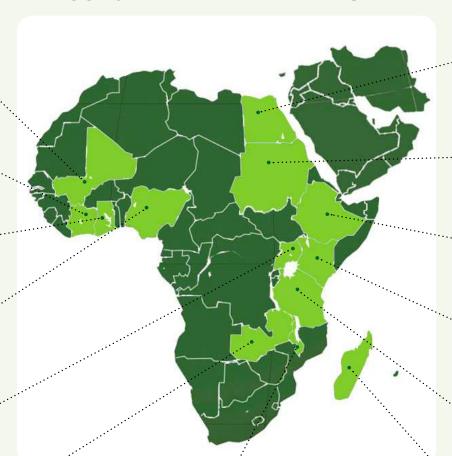
219 new SSPs trained in 2017 Total SSPs: 1163

Uganda

21 new SSPs trained in 2017 Total SSPs: 245

Zambia

No new SSPs trained in 2017 Total SSPs: 3208



Egypt

13 new SSPs trained in 2017 Total SSPs: 781

Sudan

58 new SSPs trained in 2017 Total SSPs: 58

Ethiopia

30 new SSPs trained in 2017 Total SSPs: 195

Kenya

380 new SSPs trained in 2017 Total SSPs: 847

Tanzania

40 new SSPs trained in 2017 Total SSPs: 40

Madagascar

No new SSPs trained in 2017 Total SSPs: 25

Malawi

191 new SSPs trained in 2017 Total SSPs: 323

The SSP concept is more than just the training of farmers

A SPRAY SERVICE PROVIDER (SSP) IS A FARMER WHO:

- has received special training to apply pesticides.
- is directly linked to member companies of the local CropLife association for access to good quality pesticides.
- hires out his services to (fellow) farmers to spray their lands.

THE FOLLOWING STEPS ARE TAKEN TO SET UP

A NETWORK OF SSPs:

- 1. Selection of farmers to be trained
- 2. Training of SSPs
- 3. Linking SSPs with member companies of CropLife
- 4. Equipping SSPs with essential needs such as personal protective equipment (PPE) and a suitable sprayer
- 5. Promoting the services of SSPs
- 6. Coaching and monitoring of SSPs

Crops covered

Special SSP programs have been developed for cassava, cocoa, cotton, sorghum, and rice. However, most SSPs service a variety of crops including beans, maize, onions, potatoes, tomatoes, vegetables.

Our partners in SSP projects in 2017









Blue Moon & Shiraka **Egypt**

IFAD Sudan

IFDC/REACH

Uganda MOST

Malawi

SNV Ethiopia and Kenya GIZ/CARI

Ghana and Nigeria

IFDC/2Scale

Ethiopia, Mali, Nigeria, and Uganda

IFDC/SMS **Nigeria**

Palladium/Propcom **Nigeria**









Total number of new SSPs trained in Africa in 2017: 1,167

Total number of SSPs operating in Africa: 10,526

Total number of SSPs trained in IPM in 2017: 1,082

Total number of farmers serviced by SSPs in 2017: 60,000+



Results from the SSP Palladium/ Propcom project in Nigeria

A total of 165 SSPs were trained in 3 different states. In September 2017, the Propcom M&E team undertook a field study to verify the results presented by CropLife.



Propcom reported the following:

- More than 7,000 farmers made use of the services of the SSPs.
- In Kaduna, SSPs grouped to jointly purchase their agro inputs from one of the member companies of CropLife Nigeria.
- In all areas where the SSPs are active, contract sprayers are also active. It seems that they are losing ground to the SSPs.
- Farmers have confidence in the SSPs.
 The brightly coloured overalls
 contribute to this and are easily
 recognized.
- SSPs generate higher fees than existing contract sprayers.
- Several SSPs have trained some of the existing contract sprayers, especially on the use of PPE.

Results SSPs IFDC/2Scale in Uganda

CropLife Uganda trained 21 SSPs in collaboration with the IFDC/2SCALE project. All SSPs are members of a cotton cooperative.

Following the graduation ceremony in July 2017, CropLife Uganda visited all 21 SSPs to coach them and monitor their activities. Over a period of 4 months, the SSPs had serviced 383 farmers, earning themselves an average of 65 USD.

