



West, Central and North Africa Hub and Regulatory Workshop

The Annual Hub and Regulatory Workshops for the West and Central Africa hub and the North Africa hub, which covered the participation of Tunisia, took place on 2nd and 3rd April in Dakar, Senegal. More than 80 participants attended the workshops, representing the regulatory authorities, the national associations, allied organizations and key institutions involved in pesticide policies and management thereof in the sub-region. Participants also comprised of the R&D and registration managers as well as officers of the member companies of CropLife Africa Middle East.

The workshop was organized under the theme “**Strengthening Pesticides Management through Effective Enforcement of Regulations**” under the presidency of the Ministry of Agriculture and Rural Equipment, represented by Mr Lamine Lo, Director of Cabinet.

The aim of the workshop was to foster proper enforcement of pesticide regulations in the countries and the sub-region to ensure a sound environment for, and the availability of quality pesticides on the markets.

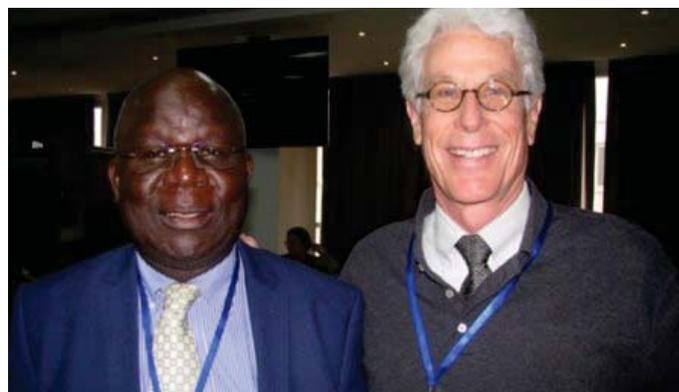
Professor Steven Haggblade from the Department of Agricultural, Food and Resource Economics at Michigan State University used his keynote address to highlight the proliferation of “me-too” registrations about glyphosate-based herbicides in the sub-region. Many of these products are unfortunately of poor quality, and the lack of certified laboratories (GLP) further increases the difficulty in the control of the quality of the pesticides on the markets.

Presentations and subsequent discussions during the hub sessions stressed on the proactive leadership and guidance expected from the national associations for the proper management of ongoing issues such as:

- The threat of Fall Armyworm in the sub-region for which CropLife AME and the national associations are engaged in the rollout of training programs and materials, calling for special attention in the selection of the control tools available.
- Counterfeit and illegal pesticides invading the markets, which requires sound joint strong efforts from key stakeholders including enforcement bodies such as customs and control agents and regulators, the pesticide industry and the whole supply chain, farmers and their organizations, commodity exporters, administrative authorities and the media.
- Mode of action (MoA) labelling of pesticides in resistance management. The proliferation of counterfeit and illegal pesticides leading to the continuous use of the same MoA is conducive to the rapid development of resistance. Efforts to delay the onset of resistance must be considered under stewardship practices and regulatory cross platform activities.



Dr Emile V. Coly, Director of Plant Protection Directorate, Minister of Agriculture and Rural Equipment and Lamine Lo, Director of Cabinet, Minister of Agriculture and Rural Equipment of Senegal



B. Yao, Regional Director CropLife AME with Prof. S. Haggblade, MSU



- Greater efforts are expected from the sub-region in the management of empty pesticide containers.
- Monitoring & Evaluation with a focus on proper data collection to measure both performance and impact of the various programs is critical in all our activities.
- Association Management with the aim of ensuring the liaison between the key actors, especially industry and the regulatory authorities, and the proper and smooth rollout of programs and activities at CropLife country level.

The interactive presentations and subsequent discussions led to various recommendations made to the national associations to provide support, guidance and leadership for the enforcement of pesticide regulations in the sub-region.



L-R: Dr Johannes Hutzler, Chair of the RRC representing the DG & CEO of CropLife AME, Cheick D. Kamara, Honorable President of CropLife Senegal, M. Lamine Lo, Director of Cabinet of the Ministry of Agriculture of Senegal, Dr Victor Emile Coly, Director Plant Protection Directorate of Ministry of Agriculture of Senegal, and D'Arcy Quinn, CropLife International.

