

Stewardship

Flagging off and “saying goodbye” to the Obsolete Pesticides Destined for the UK

The CropLife Kenya Safeguarding Project, CleanFarms, was launched in 2008 by the signing of a Memorandum of Understanding between CropLife International and the Ministry of Agriculture, Livestock and Fisheries. The project, which was funded by CropLife International had the objective of carrying out an inventory of all the obsolete pesticides in Kenya and safeguarding these for eventual high temperature incineration in an approved International facility, through the CleanFarms Project, was initially planned to carry out an inventory of obsolete pesticides originating from CropLife member companies only but as the project progressed a large number of empty pesticide containers emerged and which became part of the program. In 2012 the project launched a sister program to collect empty pesticide containers (EPCs) in one region. The EPC program eventually realized 19.3 tons of empty pesticide containers. The result of the CropLife Kenya Safeguarding CleanFarms Project realized 205 tons of obsolete pesticide products and 19.3 tons of empty pesticide containers. This volume of hazardous waste was shipped by Veolia UK for high temperature incineration as follows:

- April 2012, 30 tons of obsolete pesticide and 17 tons of empty pesticide containers
- November 2015, 60 tons of obsolete pesticide
- February 2016, the remaining balance of 115 tons of obsolete pesticides

The final consignment of three trucks were “flagged off” by the Principal Secretary, State Department of Agriculture and accompanied by the CropLife Africa Middle East President, Eric Bureau, the Managing Director, Pest Control Products Board, Peter Opiyo, Chairperson of CropLife Kenya, Madam Susan Njoroge and Chairperson of the Project Leadership Team, Joe Ngetich of the Ministry of Agriculture.

CropLife Kenya would like to use this opportunity to thank CropLife International for initiating the program and which has helped towards a cleaner environment in Kenya. CropLife Kenya also acknowledges all those who contributed towards the disposal one way or another which includes CropLife Africa Middle East, staff of CropLife Kenya, FAO, Ministry of Agriculture Livestock and Fisheries, National Environment Management Authority, Ministry of Environment, Project Manager, David Laycock, Joe Ngetich, Chairman Project Leadership Team, the Pest Control Products Board, and members of the Industry.

Richard Sikuku



Right: L-R Eric Bureau, President CLAME, Dr Richard L. Lesiyampe, Principal Secretary Agriculture, Susan Njoroge, Chairperson CLK, Joe Ngetich, Chairman Project Leadership Team, Peter Opiyo, MD Pest Control Products Board, Richard Sikuku, CEO CLK and Kuria Gatonye, Former Chairman CLK

Above: The empty Kabete warehouse



Launch of the GEF-World Bank Obsolete Stocks Project in Cote d'Ivoire



Participants at the launch which was attended by the President and the Executive Secretary of CropLife CI

The launch took place on 2 February in Abidjan at which more than 40 representatives from various organizations participated. This included the Ministry of Environment, the Ministry of Agriculture and Rural Development, the Funds of the Inter-profession for Research and Counselling in Agriculture (FIRCA), the national extension service (ANADER), farmer & producer organizations, the national agricultural research service (CNRA), Academia, and the media. CropLife Cote d'Ivoire was represented by its President, G. Liabra and the Executive Secretary R. Yeboue.

The Global Environment Facility (GEF) project, "Projet de Gestion des Stocks de Pesticides Obsoletes et Déchets Associes" (PROGEP.CI) to be implemented by the World Bank (WB) is aimed at the disposal of obsolete pesticides and associated wastes in the country. The launch workshop was organized to share with the various stakeholders the objectives of the project and the related commitment by government.

The presentation of the project by the Director General of Environment from the Ministry of Environment was followed by messages from the representative of the WB, the Director of Crop Production and Food Security of the Ministry of Agriculture and Rural Development, and by the representative of the Ministry of Environment. These messages addressed the following issues:

The importance of pesticides in sustainable agricultural productivity, especially in a country like Cote d'Ivoire where agriculture is the engine of the economy.

The risks to man and the environment when pesticides are mismanaged by those involved in the illicit trade of counterfeiting.

The commitment of the government and its allies to provide a sound environment for the population by removing and disposing of obsolete stocks which represent a real threat to man and the environment.

