Editorial

• The Importance of Empty Pesticide Container Schemes

8.3 billion tons - That’s approximately how much plastic the world has created since mass production began about 60 years ago. Most of this is accumulating in landfills where it will take 400 years to degrade.

Our industry has a role to play. Although the plastic packaging produced by the crop protection industry is a tiny fraction of that which has been produced globally, unless empty containers that previously contained Plant Protection Products (PPPs) are managed correctly, they could be hazardous to both man and the environment. There is a risk that empty PPP containers are reused for carrying and storing food and water, which could result in pesticide poisonings. PPP containers abandoned in the environment contribute to plastic pollution and in turn lead to pollution in both soil and groundwater.

A container management scheme contributes to reducing these risks and is part of the “life-cycle concept” as addressed in the International Code of Conduct on the Distribution and Use of Pesticides.

The crop protection industry generates a substantial amount of waste in the form of used containers that need to be properly disposed of. The answer lies in effectively managing the disposal of used containers – mainly through recycling after making them non-hazardous by following proper cleaning guidelines. If regulators do not allow all properly rinsed PPP containers to be treated as non-hazardous waste, the effort required for collection, transport and processing will escalate – with the corresponding costs attached. Successful container management schemes around the world have been achieved only with the engagement and support of all stakeholders in the supply chain for PPPs. These stakeholders include government bodies, manufacturers, users, distributors and suppliers, recyclers and even NGO’s. Plastics from our empty pesticide containers can be recycled into a variety of useful products, including car battery cases, agricultural fencing posts, sewage and irrigation pipes.

CropLife Africa Middle East is committed to encouraging the recycling of crop protection plastic containers into new products and in doing so conserve a valuable resource. The regional association currently has 7 operating collection schemes with a further 5 in various stages of development.

It is estimated that 29,225 tons of plastic pesticide containers were placed on the African market in 2019 which represents ±9% of the global figure. Of the 29,225 tons plastic slightly more than 6 million kg were collected or 20.9% of the total. The program is spearheaded by South Africa who is within the top 5 countries in the world in terms of collections and recycling. Data covering the 2020 collections will be available by early June. We are optimistic that we will be able to increase our collection rates by the end 2023 from 20.9% to at least 30%. This will be with the support of the Extended Producer Responsibility (EPR) programs being adopted by several African countries. EPR holds producers responsible for the collection and recycling of specified volumes of plastic that they produce and place into the market.

Les Hillowitz
Stewardship

• SSP Responsible Use training program to serve strawberry growers in the Moshtohor – Qalyoubia

CropLife Egypt (CLE) collaborates with Knowledge Economy Foundation (KEF) in activities covering professional sprayer teams, digital extension service and marketing skills. Said Abdella, Master Trainer within CropLife Africa Middle East, supervised the first round of the training program for the Faculty of Agriculture – Benha University and with the support of the CLE Master Trainers’ team, rolled out the Spray Service Provider training program together with the Pesticide Responsible Use program to senior students. Tamer Mouwad (FMC) conducted the practical field training, whilst the overall event was coordinated and organized by Eng. Mahmoud Said.

The 1st training round of the student’s program in 2021 took place from 5 - 13 April at the Faculty of Agriculture (Moshtohor), Qalyoubia, Egypt with the aim of servicing the strawberry growers under the “From Farm to Export” project.

The Chairman of CropLife Egypt, Dean of the Faculty of Agriculture, President of KEF, Undersecretary of Ministry of Agriculture and Head of Agronomist Syndicate, attended both the opening and closure ceremonies. They expressed their appreciation on the activities of the program which aims at preserving health to man and the environment and supports job creation.

It is intended to conduct a further 3 rounds of the training program during the 2021 academic year to produce a total of 45 SSP’s who will also receive training covering feasibility studies, digital extension service and marketing skills.

On the practical field training, Tamer Mouwad (FMC) carried out the following exercises: the calibration of a knapsack sprayer, maintenance of a knapsack sprayer, nozzle types (spray height, width, pattern), flow rate and spray drift. The opportunity was also taken to create linkages between the new SSP’s CLE member companies.

Eng. Nabil Abdelsattar (Kafr Elzayyat) conducted a training session covering the role of the plant protection industry and the generous gesture in offering support to the new SSP’s in starting their own projects.