The West, Central and North Africa Regulatory Workshop

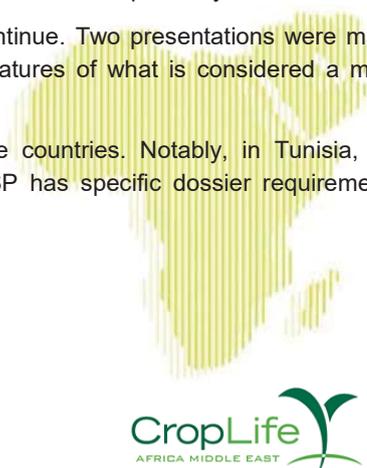
The regulatory session was organised around interactive discussions where each of the participating regulatory authority representatives shared their respective progress and perspectives on several topics.

On enforcement of **Regulations and Quality Assessment** in anticounterfeiting efforts, there was an extended session where representatives from Tunisia explained some of the measures that have been put in place to address the challenges including accreditation of vendors, sanctioning defaulters and strict controls on imports. It was agreed that this was a major challenge for other countries as well owing to the inadequate level of resources and weak border controls. Country representatives agreed that this was not only a scientific issue but political and social and therefore needed all stakeholders to collaborate and actively allocate human, financial and material resources to tackle the issues.

In another parallel session on **Mode of Action labelling**, it was highlighted that in order to implement the system, there was need to review existing labelling guidelines and create awareness among farmers and distributors respectively.

Regulators urged that further engagement on **Minor formulation changes** should continue. Two presentations were made highlighting how Tunisia had implemented a minor formulation change. The critical features of what is considered a minor change are included in a monograph, provided for reference.

Risk assessment procedures for **Biologicals** have been established in some of the countries. Notably, in Tunisia, the registration of biologicals is 50% cheaper than conventional pesticides, while the CSP has specific dossier requirements. Capacity building in the evaluation of biologicals was recommended.



The West, Central and North Africa Regulatory Workshop cont.

On **Emergency registration procedures**, it was indicated that for most countries the evaluation and registration of products to handle the FAW outbreak was and continues to be handled on a case-by-case basis. CILSS – SP, on its part has an emergency procedures in place itemised under Article 23. It was recommended that there was need to disseminate and implement existing procedures in respective countries.

On the **changing policy landscape for pesticides**, the discussion focused on MRLs and Import tolerances (IT) and the potential impact of application of the EU hazard based cut off criteria. Other emerging policy issues including EDs and HHPs were also discussed. On the NNICs, CSP indicated that they are establishing risk assessment protocols and guidelines to be followed for the registration of such products.

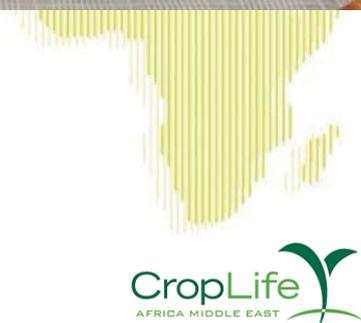
The session covering **implementation of GHS** saw countries providing updates on efforts being made in establishing legislation such as Tunisia and others, including Ivory Coast, Cameroon, Nigeria, Ghana and Benin, who engaged in capacity building events. Most of the countries are still implementing the WHO classification system.

The protection of **Confidential Business Information**, has been included in the CILSS - CSP, Article 16-17. Other countries indicated that although there are no specific legal provisions, the practice to safeguard CBI is habitual and equally implied in other regulations.

Bama Yao & Stella Simiyu Wafukho



Group photo of the participants at the WCA-NA annual workshop in Dakar, Senegal



Stewardship

First batch of SSPs graduate in horticultural project in Ghana

120 Spray Service Providers (SSPs) graduated in April in Ghana to sell their services to vegetable farmers. They are the first batch of a total of 255 SSPs who will be trained in partnership with the HortiFresh project of the Netherlands Development Organization (SNV).

CropLife Africa Middle East signed a grant agreement with SNV/HortiFresh in February 2019 to set up a network of SSPs to improve food safety of vegetables and the environmental conditions at farm level for 4,000 vegetable farmers.

As with other SSP projects, the SSPs were carefully selected based on selection criteria by the farmers' groups in the community and CropLife Ghana. In all districts, the agricultural office was also involved from the start and during most of the training programs, in fact, the district agricultural director paid a visit to the training venue.