The commitment of the project to support the improvement of the regulatory framework in order to avoid a recurrence of the build-up of obsolete stocks. The improved regulations would attract environmentally friendly pesticides.

Implementation would involve all stakeholders including the administration, the pesticide industry, retailers, farmers and the civil society.

The role of the media in sensitization and education programs covering the project was highlighted. The media must not only address the activities of the project but also the promotion related to the proper uses of pesticides.

Bama Yao

Ministry of Environment in Nigeria Supports Disposal of Obsolete Pesticides

The Federal Ministry of Environment of Nigeria is enthusiastic about the upcoming disposal of safeguarded obsolete pesticides that are stored in the country, and has promised to provide the necessary support to move things forward. This was the main outcome of a meeting that took place on 25 February 2016 with representatives of CropLife International and CropLife Nigeria at the ministry in Abuja.

CropLife International has made funds available to dispose of around 6 tons of safeguarded obsolete pesticides that are stored in a government warehouse in Niger state. Veolia UK was contracted to handle these stocks which will likely be incinerated in Europe. The Ministry of Environment initiated the meeting with CropLife to discuss the procedures and regulations that need to be followed.

In May 2010, CropLife Nigeria in collaboration with CropLife International and NAFDAC undertook a pilot project to identify obsolete pesticides and empty containers in the private sector in Benue, FCT, Kaduna, Nasarawa, and Niger state. The activities were a follow-up of the Africa Stockpiles Program (ASP) in which an inventory was made covering the public sector.

A total of 9.9 tons of obsolete pesticides and 72,000 empty containers were identified. Of the identified obsolete stocks, 10% were leaking or highly toxic. A little over 20% were produced by CropLife International member companies, whilst 79% manufactured by other producers (of which 90% originates from China). As only 21% of the identified obsolete pesticides were produced by CropLife International members, funds were made available to safeguard in only one state. Niger state was selected because of the high percentage of leaking products.

In 2013 around 6 tons were safeguarded and if everything goes according to plan, disposal will be completed by August 2016.

Manon Mireille Dohmen



Above & Below: Identified stocks in the private sector in Nigeria



Safeguarding exercise in which leaking products are repackaged



Safeguarded stocks waiting for disposal

CropLife Egypt SSP/RU Training in Aswan and USAID Delegation Visit



Dr. Anne Patterson and Said Abdella with trainees

CropLife Egypt has a MoU with Blue Moon and collaborates in activities covering professional spray teams with the goal of serving participants of the **USAID funded Premium Project for Egyptian Small Growers** which includes small producer organizations and agricultural technical schools.

The USAID delegation including Dr. Anne E. Patterson, Acting Director of the USAID mission in Egypt visited the Enieba Agricultural Technical School during a Blue Moon event to honour winners of their small projects contest. One student from Esna Agricultural Technical School received a knapsack sprayer as an award having participated at the CropLife RU/SSP training. Dr. Patterson witnessed and appreciated the CropLife SSP/RU practical training and confirmed the need for such programs to ensure the needed safety to man and the environment and which opens job opportunities to small growers.

The training took place at the Enieba Agricultural Technical School - Aswan from 18 - 21 January and this was the 7th program to be conducted through the **USAID funded Premium Project for Egyptian Small Growers**. Plans are in place to conduct a further 18 training programs during the 2016 school academic year for 10 Agricultural Technical Schools in 4 governorates (Beheira - Qena - Luxor - Aswan). This to achieve the training of 500 students through 50 Master Trainers from school teachers previously trained by CropLife Egypt.

Said Abdella



Above: Practical Training



Right: Winners of the projects contest

CropLife Malawi Enters Phase 3 of the SSP Project in Cotton

CropLife Malawi (CLM) is in the process of implementing a Spray Service Providers (SSP) Program in the cotton sector. The SSP is being implemented with the support of Malawi Oilseeds Sector Transformation (MOST), a DFID funded program. The project is targeting to train 60 SSP trainers who would in turn train 1,800 SSPs to service more than 20,000 cotton farmers across the Country. This target would only be for the initial phase as these trainers have the potential to train more SSPs in the following seasons who will potentially service up to 24,000 cotton farmers bringing the total number of farmers to be serviced to 44,000 in the next two season.