The main crop serviced was cotton, with beans, maize, and mango as additional crops. 20% of the SSPs confirmed satisfaction with their earnings. 55% mentioned the disposal of empty containers as a major issue.

CropLife Uganda will continue monitoring the SSPs in 2018.



New Technologies Introduced through SSPs in Sudan In Sudan, the SSP concept has been used to introduce a new technology in the form of a tractor mounted sprayer with a capacity of 400 liters. The sprayer can cover a large area in a short period as compared to a knapsack sprayer. In addition, there is less risk of contamination. A total of 58 SSPs were trained in collaboration with the International Fund for Agriculture Development (IFAD). During the training program, the tractor mounted sprayer was demonstrated.





SSP activities in Africa



Graduation ceremony of SSPs in Kasese, Uganda (IFDC/2Scale project)



Proud SSPs displaying their record keeping books in Ghana (GIZ/CARI project)



Proud SSPs displaying their personal protective equipment and certificates during a graduation ceremony in Ethiopia (SNV/HortiLIFE project)



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Demonstration with a motorized sprayer in Sudan (IFAD project)



Practical session on measuring and mixing in Egypt (Shiraka project)



Session on parts of the knapsack sprayer during a SSP training in Zambia (Lima Chuma project)



One of the SSP groups in Kenya (SNV/HortIMPACT)



RESPONSIBLE USE TRAINING

In addition to the training of Spray Service Providers (SSPs), national CropLife associations implemented stewardship activities, including training on responsible use, Integrated Pest Management (IPM), Resistance Management, and other topics.

Number of people trained in Africa and the Middle East in 2017: 27,909

Number of people attending awareness creation programs: 16,872

Farmer training in Egypt

CropLife Egypt is involved with Blue Moon in activities under the USAID funded Premium Project for Egyptian Small Growers. Farmers from 6 different small Producer Organizations who are certified under Fairtrade and GLOBALG.A.P. received training in the responsible use of pesticides. In 2017, a total of 474 farmers followed a 2-day training program, while an additional 796 attended awareness creation days. Several of the farmers were selected to be trained as Spray Service Providers.



INTEGRATED PEST MANAGEMENT (IPM)

NEW IPM SSP ADVANCED COURSE

CropLife Africa Middle East developed an Advanced IPM course for SSPs who have been servicing farmers for 4 years or longer. During the 2-day course, SSPs learn about the life cycle of pests, prevention, pest management and the environment, and several other topics. So far, 295 SSPs in Ghana and Nigeria have followed this new course.

UPDATE ON THE ROLLOUT OF THE IPM SSP COURSE

The first IPM course developed 2 years ago for SSPs was updated. Topics now include factors influencing the outbreak of pests and diseases, mitigating factors, the economic aspect of IPM, applying pesticides under crop certification schemes, and several other topics. In 2017, 643 SSPs in Cote d'Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Uganda, and Zambia followed this 2-day course. In Uganda, the course was partly implemented with the support of the IFDC/REACH project.



From 2015, 2904 SSPs in Africa undertook the special IPM course.

295 of them, also undertook the advanced IPM course.

Regional IPM Course for SSP-Trainers

10 SSP-trainers from the national CropLife associations of Egypt, Ethiopia, Ghana, Kenya, Malawi, Nigeria, and Uganda underwent a 5-day course on IPM and training skills in Nairobi. The course was organized to update their knowledge on IPM by testing the manual of the new IPM SSP Advanced Course, and to improve on training skills.

In Egypt, Ethiopia and Uganda, field staff of member companies underwent the CropLife IPM course to be better equipped to train SSPs and others in IPM.



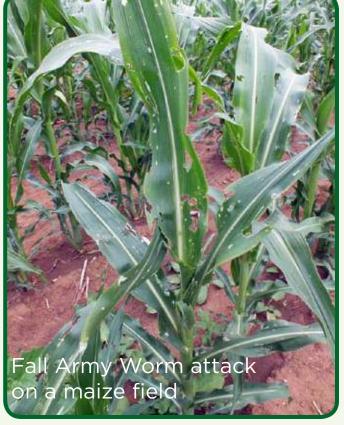


Fall Army Worm (FAW) -Demanding a professional IPM approach

Crops, primarily maize, in almost all countries in Sub Saharan Africa were severely affected by attacks of Fall Army Worm during 2017. Representatives of the national CropLife associations contributed during meetings at country level in Cameroon, Ghana, Kenya, South Africa, Uganda and Zambia, and wherever a special committee or task team was formed, the national CropLife association was an active member.