The 5-day training program consisted of technical topics on pests and pesticides, responsible use and application, and one day on business skills. According to SSP, Wonder Adukonu from Anloga, they learned a lot: "We have been applying pesticides for years and we never realized that there is so much important information on the label. Some of us thought the toxicological band was for decoration but now we know it is crucial to know how to protect ourselves. Uncle Bob (read; Bob Adjakloe) from CropLife Ghana of is an amazing trainer. Thanks to him, we were able to understand everything and to pass the tests."

Each SSP had the opportunity to purchase a knapsack sprayer at a competitive price. Almost all SSPs made use of this offer. During the graduation ceremonies, the sprayers were handed over in addition to a full set of Personal Protective Equipment that was sponsored by CropLife Ghana and member companies, Macrofert and RMG.

SSP, Wonder has already used the sprayer to service his first customers. In a text to his trainer Bob Adjakloe he writes: "I used the spraying machine today and it is very, very good: good performance and highly economical. I have wasted so much chemicals over the years. Thanks so much to you uncle Bob, CropLife and SNV. I would forever remain grateful for the training."

By the end of May 2019, the rest of the 135 SSPs will have been trained and graduated.

Manon Mireille Dohmen



Manon Dohmen of CropLife Africa Middle East during the graduation ceremony in Anloga, Volta region

Stewardship

Zambia to Rollout Container Management Program

CropLife Zambia embarked on a Container Management Scheme in 2013 starting with a pilot program which involved one recycler and 2 major vegetable exporters. The pilot program has been running since then and has seen a great deal of successes and challenges.

CropLife Zambia is now in the process of scaling-up the program. To do this, a stakeholders meeting took place on 18 April with 45 participants taking part. Among the participants were the pesticide industry (most of who were CropLife Zambia members), recyclers including Lafarge (Geocycle) and the Zambia Environmental Management Agency (ZEMA).

The objective of the workshop was to review the Government directive with industry to develop waste management strategies for empty pesticide containers and obsolete pesticide stocks.

The meeting also looked at the existing container management program and proposed strategies to roll this out further. The recyclers and Lafarge where also given the opportunity to share in their disposal solutions.

The workshop reviewed the environmental regulation, "Extended Producer Responsibility" which compels all companies to manage the waste the they introduce into the environment.

It was agreed that the industry would develop an "industrywide strategy" to which all companies will subscribe to.



Benches made from recycled HDPE material



Stewardship

Zambia to Rollout Container Management Program - cont.

Several of the key proposals were as follows:

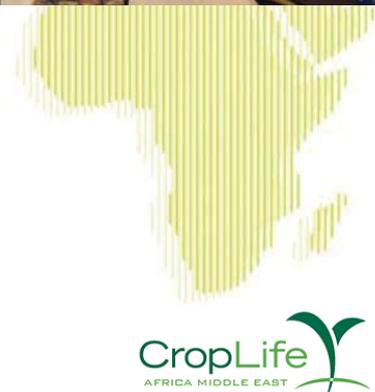
- A comprehensive container management program would be developed which would focus on the collection of containers and recycling with heavily contaminated units taken for incineration
- The establishment of a waste management fund which would be used to manage the program activities such as awareness, monitoring and evaluation, and other costs of coordination. It was proposed that the fund would be managed by CropLife Zambia
- The recyclers should produce end products that would be useful for farmers and industry, such as plastic fencing poles
- The industry to develop a set of standards to govern the program and to which all stakeholders should abide by
- Roles and responsibilities were proposed for each of the stakeholders in the program and it was proposed that all recyclers including the incinerator who meets the criteria, be part of the program
- Monitoring and evaluation should be part of the program to help measure success and provide feedback on areas of improvement

The next step is to develop a comprehensive collection system which will be validated by the stakeholders at the next workshop scheduled to take place in June.

Perry Ngoma



Group Photo



Stewardship

IPM/RU Training Workshop by CropLife Côte d'Ivoire

The 75 participants at the workshop comprised of 33 applicators, 24 extension agents and 18 retailers. The workshop, which took place on 8 – 12 April in Yamoussoukro, Côte d'Ivoire, was aimed at improving the knowledge on IPM/RU for the proper handling and use of pesticides. The program was facilitated by eight trainers of CropLife Côte d'Ivoire and covered the following 10 topics:

- Basics on pesticides, IPM and GAP
- Pesticide regulations in Côte d'Ivoire
- Labels and the understanding of pictograms
- Integrated management of soil fertility
- Tackling counterfeit and illegal pesticides.
- Safe transportation and storage of pesticides
- Public hygiene
- Spraying equipment, maintenance and the application of pesticides
- Poisoning and first aid measures
- Pesticide application and fumigation of stored commodities.