Mahmoud Said CropLife Egypt
Stewardship

- MoA Labelling for resistance management in the cotton sector in West and Central Africa.

The virtual training workshop for the implementation of the MoA labelling initiative in the cotton sector by the Regional Program for the Integrated Production of Cotton in Africa (PR-PICA) was held on April 07 and attended by 70 participants. The participants included members of the steering committee of PR-PICA, the production and extension managers and officers of the cotton companies in the seven member states of PR-PICA (Benin, Burkina Faso, Cameroon, Côte d’Ivoire, Mali, Senegal and Togo), the regulators and registrars from the member states and the Sahelian Pesticide Committee (CSP), representatives of member companies and national associations of CropLife Africa Middle East and other pesticide suppliers’ associations present in the member states.

The participants were addressed on the importance of MoA labelling as an additional tool to the existing pest management program in the cotton sector in the PR-PICA countries, the classification and codification of insecticides, fungicides and herbicides, and the guidance of CropLife International for MoA labelling. The lively presentations and interactions gave the workshop a wonderful vibe; participants could assess their understanding of the issue through a quick exercise on MoA combination and rotation.

The workplan for the implementation of the initiative was shared with the participants. The CropLife national associations and the member companies of CropLife AME will provide support for the cascade training of the agents of the cotton companies, regulatory authorities for awareness and capacity building, and for other related activities in the countries.

The regulatory authorities were requested to initiate the needed regulatory arrangements for the proper enforcement of MoA labelling under PR-PICA, and efforts should be made to involve other crop sector organizations for extending the MoA labelling to all crops.

Bama Yao

Participants expressed their satisfaction on the pertinence and timing of the workshop.
Stewardship

• Assessing the Integrated Cotton Production program in Côte d’Ivoire.

The Centre National de la Recherche Agronomique (CNRA), the national agricultural research service of Côte d’Ivoire, organized a two-day workshop on April 26-27, under the Regional Program for the Integrated Cotton Production in Africa (PR-PICA) plan for Côte d’Ivoire. The workshop was organized as part of the activities under Phase 3 of the PR-PICA program covering the 2019-2022 period which also set-up a tripartite agreement involving PR-PICA, the Interprofessional Fund for Research and Counseling in Agriculture (FIRCA) and CNRA.

The workshop aimed at sharing with key stakeholders the achievements during the 2020-2021 crop season, engaging discussions on the innovations and providing recommendations and strategic guidance.

The 62 participants were addressed on the statistics on cotton production by the five cotton companies (acreage, number of farmers, types, and costs of inputs, yields and total production, challenges, forecast for 2021-2022…), the agronomic and technological characteristics of the varieties, strategies for soil fertility management and strategies for the integrated management of the pest population in cotton.

The group work sessions and the subsequent feedbacks made important recommendations, especially under theme 3 “Strategies for the integrated pest management in cotton production”, encouraging the ongoing periodic mapping of the main pests in the cotton production basins, digital monitoring of infestation, and subsequent programs based on innovation focusing on new active substances and technologies.

Bama Yao
Stewardship

- **Enhancing the capacity of farmers on IPM/RU in Ghana.**

CropLife Ghana organized two sets of training on the responsible use of pesticides and fertilizers as part of its stewardship program, on the 8th and 13th April 2021 in the Ashanti and Bono regions of Ghana respectively. The training program brought together at least 200 farmers in each region who sought to improve their knowledge on the effective and efficient use of agri-inputs without any over exposure to themselves, their families, the environment, or the community at large. The training sessions were carried out in collaboration with the District/Municipal departments of Food and Agriculture in the respective training areas. Topics for the training included effects of pesticide misuse and/or misapplication on human health, crops, and the environment. Also covered were the hazardous nature of pesticides, the use of personal protective equipment, purchasing, transportation and storage of pesticides and fertilizers, the handling of empty pesticide containers and container management program, first aid, and the SSP concept.

CropLife Ghana member companies were present for both training programs and took turns to introduce themselves and their wide range of products to the many farmers present.

Rashad Kadiri.
Plant Biotechnology

Kenya’s Agricultural Reforms Set to Bolster Bt Cotton Commercialization

Radical reforms in Kenya’s agricultural sector are set to inject fresh impetus to Bt cotton farming in the country, should a fibre crops legislative Bill pass into law. The Government shall be mandated to promote and market fibre crops and products locally and internationally, a development that will invigorate Bt cotton production.