Training materials developed by the private sector in South Africa and later adapted by the FAO were circulated among the national CropLife associations to be used in the field.





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ANTI-COUNTERFEITING ACTIVITIES

In all SSP training programs and many responsible use programs, topics on anti-counterfeiting are included. Participants learn about the consequences of using counterfeit pesticides and how to recognize counterfeit products. In Egypt, a special video developed on anticounterfeiting is shown in all responsible use programs with farmers and agro-dealers. CropLife Zambia assisted the regulatory body ZEMA during the inspection of agro-dealer shops. During these inspections, agro-dealers were sensitized about counterfeit pesticides, their effects and how to identify them.

In Ghana and Cote d'Ivoire, a total of 1400 customs officers received training on how to recognize fake products and what to look for in shipping and importation documents. In addition, 360 people followed awareness and training programs. CropLife Sudan is a member of the anti-counterfeiting committee that was formed by the National Pesticide Council in October 2017.

Stickers used in Ghana to warn farmers and other partners on counterfeit pesticides





MANAGEMENT AND DISPOSAL OF OBSOLETE PESTICIDES

CropLife International and CropLife Africa Middle East, along with CropLife national associations, worked on several projects on the management and disposal of obsolete pesticides.





Eritrea (363 tonnes): In collaboration with FAO. A total of 363 tonnes of obstocks were removed.





Morocco: Tenders for disposal are in preparation.

829 tonnes of obsolete pesticides (obstocks) removed in Cameroon, Eritrea, Ghana and Malawi in 2017





South Africa: Uncertainty about the remaining 200 tonnes in South Africa following the closure of the World Bank project in 2013.





Benin: Tenders for disposal are in preparation





Ghana (223 tonnes): In collaboration with FAO. A total of 223 tonnes of obstocks were removed.





Cameroon (35 tonnes): In collaboration with FAO. A total of 35 tonnes of obstocks were removed.

1,135 tonnes of obsolete pesticides (obstocks) proposed to be removed in 2018





Sudan (800 tonnes): An FAO-led project in Sudan (800 tonnes) was approved in principal in 2017 by the Global Environment Facility (GEF) but implementation has to wait for preparation and GEF clearance of the full project document.





Senegal (estimated 300 tonnes): FAO-led project has reached agreements with several partners and is ready for the outreach and declaration phase in which obsolete pesticides in the private sector will be identified.



Cote d'Ivoire: GEF-World Bank project. Inventory has started.



Malawi (208 tonnes): In collaboration with FAO. A total of 208 tonnes of obstocks were removed.



Nigeria: Plans are in preparation for the disposal of 6 tonnes.



Mali (666 tonnes): World Bank Project with technical assistance of CropLife International.

Looking to the future

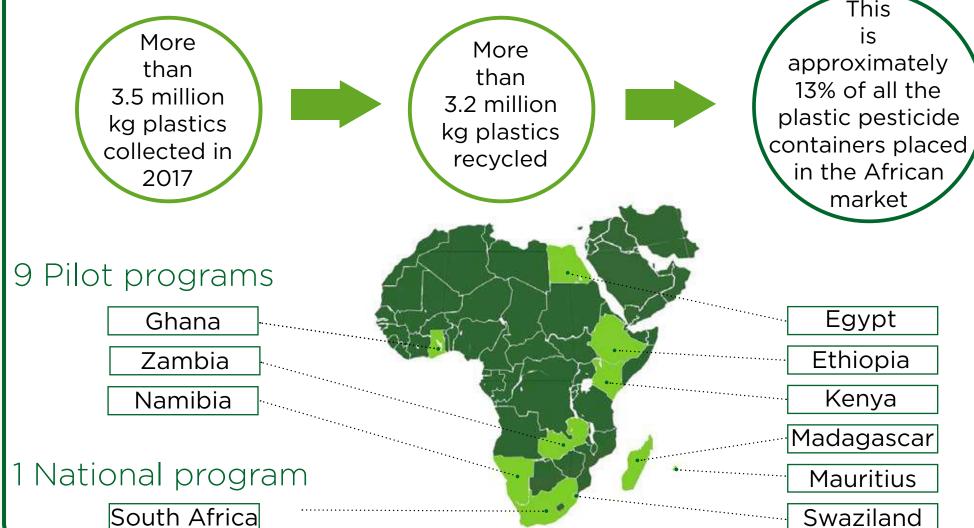
The national associations in countries that have had an obstocks project confirmed many benefits to them. The majority of associations in countries that have not had an obstocks project thought such a project would be useful. Implementing partners such as FAO continue to recognize the importance of addressing the obstocks issue, including the causes of accumulation and strategies to prevent it.