All participants undertook a written evaluation test; those in the applicators group also undertook a practical evaluation test. All participants in the retailer and counsellor groups passed the test, while 32 out of 33 participants in the applicators group passed the tests.

It is worth mentioning that the participants were from the following countries: Mali, Burkina Faso, Senegal and Côte d'Ivoire.

The Director of Plant Protection and Quality Control (DPVCQ) of the Ministry of Agriculture and Rural Development, chaired the closing ceremony, supported by the Executive Director of CropLife Côte d'Ivoire, the trainers and the members of the Training Project Team. He paid tribute to CropLife for a well-organized workshop and the continuous training to provide the much needed and updated knowledge to the various participants.

Bama Yao



S. Gneneyeri, Director of Plant Protection Directorate (3rd L-R) addressing participants during the closing ceremony. Courtesy CropLife Côte d'Ivoire.

Stewardship



A practical session on the parts and calibration of knapsack sprayers. Photo Courtesy: CropLife Côte d'Ivoire



A view of the 75 participants during the opening ceremony handled by the Executive Director of CropLife Côte d'Ivoire
Photo: Courtesy CropLife Côte d'Ivoire

Stewardship

A MoA Labelling Initiative - PR-PICA

The 12th annual meeting of the regional program for integrated cotton production in Africa (PR-PICA) took place 10 - 12 April, in Cotonou, Benin, under the presidency of the Minister of Agriculture, Livestock and Fisheries of Benin.

Approximately 200 participants attended the workshop as representatives of cotton companies, national agricultural research services, and producer organizations from the member states of PR-PICA (Benin, Burkina Faso, Côte d'Ivoire, Mali, Senegal and Togo). Other participants included representatives of the WAEMU Commission and international organizations involved in all aspects of cotton production, as well as agricultural inputs, including R&D companies and members of CropLife Africa Middle East.

Topics on the agenda related mainly to the 2018-2019 crop year, the management of soil fertility, genetic improvement, and pest management in the six member states of PR-PICA.

Mode of action (MoA) labelling for resistance management was discussed during the Steering Committee meeting of 9 April, the AGM on 12 April, and the plenary session where the 200 participants followed the presentations by Bama Yao and Andy Ward of CropLife.

The presentations and messages were well received by the participants, the Steering Committee and the AGM. The following recommendations were concluded:

- For the Executive Secretary of PR-PICA to liaise with CropLife for the preparation of a work plan for the implementation of MoA labelling in the PR-PICA territory.
- For the work plan to indicate priorities such as training sessions, sensitization and other activities for the key stakeholders who are expected to play a needed role for implementation.
- The work plan must be submitted to the Steering Committee for adoption during the meeting of December 2019, which will take place in Burkina Faso.

Bama Yao



Above: Bama Yao, providing inputs on MoA labelling and Below with Andy Ward

Photo Courtesy: PR-PICA Secretariat



A view of the approximate 200 participants attending the 12th annual meeting of PR-PICA in Cotonou

Photo Courtesy: PR-PICA Secretariat



Regulatory Advocacy

Efficacy testing of plant protection products

The ultimate goal of pesticide efficacy testing is to demonstrate a net positive effect of using a particular plant protection product (PPP) in a crop production system. A positive effect is generally understood as the protection or improvement of crop yields or quality, or more generally, a positive effect on resource efficiency in crop production.

Thereby, *it is important to test PPPs under local conditions as these can significantly affect product performance.* It is for instance not guaranteed that a product originally developed for temperate latitudes works well in tropical climates. The major local factors influencing product performance are local agricultural practices, the degree of mechanization, climatic and environmental conditions, soil types, and the respective pest, weed, or disease spectrum. Only if a PPP proves performance under the respective conditions, its use can be recommended. In the worst case, PPPs may also have negative effects, such as phytotoxicity, adverse effects on succeeding crops, yield reduction, negative impact on pollinators or natural enemies of plant pests, or an increased risk of resistance.

Another important goal of local efficacy testing is the development of label claims and use recommendations, which must be derived from and supported by field data and must reflect the actual performance of the product. Label claims include pests, diseases and weeds for which the product is to be used, recommended equipment and methods of use, dose rates, timing and number of applications, situations of use, nature, extent and duration of pest control, potential compatibility with other products and uses and potential adverse effects under certain conditions of use.