CLM has already trained 20 SSP trainers in 2015. The 2016 training intervention took place in Blantyre, 1 - 5 February facilitated by Perry Ngomo. This was a smaller than normal group covering only 8 participants from CropLife Malawi member companies and cotton buying companies.

The training took place over a 5-day period, split into 3 parts:

- * Responsible Use topics
- * Application topics
- * Adult Training Skills Topics

Following the pre, post and practical tests it was seen that this group would be able to conduct training activities but would need the assurance of coaching by the newly appointed CropLife Malawi Field Coordinator.

As with the earlier trainings, the SSP program was a new concept to all the participants but after a thorough explanation the concept was well received. Each of the participants received a complete CLAME SSP Training Manual which will be used for training of Spray Service Providers in the cotton sector.

As a recommendation this new group should immediately be equipped with training aids and allocated the necessary resources to go out and train SSPs in readiness to start providing the service. Training sessions should be conducted in pairs to provide the necessary experience and confidence needed before embarking on a single SSP training session. A refresher training to include a 3- day IPM training for the group should take place after the first active season.

The 4th and final phase of the training program is likely to take place in this quarter.

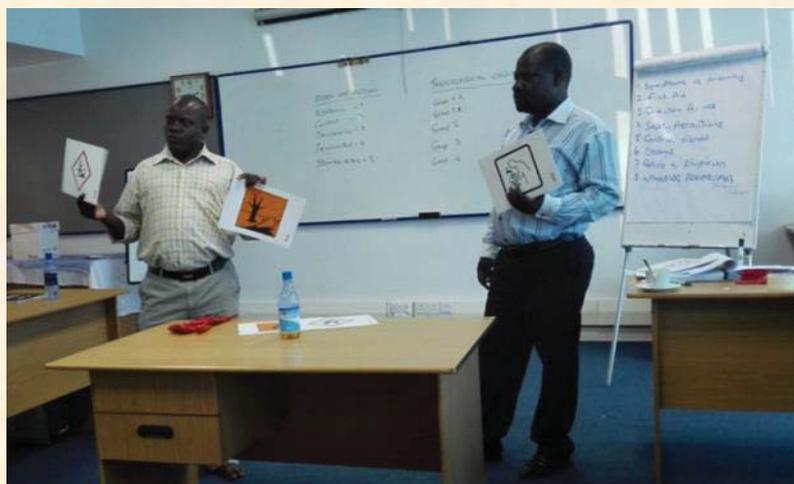
Perry Ngomo



Group Photo



Demonstrating on how to wear personal protective equipment



Participants explaining pesticide pictograms

CropLife Signs Contract with IITA

CropLife Africa Middle East has signed a contract with the International Institute of Tropical Agriculture (IITA) under the project "Putting Nitrogen Fixation to Work for Smallholder Farmers in Africa" (N2Africa) for activities in Nigeria. The agreement includes the training of 45 existing applicators into Spray Service Providers in Borno state and to monitor their activities in the field.

The contract is a logical follow-up of an assessment that was carried out by CropLife Nigeria in December 2015 among existing spray teams in Borno state (see newsletter January 2016). During the assessment the capacity and knowledge of the spray teams were measured using questionnaires and practical tests. The results were so alarming that N2Africa asked CropLife to submit a proposal to upgrade the knowledge and skills of these spray teams. It was argued by both CropLife and N2Africa that it is better to improve the skills of existing spray teams rather than the setting up of new teams, as the current applicators will continue selling their services anyway, trained or not.

The project will run for half a year and the focus crops will be maize, cowpeas, soybeans and groundnuts. The SSP training programs will start in March 2016.

Manon Mireille Dohmen



Contract sprayer undertaking a practical application test



Siji (striped shirt) with some of the contract sprayers

Representing the Plant Science Industry

GlobalGAP: National Technical Working Group Meeting (South Africa), 2 Feb

In preparation for this meeting we were able place "CropLife Container Management" as an agenda item. As a pre-read a copy of the revised 'Roadmap' was sent to the Secretariat. We will try to have hard copies available for the August meeting in Gauteng.

A short address was given on what South Africa had achieved with regard to the collection and recycling of empty pesticide containers, the need to promote "triple-rinsing" and for the puncturing of containers to be included as part of the GlobalGAP requirements.