CropLife International remains committed to supporting projects until the end of 2018 and is reviewing with partners the best way to proceed beyond that.

CONTAINER MANAGEMENT

Clearly stated in the Stewardship Vision 2020 document is the goal to have safe and responsible management of empty, properly rinsed pesticide containers worldwide, with our industry recognized as a leader for this initiative.

IN COUNTRIES WHERE CONTAINERS ARE RECYCLED, THE MAIN END PRODUCTS ARE FENCING POSTS AND REFUSE BAGS



Looking ahead

Partnering with FAO in pilot projects in:

- Benin
- Botswana
- Cameroon
- Malawi
- Morocco

Significant growth expected from existing programs in:

- Ghana
- Zambia

Constraints remain as:

- Not all containers are triple rinsed.
- Empty pesticide containers have a "value" in Africa.
- Regulatory acceptance that properly rinsed containers are classified as non hazardous.
 In all of Africa, only 3 countries carry this classification, namely:
 Morocco, South Africa and Zambia.





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South Africa is the only country in the region with a national collection program. It started in 2005 alongside the Africa Stockpiles Program during which 6,000 empty 20 liter containers were collected in the Limpopo province. These containers were recycled into "concrete savers" used in the construction industry. By 2009, the recycler had reached

1.0 million containers country-wide focusing on the agro dealer network. The company closed at the end of 2009 but had created a network of franchises which became stand-alone operations specializing in this field. Presently there are 15 recyclers that are active in the recycling of empty pesticide containers and feature on the CropLife South Africa website.

Jointly they recycle approximately 50% of all containers on the market of South Africa, exceeding 3 million kg plastics. At the moment, 80% of the containers are recycled into fencing materials and refuse bags. The role of GLOBALG.A.P. in the key export cropping areas has been significant in the management of empty pesticide containers.





CropLife Africa Middle East - Partners in Sustainable Agriculture

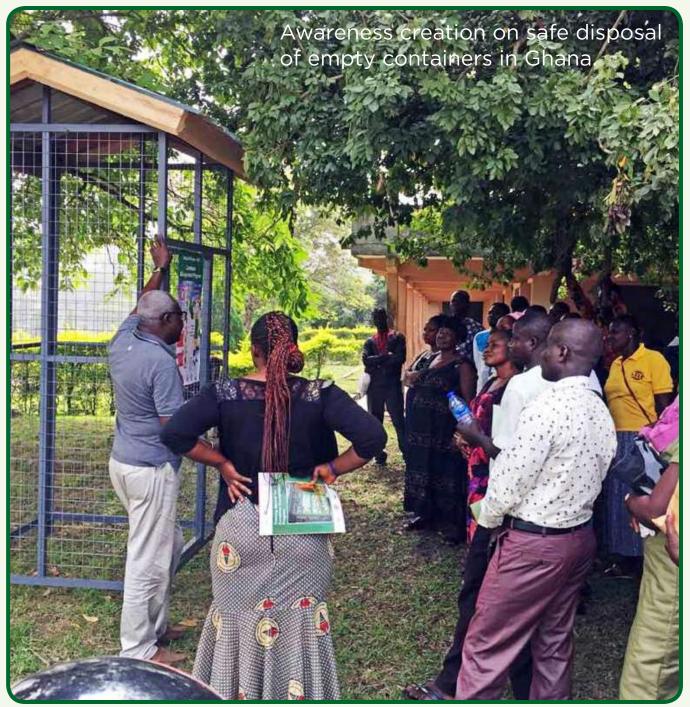


CropLife Ghana expanded its pilot collection scheme to other regions in the country with the support of the Food and Agriculture Organization (FAO) of the United Nations.