In many countries, a local proof of product performance is required to register PPPs. The obvious reason for this is that the regulator should prevent ineffective or phytotoxic products from being placed on the market. Efficacy data can be obtained in field, glasshouse or laboratory tests, depending on the targeted use. Requirements on the type of data are defined and released by the registering authority as well as the question of who is qualified to generate the studies.



Figure 1: typically used field trial settings for efficacy testing

In some countries, the applicant (usually the PPP manufacturer or importer) is responsible for the generation of trial data, in other countries trials are conducted by state-owned institutes or certified service providers. Depending on the country, data may be required from different locations or geo-ecological zones and from one or more growing seasons on a number of widely-used local varieties.

Some countries, such as the United States, do not require that biological efficacy data are submitted as part of the registration dossier. The evaluation of the effectiveness of PPPs remains with the user. This approach is based on the assumption that products cannot prevail in the market if they are not or not sufficiently effective.

The effort for efficacy testing of new active ingredients and PPPs is high

The development of new active substances for plant protection products is a complex task and a significant financial investment for R&D companies. It is estimated that around EUR 250 million will have to be invested in R&D and registration over a period of more than ten years until the introduction of a new active substance. A significant portion of these expenditures goes into efficacy testing: around 10,000 field trials are carried out at various locations around the globe until the market launch of an active substance.



Regulatory Advocacy

Also, new formulated products containing well-tried active ingredients must be tested under local conditions, since the recipes of the products usually differ significantly and thus their performance in the field can be very different. This is especially important regarding generic products, which are in African countries often registered based on basic equivalence assessments of the active ingredients but differ largely in their product composition from the originator products. If such PPPs are marketed without being tested properly in the field under local conditions, severe damages such as phytotoxicity or crop losses can happen.

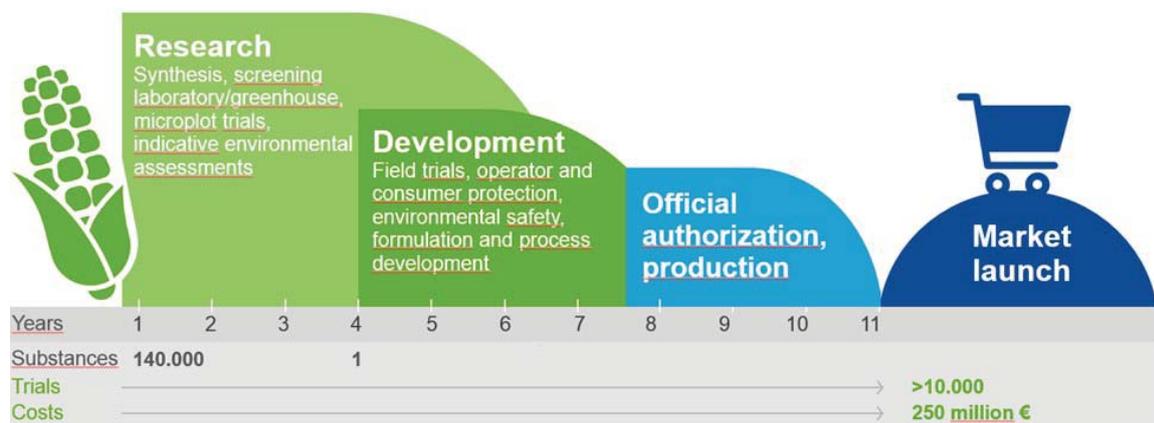


Figure 2: The development of a new active ingredient is complex and costly process which involves screening of more than 100.000 substances, more than 10.000 field trials and an overall investment of roughly 250 million Euros.

Regional Harmonization

Regional harmonization of efficacy testing methods and evaluation approaches is a reasonable approach that can help save resources and make data packages and thus product performances more comparable. Thereby, harmonization can take effect at various levels, including the adoption of common experimental protocols by a group of countries, the mutual recognition of results of the efficacy studies prepared under comparable geo-ecological conditions, and the joint assessment of efficacy data. The most far-reaching approach that is conceivable is the mutual recognition of registration approvals between neighboring countries such as practiced by the European Union (EU) and the CILSS countries in West Africa. A recent example is the East African Community, where regional harmonization standards are currently under development.