We are of the view that the GlobalGAP auditors will now pay greater attention to the area as a whole of "triple rinsing" and puncturing before signing off on this this.

Participants included stakeholders from both the deciduous fruits and sub tropical fruits (citrus) industries.

Les Hillowitz



SSPs Activities Have Started in Nigeria with IFDC

Spray Service Provider (SSP) activities have started in Nigeria with the International Fertilizer Development Centre (IFDC). In January 2016, CropLife Africa Middle East signed a contract with the 2SCALE (Toward Sustainable Clusters in Agribusiness through Learning in Entrepreneurship) project to set up SSP schemes in tomatoes, maize and chilies.

In early February, Siji Ofoesuwa, project coordinator of CropLife Nigeria, together with staff of 2SCALE farmer communities in Kaduna, Oyo, and Plateau state visited the areas where activities will take place. During these visits, meetings were organized with farmers to create awareness about the SSP concept and to select the right farmers to become SSPs. In every state 30 potential SSPs were selected that will be trained during period.

Following the awareness creation process, the first Training-of-Trainers (ToT) program took place in the middle of February in the Northern state Kaduna in which 9 field officers from member companies, 2 2Scale staff and the new field coordinator of CropLife Nigeria were trained to become SSP trainers. A second ToT was organized in the first week of March in the Southern State of Oyo in which 9 field officers from member companies, 2 2Scale staff and 1 staff member of the Western Agro-Input Dealers Association (WAIDA) participated. Both courses were facilitated by Siji Ofoesuwa, with the assistance of the CropLife trainer, Gbenga Aiyeku from Insis (member company) during the second course. During the 6-day program, participants learned about the responsible use of pesticides and correct application. All participants succeeded in both the written test and practical tests.

The SSP trainers from the Northern states were able to immediately put their training skills into practice, as from the 7 to 25 March, 3 SSP training programs were organized in Kaduna state in which a total of 30 farmers were trained to become SSPs. The SSP trainers were from member companies, Candel and Harvestfield.

Manon Mireille Dohmen



Above: ToT in Kaduna

Below: SSP Training in Kaduna



Representing the Plant Science Industry

Regulatory

Ecological Risk Assessment of Pesticides Workshop: IUPAC

A training on Ecological risk assessment of pesticides was held in Nairobi from Feb 25 – 26 organized by the International Union of Pure and Applied Chemists and the Technical University of Kenya. Participants were drawn from Universities in East Africa; government officials from standards organization, environment and regulatory authorities, Ministry of Agriculture, and private sector representation from chemical companies.

The training was based on five key elements of risk assessment namely; planning, problem statement, analysis, risk characterization and risk management. A range of topics covered included:

- The Regulatory Framework and Principles of Regulations
- Protection Goals and their Implementation in the Risk Assessment Process
- Principles of Eco toxicity Testing
- International Testing Requirements
- Exposure Assessment
- Risk Characterization
- Uncertainties in Risk Estimation
- Risk Mitigation and Refinement
- Implementation and Enforcement
- Risk Perception, Communication and Management
- Tools for ecological and drinking water risk assessment of pesticides

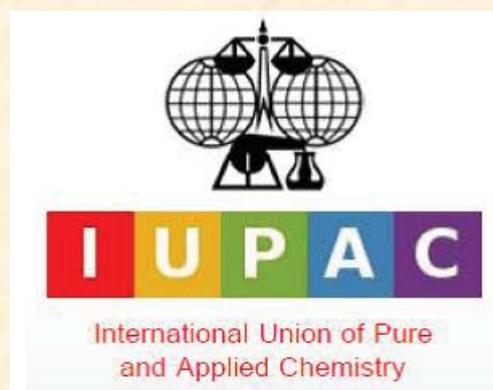
These were facilitated by experts from IUPAC, academia and industry representatives including; Prof. Joseph O. Lalah; Technical University of Kenya; Prof. Shem O. Wandiga, Director, Institute of Climate Change, University of Nairobi, Dr. John B. Unsworth - Private Consultant, UK; Prof. Keith Solomon - School of Environmental Science, University of Guelph, Canada; Prof. Allan Felso - Entomology & Environmental Toxicology, Washington State University, USA ; Dr. Jan Linders - previously National Institute for Public Health and Environment (RIVM), The Netherlands; Dr. Ludovic Loiseau - Syngenta Crop Protection AG, Basle, Switzerland and Dr. Bernhard Johnen - CropLife International, Brussels, Belgium.