The focus of the FAO activities is mainly at the beginning of the collection scheme, and includes creating awareness in communities on the need for the safe disposal of empty pesticide containers, training of farmers in triple rinsing, and placing of collection bins in communities.

The collected containers are brought from the communities to the storage facility of CropLife Ghana where they are again rinsed and shredded into small chips.

CropLife Ghana is in the process of identifying a suitable recycler. For the time being, the chips remain at the storage facility.





Overview

Over the last year, Africa has made measured but consistent progress towards the full incorporation of plant biotechnology products into its agricultural sector, especially as many African governments, such as Kenya, Nigeria, Tanzania, and Uganda are increasingly considering new solutions and scientific advances to improve food security in the face of climate change. At the same time, the African research community is developing new varieties of maize, cassava, and potato that leverage plant biotechnology to address local farming challenges to maintain stable harvests despite climate change. Throughout 2017, CropLife International and its network of partners in Africa have provided support, information, and capacity-building to help further dialogue and the adoption of sciencebased policies. Across the continent, the plant science industry has been instrumental in promoting the benefits of plant biotechnology, dispelling myths, and providing insight on science-based regulations that support innovation with policymakers, farmers, and stakeholders.

New Biosafety Bill in Uganda Will Facilitate Commercialization

The Ugandan National Agricultural

Research Organization is a continental leader on biotechnology R&D and technology development. Its pipeline of new technologies includes diseaseresistant potatoes, virus-resistant cassava, and disease-resistant matooke bananas — all of which are expected to be more easily accessible to Ugandan farmers because of a new piece of legislature from the Ugandan Parliament. After nearly a decade of deliberation and thorough consideration, the newly passed biosafety bill will facilitate the introduction of plant biotechnology products to help mitigate some of the major problems with plant disease and viruses that have plagued farmers for decades.

More Countries Move Closer to Commercializing Biotech Cotton

Insect-resistant cotton varieties are often the first products to be commercialized when developing countries and farmers first adopt plant biotechnology.

Agricultural communities continue to enthusiastically demand biotech cotton because of the significant impact it can have on farm labor, sustainability, and local and national economies. In South Africa and Sudan, commercial biotech cotton plantings remain consistent with previous years, and the biotech variety

has moved closer to commercialization in several countries. In Cameroon and Ethiopia, multi-site confined field trials continued in 2017, and over the past year, the governments of Kenya, Malawi, and Nigeria commenced the required variety registration trials for biotech cotton, and each country is expecting full commercialization within the next 1-2 years.

Regional Approaches to Evaluating Plant Biotechnology

This year, African governments and regional blocs continued to actively seek resources to assist in establishing the evaluation and decisionmaking process around the use. cultivation, and importation of plant biotechnology products. Following global trends, African national and regional government organizations are looking for regulatory cooperation and information sharing to facilitate the move toward widespread implementation. In both COMESA (East Africa) and ECOWAS/WAEMU (West Africa), regional cooperation efforts in evaluating biotech products have been put forward and, in the case of East Africa, endorsed. Countries are now looking to follow through with these regional commitments on a national

level, potentially in the context of products like cotton, maize, and other agricultural staples of member countries. In 2017, CropLife International and its partners actively responded to government requests for input and feedback on proposed solutions.

Fall Armyworm

The Fall Armyworm (FAW), which can significantly decrease production of staple crops such as maize, sorghum, rice, and sugarcane, is easily the most destructive pest in Africa in over two years. According to CABI (Centre for Agriculture and Biosciences International), damages to these four crops alone have reached a loss of over US\$13 billion. FAW has officially been identified in at least 11 African countries and is suspected to be present in more than a dozen more. FAW can be especially devastating to food security and farmer income as it feeds on over 80 different crop varieties. In regions where FAW has been dealt with effectively, it has been done so through a combination of crop protection products and biotech varieties with pest control traits. CropLife International and its members are working to identify solutions to help farmers better control FAW and reduce its impact.

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