Standards for Field trials

Field trials for efficacy evaluation during PPP registration must follow certain standards in order to allow the comparison of results between different PPPs or comparisons of performance over time (e.g. related to resistance development). There are international standards that are also used in some AME countries, such as the European *EPPO standards* (https://www.eppo.int/RESOURCES/eppo_standards) or the *Guidelines on Efficacy Evaluation for the Registration of Plant Protection Products* from the FAO International Code of Conduct on the Distribution and Use of Pesticides (http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/Code/Efficacy.pdf). Other countries and harmonized regions developed individual standards like e.g. the *Guidelines on the data and documents required for registration of agricultural remedies in South Africa* (<https://www.daff.gov.za/daffweb3/Branches/Agricultural-Production-Health-Food-Safety/Agriculture-Inputs-Control/Guidelines>) or the *Framework Protocols for the Biological Evaluation of Plant Protection Products in the CILSS region* (<http://insah.cilss.int/index.php/csp/>).

Key factors for successful efficacy trials

The successful conduct of efficacy trials requires a decent knowledge of the test product (e.g. mode of action, formulation properties, expected dose rates etc.) and the agricultural framework in the target country or region (e.g. the spectrum of target organisms, local agricultural practices, crop rotation patterns etc.). Based on this, definition of clear trial objectives and the preparation of a trial protocol are key. The protocol defines all necessary tasks and steps to be conducted for a successful trial as well as the number and set up of trials that need to be carried out.

Proper planning is needed before and during the conduct of the trial which includes: application for trial approvals, selection of a proper trial site, ordering of seeds and samples of the test product, allocation of labor for the entire season, availability and maintenance of machinery and equipment, training of all persons involved, and so forth.

Following the predefined trial protocol supports to receive trial results that can be statistically analyzed and that are comparable throughout a series of trials from different regions and seasons. This makes it possible to observe the behavior of the test product under various environmental conditions, thereby ensuring the development of proper label claims and use recommendations that lead to reliable and reproducible effects in agricultural practice.

Johannes Hutzler, Chair RRC



Regulatory Advocacy

The MINADER and CropLife Cameroon join efforts towards pesticide management.

The Ministry of Agriculture and Rural Development (MINADER) of Cameroon and CropLife Cameroon signed a MoU to formalize their cooperation for pesticide management in the country. The signing ceremony took place on 27 March at the premises of the MINADER in Yaoundé.

The delegation of the MINADER led by the Minister of Agriculture and Rural Development comprised of managers and officers from the key directorates involved in pesticide management, agricultural production programs and projects closely related to the handling and uses of pesticides. Henri Fosso, President of CropLife Cameroon led the CropLife delegation, which comprised of management and officers of the member companies, and Jean-Paul Ngoulou, Executive Director of CropLife Cameroon.

The joint activities under the MoU will focus on, but which is not limited to:

- Promotion of PPE, GAP and overall safety measures during pesticide handling
- Preparation and dissemination of CropLife training materials and programs for the management of Fall Armyworm
- Updating the pesticide regulations when necessary
- Tackling counterfeit and illegal pesticides
- Sanitary and phytosanitary (SPS) measures to secure the quality-label of Cameroon agricultural producers.

Other issues related to pesticide management for the improvement agricultural production

Bama Yao



H. Fosso, (L) President of CropLife Cameroon, and the Honorable Minister (R) signing the MoU



Right: Exchanging the MoU



Ceremony attended by members of CropLife Cameroon and officers of the MINADER (CropLife CM)

Plant Biotechnology

Kenyans Embrace Dialogue on Genetically Modified Crops

Dialogue is key in improving public perceptions on genetically modified (GM) crops. This emerged during Kenya's first national dialogue on GM crops held on April 24, 2019 at the University of Nairobi.

Kenya's Agricultural Research Principal Secretary Prof. Hamadi Boga welcomed the dialogue and affirmed the Government's commitment to support sober and objective discourse on modern agricultural technologies. He, however, cautioned against nullifying a scientific fact based on social, political, ethical or religious beliefs. Prof. Boga hinted that the Government is seriously exploring deployment of agricultural biotechnology as a sustainable option to address famine in regions prone to perennial drought. "Drought tolerant crops are an option for some of these communities so that they are not tied to relief food for the rest of their lives," he said. He also exuded confidence with the country's biotech research and regulatory capacity to safely apply genetic engineering tools in agriculture.