The Bill, technically referred to as Fibre Crops Development Authority Bill, seeks to provide for the development, regulation, and promotion of cotton and sisal industries. This is expected to introduce focus and clarity in the management of the cotton value-chain as the Government banks on Bt cotton to revitalize the textile and apparel industry by increasing the crop production from the current 20,000 bales to 200,000 bales by 2022. Speaking during a virtual consultative meeting on Bt cotton with Kenya’s cotton value chain players, Solomon Odera, the Head of the country’s Fibre Crops Directorate, exuded confidence that once the Bill becomes law, cotton farmers will enjoy protection from exploitation through price fluctuation.

“The Bill will establish a development levy which will be used in financing various activities within the value chain of both cotton and sisal,” said Odera. “It is worth noting that one of the areas that the levy will help finance is the creation of a stabilization fund that will manage price volatility within the cotton sub-sector,” he added.

Bhagirath Choudhary of South Asia Biotech Center shared India’s impressive Bt cotton socio-economic impacts with the Kenyan stakeholders and emphasized the importance of strengthening the value chain to reap full benefits including by-products. “India produced and consumed a staggering ~20.8 million tons of Bt cottonseed oil from 2002-03 to 2019-20, turning the country from a sole importer to a lead exporter of edible oils. Approximately 1.5 million tons of cottonseed oil is produced annually, making cottonseed oil the number one vegetable oil produced from secondary sources. Cottonseed oil is trans-fat free, contains no cholesterol, and can play a role in reducing saturated fat intake,” he said. He also revealed that cottonseed is a major source of protein, as its by-product, the oil cake, contains a high-quality protein (23%) – a necessary ingredient for animal feed. This makes cotton de-oiled cake or meals the preferred feed for cattle and buffaloes in the country.

Kenya is currently rolling out commercial farming of Bt cotton with farmers in cotton-growing counties in eastern and western Kenya having already planted the GM crop. During the 2020’s October-November season, farmers in ten cotton-growing counties in the eastern region planted 16.3 metric tons of Bt cotton on 10,000 acres (4,047 hectares). Cultivation of Bt cotton was launched in the country in March 2020 starting with the planting of on-farm demonstration plots around the country.
**Plant Biotechnology**

- **Nigeria on Track to Submit National Biosecurity Policy for Approval**

The Federal Government of Nigeria has expressed commitment to fast-track the formulation of the country's National Biosecurity Policy. The National Biosafety Management Agency (NBMA) is working round the clock to ensure completion and submission of a draft policy to the Federal Executive Council for consideration and approval, the Agency's Director General/Chief Executive Officer Dr. Rufus Ebegba has said. This emerged when the Senate Committee on Environment visited the NBMA in Abuja for an oversight function.

The policy aims to provide a structure for effective coordination of biosecurity activities and services and develop and implement relevant guidelines, plans, regulations, and strategies for best practices in all components of biosecurity.

Dr. Ebegba also revealed that NBMA is carrying out expert reviews and possible validation of other regulatory instruments that include the National Biosafety Guidelines on Genetically Modified (GM) fish, tree, birds, animals, and mosquitoes. "The NBMA will continue in the bid to ensure that her mandate is delivered. We will be doing so much; such as processing of biosafety applications, carrying out nationwide survey and tracking of GMOs, and inspection of GMO farms, companies, and research institutes," he said.

He added that the Agency will also review risk management plans and strategy development for protecting human and animal health and the environment, as well as developing a template for risk assessment. "The Agency will also establish the National Biosafety Management Agency Data Centre and Integrated GMO Monitoring System, and participate in UN COP-MOP, among others," assured the Director General.

The drafting of the National Biosecurity Policy was among key achievements recorded by the Agency in the past year. The DG/CEO highlighted other notable achievements that the Agency realized in 2020. These include the creation of the Department of Biosecurity and the organization of a National Stakeholders' Consultative Meeting. Chairman of the Senate Committee on Environment distinguished Senator Ike Ekweremadu commended the NBMA on its efforts in ensuring the safety of human health and the environment in Nigeria. Distinguished Senator Ekweremadu assured Dr. Ebegba of the Committee's commitment to work with the Agency in the bid to achieve its mandate. The Members of the committee visited the Agency's GM detection and analysis laboratory and commended the state-of-the-art equipment installed in the lab.