Follow-up discussions were on the differences in implementing of regulatory requirements in other regions compared to Africa, application of the precautionary principle, the results of animal trials from other regions as they have similar physiology and sensitivity. There is therefore no need for country specific data.

Stella Simiyu Wafukho



Left: Some of the participants at the workshop



Representing the Plant Science Industry

Anti Counterfeiting

Ministry of Agriculture and Rural Development - Anti-Counterfeiting Meeting

The workshop which took place on 25 February in Yamoussoukro, was organized under the West African Economic and Monetary Union (WAEMU) support convention to the West Africa Agricultural Productivity Programme (WAAPP).

The aim of the workshop which was organized by the Ministry of Agriculture and Rural Development was to ensure that the pesticide regulations are disseminated to the key stakeholders in the 31 administrative regions following the numerous training sessions undertaken in the recent years to combat the illegal trade of pesticides.

Approximately 40 participants including 31 Regional Directors from the Ministry of Agriculture and Rural Development (MINADER), the Director and officers from the Crop Protection and Quality Control Directorate, the Director of Local Development and External Services of the MINADER. CropLife AME was represented by the Regional Director, and CropLife CI by G. Liabra, President of the Executive Committee, R. Yeboue, Executive Secretary and A. Coulibaly, Counsellor of the ExCo.

The following topics were discussed and subsequent recommendations made:

- Undertake the training of retailers and farmers on the pesticide regulations in each of the 31 Regional Directorates.
- Strengthen the cooperation with enforcement agencies such as the police and customs with the support of regional administrative authorities.
- Update and report on the seizure operations carried out in 2015.
- Information sharing with CropLife CI on the training of farmers and retailers, and on seizures in the respective regions. (The field agents of member companies need to visit the Regional Directors during their promotional campaigns in the regions).

Participants were informed of the decree under preparation to set up a regional pesticides committee to disseminate the regulations, sensitize stakeholders on illegal pesticides and related risks and report cases of illegal trade.

Bama Yao



Group Photo

Association Management

Re-launch of CropLife Tanzania



Meeting Participants

CropLife Tanzania (CLT) has been relatively inactive for a number of years with the last notable event being the Association Management training in Arusha in October 2013. At the time of the 2013 workshop the only CropLife member company operating in the country was Syngenta. This has now changed with Bayer, Arysta and BASF having established operations in the country. The need for an active association has come from this core group.

Through the direct involvement of the President of CLAME, Eric Bureau, a Special General Meeting took place in Dar es Salaam for the sole purpose of addressing the challenges faced and to re-launch CropLife Tanzania to the level that it can actively serve its members adequately.

Thirteen participants attended the meeting, representing (8) member companies and (1) NGO. Of significance was the presence of Twahir S. Nzallawahe, Director Crop Development, The United Republic of Tanzania Ministry of Agriculture Food Security and Cooperatives. TPRI, the regulatory body falls within his responsibility.

Harish Dhutia opened the meeting with a presentation on where CLT currently stands i.e. no membership commitment, no funding and no activities. This was followed by a presentation on CLI & CLAME by Eric Bureau stressing on the main activities of the regional association, and the importance of IPR and anti-counterfeiting. Les Hillowitz followed, echoing on a number of the earlier points covered including a comparative table showing Ethiopia and Uganda alongside Tanzania. This clearly showed the need for a dedicated secretariat to be in place, the role of projects and partners and how this brings financial stability and credibility to the national association and provides the added value expected by members.

An interactive discussion pursued centered around the need to increase commitment from the members and generate funding to take on a fulltime secretariat. Options could be an increase in annual membership fees and/or a broader membership base.