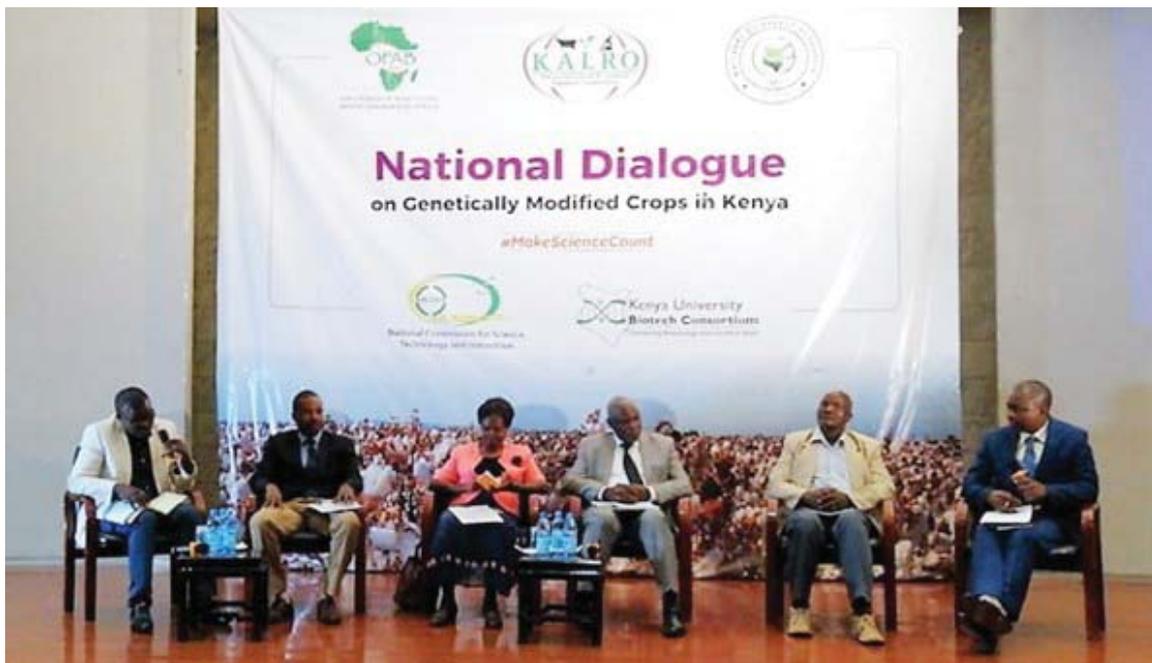
The farmers urged the Government to approve Bt cotton for commercial planting saying they have recorded big losses with conventional cotton due to its susceptibility to African bollworm. Daniel Magondi, chairman of the Society for Biotech Farmers of Kenya (SOBIFAK) said farmers have been "waiting for GM cotton and maize like yesterday."

The dialogue, organized under the auspices of the Open Forum on Agricultural Biotechnology (OFAB-Kenya), was a collaborative effort between KALRO, National Commission for Science, Technology and Innovation, the National Biosafety Authority and Kenya Universities Biotechnology Consortium. It is part of a national program aimed at promoting public awareness on agricultural biotechnology as the country makes significant strides towards commercialization of GM crops.

ISAAA

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Kenya's Agricultural Research Principal Secretary
Prof. Hamadi Boga



Pakistan Announces National Coordinated Trials of 85 Bt Cotton Varieties

The Pakistan Central Cotton Committee (PCCC) has announced that 93 new cotton varieties will undergo National Coordinated Varietal Trials (NCVT) in four provinces in Pakistan. The NCVT is the near-end stage of the performance evaluation process of any crop variety before Pakistani authorities make their decision to allow commercial cultivation.

The 93 varieties are composed of 85 Bt and eight non-Bt cotton varieties. 41 of the Bt cotton varieties were developed by the public sector and 44 by the private sector. The NCVT aims to assess the cotton varieties' production capability and fiber qualities in accordance to Pakistan's 2018-2019 research plan.

The announcement was made during the Agriculture Research Committee Meeting in Multan. Cotton Commissioner Dr. Khalid Abdullah also said during the meeting that scientists are encouraged to employ biotechnology to make the cotton more profitable and resistant to threats such as pests and diseases, notably the pink boll worm.



Cotton Commissioner Dr. Khalid Abdullah

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