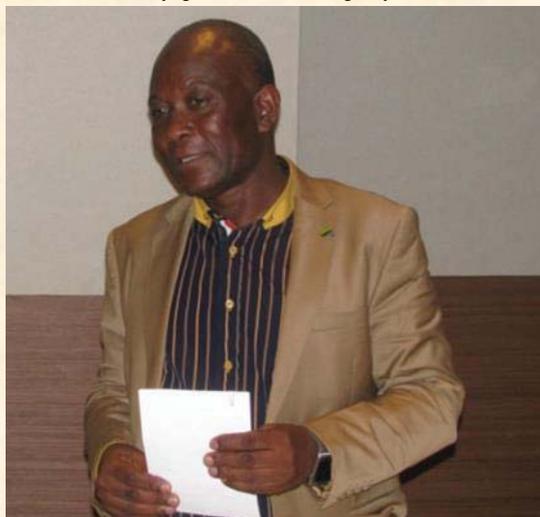
Different scenarios and options to be prepared and presented at the AGM. It was agreed that a General Assembly will be called for 28 April in Arusha and that good preparation for this will be necessary.

Les Hillowitz



L-R Pierre Denieul, Arysta, Samuel Muturi, Syngenta, Felix Ochieng, Arysta

Twahir S. Nzallawahe,
Director Crop
Development



Representing the Plant Science Industry

CropLife Nigeria Discusses Solution for Debtors

CropLife Nigeria has found a possible solution to deal with distributors and agro dealers that have outstanding debts with one company whilst at the same time applying for credit with another company. The credit bureau XDS presented a software package during the meeting of the General Assembly on 25 February 2016 in Lagos, which allows data on debtors to be shared. The software developed by XDS works quite simply: every member company will supply information on debtors and all data is captured in a database that can be accessed by all members of CropLife Nigeria.

This means that if a distributor or agro-dealer would like to purchase products on credit, a company can check if that person already has an outstanding debt with any of the other companies, just as banks do. XDS can also serve as a debt collector on behalf of the members. The member companies agreed that if a distributor or agro-dealer already has a debt with any of the other companies, this organization should not be allowed to purchase products on credit as they are not trust worthy. As one member stated: "We should act as an industry, not as individual companies."

The meeting was attended by Manon Mireille Dohmen who gave the members an update on ongoing SSP projects and possible upcoming projects. Participating companies are enthusiastic about the SSP concept which is clearly demonstrated by their commitment during activities such as SSP training programs.

Another point discussed during the meeting was the upcoming HUB meeting in Nigeria that will take place on 9 and 10 May 2016. The Executive Council mentioned that this is the first time a HUB meeting is being organized in Nigeria since the registration of CropLife Africa Middle East in 2002. Everyone agreed the meeting is an opportunity for CropLife Nigeria to put itself on the map as a serious partner among the public sector, private sector and other stakeholders.

Manon Mireille Dohmen



Participants at the Meeting



CropLife Malawi Holds Annual General Meeting - 12 February

Membership increased to 15 from 11: CropLife Malawi (CLM) will take a leading role in the FAO project component on container management: Members agreed to establish a fulltime secretariat, the SSP Program Officer could easily fulfill this role: 30 SSP trainers have so far been trained many of them from CLM member companies. Mr. Kenson Ndalama had been recruited as the SSP Program Coordinator with support from Malawi Oilseeds Sector Transformation (MOST).

These were a few of the statements made by the Chairman in his opening address.

The AGM took place at the Limbe Country Club and attracted 15 participants. The Chairman also mentioned the concern on the increase of counterfeit products found on the market and it was agreed to work with PCB on a campaign to address this issue.

On empty container management and stewardship, the PCB (Pest Control Board) was asked to recommend a person to replace Mr. Maulana who is no longer at the PCB and part of the SHE subcommittee. The subcommittee responsible for container management was asked to meet urgently and drive the pilot project as well as the FAO project. A report is expected by end March. Members were briefed on the CMPT meeting which took place in South Africa in Nov 2015. Lessons learnt from the CMPT will be considered by the subcommittee

The newly appointed Registrar, Mr. Misheck Soko attended the meeting at which his presence was welcomed. He covered a few important points in his address, mainly that a few banned products were still found on the market and that PCB was concerned by the lack of product knowledge by most agro-dealer personnel. Also, the PCB is concerned that some suppliers who are not CLM members, in most cases, contravene the Pesticide Act. Connected to this, the PCB is pursuing some retail outlets who are stocking food items with chemicals. CLM was asked to reach out to these suppliers to become members and to adhere to the code of conduct.

The following office bearers were elected for the new term:

Mr. Adamson Tong'o – Chairperson

Mr. Ronald Chilumpha – Secretary

Mrs. Dalitso Gadama – Treasurer

Mr. Christopher Beya – Member

Ronald Chilumpha



Group Participants

Representing the Plant Science Industry

CropLife Cameroon holds General Assembly Meeting

CropLife Cameroon held their General Assembly meeting on 24 February, in Yaoundé, at which approximately 20 representatives from the member companies were present.

Following the opening address by the President, H. Fosso, the meeting focused on:

- The pesticide market for which statistics on imports for 2015 are needed.
- Stewardship activities: the MINADER is expected to provide an update on the joint training activities undertaken. This update will be used for a press briefing on the contribution of CropLife Cameroon to agricultural production and productivity in the country. Date and venue to follow.
- Anti-counterfeiting: the planning for a workshop was adopted, and the participants agreed upon. The Anti-counterfeiting committee will provide details of this in the coming weeks.

Both the communications report and financial report were tabled and approved. The executive committee was asked to initiate contact with the new Ministry of Agriculture and Rural Development (MINADER), with the aim of organizing a meeting as soon as possible, and then seek the participation of the MINADER to the AGM in June.

Bama Yao



Several of the participants at the 30th AGM of CropLife CM together with the President H. Fosso (5th R-L).



Representing the Plant Science Industry

Plant Biotechnology

Malawi Approves Confined Field Trials of Transgenic Bananas

The Malawi National Biosafety Regulatory Committee (NBRC) recently approved confined field trials for Banana on 26th February 2016. This comes soon after NBRC approved confined field trials for insect (Maruca) resistant cowpea, on 14th January 2016.

Banana is an important food crop in Malawi and is among the most affordable fruits in the country. However, farmers have been suffering heavy losses due to banana bunchy top virus which has invaded all the major production areas. As a result, Malawi has been importing bananas from Mozambique and Tanzania to meet country's demand.

The confined field trials will be conducted by Bvumbwe Research Station of the Ministry of Agriculture and Food Security for three years, from 2016 to 2018. According to the Ministry of Agriculture and Food Security officials, transgenic banana planting materials will be introduced from Australia, and tested in the CFTs for resistance against bunchy top virus.

The first confined field trial (CFT) in Malawi was conducted on cotton by the Lilongwe University of Agriculture and Natural Sciences (LUANAR) to test the efficacy of the Bt gene in conferring resistance from bollworm. The tests have lasted over a period of four years in CFTs and Multi Locational Trials and have been successful.

For more information on the trials, contact Boniface Mkoko at : bonifacemkoko@yahoo.com

ISAAA

New Study Reveals Eliminating GMOs would Take Toll on Environment, Economies

What happens if genetically modified (GM) crops were banned from US farm fields?

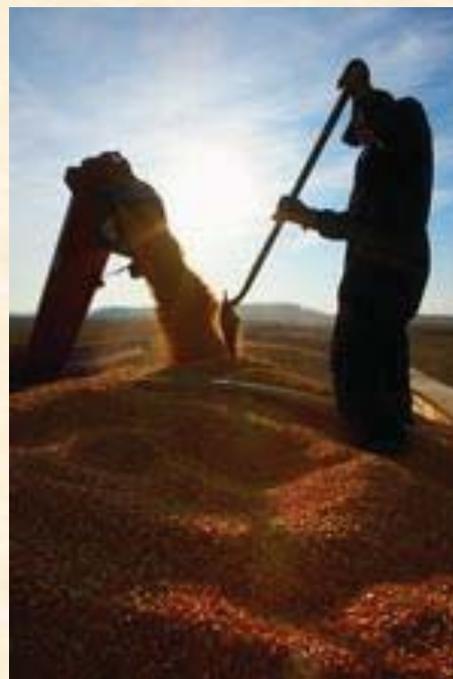
A Purdue University study conducted by Wally Tyner, James and Lois Ackerman Professor of Agricultural Economics; Farzad Taheripour, research associate professor of agricultural economics; and Harry Mahaffey, agricultural economics graduate student, presented the significant crop yield loss and other economic effects of banning GM crops in the US.

The economists gathered data and found that 18 million farmers in 28 countries planted about 181 million hectares of GM crops in 2014, with about 40 percent of that in the US. They fed the data into the Purdue developed GTAPBIO model, to examine economic consequences of changes to agricultural, energy, trade and environmental policies.

The model showed that if all genetically modified organisms (GMOs) in the US will be eliminated, corn yield declines at 11.2 percent on average, soybeans lose 5.2 percent of their yields, and cotton at 18.6 percent. Around 102,000 hectares of US forest and pasture would have to be converted to cropland and 1.1 million hectares globally for the average case. Greenhouse gas emissions will increase significantly as more land is needed for agricultural production, and commodity prices will rise at 1-2 percent or \$14 billion to \$24 billion per year. With lower crop yields without GMOs, corn prices would increase as much as 28 percent and soybeans as much as 22 percent, according to the study.

For more details about this study, read the news release at the Purdue University Agricultural News.

ISAAA



Philippine Government Approves Revised GM Regulations

The Joint Department Circular (JDC) titled Rules and Regulations for the Research and Development, Handling and Use, Trans boundary Movement, Release into the Environment, and Management of Genetically-Modified Plant and Plant Products Derived from the Use of Modern Biotechnology was finally approved and signed by the secretaries of the Philippine government's Departments of Agriculture (DA), Science and Technology (DOST), Environment and Natural Resources (DENR), Health (DOH), and Interior and Local Government (DILG) as of March 7, 2016.

The JDC was drafted in response to the nullification of the DA Administrative Order No. 8 by the Supreme Court last December 8, 2015. It was the product of five multi-sectoral public consultations held by the National Committee on Biosafety of the Philippines (NCBP) in January-February 2016 in Cagayan De Oro City, Cebu City, and Quezon City, where stakeholders from the academe, farmers, industry, and civil society organizations participated. Comments from stakeholders were also solicited through the NCBP website.

This development is expected to lift the temporary ban on research, field testing, commercialization, and importation of GM crops and biotech products in the country brought about by the Supreme Court decision which was met with criticisms from the scientific and academic community, farmer groups, traders, food and feed processors, and livestock producers as well as disappointment from farmers who are looking forward to better quality GM seeds, particularly the insect resistant Bt talong (eggplant), the field trials of which were permanently stopped by the high court.

According to economic studies, Bt talong can have significant socioeconomic benefits for both farmers and consumers such as reduction in chemical pesticide use. It is expected to greatly benefit major eggplant producing provinces such as Pangasinan, which has high insect pest pressure from Bt talong's target insect, the fruit and shoot borer.

The JDC can be downloaded from the NCBP website. For more information about agri-biotech developments in the Philippines, visit the website of the Southeast Asian Regional Center for Graduate Study and Research in Agriculture Biotechnology Information Center (SEARCA BIC).

ISAAA



Photo: SEARCA

**UPCOMING
EVENTS** **UPCOMING
EVENTS** **UPCOMING
EVENTS**

CLAME Board and General Assembly, Brussels	April 4-5
IPM/RU Project Team meeting, Brussels	April 6
Stewardship Steering Committee meeting, Brussels	April 7
Container Management Project Team meeting, Brussels	April 8
Anti Counterfeiting training workshop for enforcers, Northern CIV	April 21
CropLife Zimbabwe AGM	April 18
CropLife Tanzania AGM	April 28
WCA Hub and Regulatory Workshop, Abuja, Nigeria	May10-11
Anti Counterfeiting training workshop for enforcers, Northern CIV	May 23
BEECON, Oudtshoorn, South Africa	July 1-2
Hub and Regulatory Workshop, Dar es Salaam,	August 30 -31





CropLife Africa Middle East
Avenue Louise 326, Box 35
1050 Brussels
Belgium

www.croplifeafrica.org

GROWING FOOD – CREATING RENEWABLES – SUPPLYING SUSTAINABLY

Contributors:
 Bama Octave Yao (West-Central Africa) bama@croplifeafrica.org
 Les Hillowitz (East-Southern Africa) les@croplifeafrica.org
 Stella Simiyu Wafukho (Regulatory) stella@croplifeafrica.org

Representing the Plant Science Industry