

## Stewardship

### Obsolete Pesticides Workshop in Benin

CropLife International is partnering with the Food and Agriculture Organization of the United Nations (FAO), the Government of Benin and other collaborators on an FAO/GEF pesticide management project in Benin. The CropLife International support takes the form of a financial contribution to the obsolete pesticide safeguarding and disposal component, as well as an outreach/declaration and stock verification campaign to identify any changes to the 150 tons of obsolete stocks (not counting 450 tons of endosulfan already disposed of through a previous FAO project in 2014) recorded during an FAO inventory in 2011-2012.

The objectives of the workshop which took place on 28 April in Cotonou, Benin, were to share the details of new obsolete stocks identified, agree plans to update the FAO Pesticide Stock Management System (PSMS) database and prepare the future activities to be undertaken.

The opening ceremony as well as the closing ceremony were chaired by the Director General du Développement Agricole de l'alimentation et de la Nutrition (DGDAN) representing the Secretary General of the Ministry of Agriculture, Livestock and Fisheries (MAEP). The Director of the Crop Protection Directorate (DPV), the Technical Counselor of the MAEP and the FAO project coordinator participated in the workshop.

The presentation by the CropLife International Project Manager and subsequent discussions covered the following key points:

Sensitization and awareness creation during the last quarter of 2015 to encourage the voluntary declaration of stocks both in the public and private sectors. 91 sites in key regions with a wide-use of pesticides were inventoried following the sensitization to provide a better assessment of the stocks.

A total of 1,439,450 Kg were inventoried, of which half (745,503 Kg) of the pesticides have or will become more than two years old between October 2015 and December 2016. FAO will recommend to the Benin authorities that these products be analyzed and if still within specification, that they be used in the coming cotton season(s).

The identification of persistent organic pollutants (POPs) – there are 11.5 tons of HCH (confirmation process underway) in the original inventory.

The FAO/GEF project budget will only cover safeguarding and disposal of 200 tons of obsolete stocks so a national process of prioritization is underway that will consider various criteria including risk factors. A meeting is scheduled in July to agree on the products to be dealt with by the project.

**Bama Yao**



Group photo of participants (Right) and the officials (Above) with the CropLife International Project Manager, D. Laycock, the DGDAN, Adamou B. Zounkainery, the Director of the DPV, Issa Chabi A. Chabi, and the Technical Counselor to the MAEP, Marie Odile H. Comlamvi.



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## The SSP Project in Partnership with IFDC 2Scale rolls out in Ethiopia

CropLife Ethiopia has trained its first Spray Service providers (SSPs) for the 2Scale project of the International Fertilizer Development Center (IFDC). All SSPs who passed both the written and practical tests will receive a full set of personal protective equipment and an Identify Card this month to enable them to start selling their services to vegetable farmers in the Oromia region.

A total of 28 farmers divided into two groups, followed the 4-day training program. The programs were facilitated by SSP trainers from CropLife Ethiopia member companies Makobu Enterprise and Mekamba, and the Meki Batu Union. All participants are members of the Meki Batu Union and it is expected that the SSPs will sell their services to fellow members.

Unfortunately, only 20 of the candidates succeeded with both the written and practical tests. Dedefo Abdo Wayu, Field Coordinator of CropLife Ethiopia, explains: "The practical test was well handled with some of the candidates, scoring well above 80%. The main challenge was the written test that had to be undertaken in English. It was therefore decided that we will translate the test into Amharic and Afan Oromo and that those that did not pass initially can rewrite."



Group Photo– Meki

In spite of this challenge, Dedefo is satisfied with the results of the training. "Most participants have applied pesticides for years but required some basic knowledge, such as reading the toxicological band which was completely new to them. It was good to see how they appreciated the new things they learned."

CropLife signed a contract with the 2Scale project of IFDC in January 2016. The main objective is to set up a network of 60 SSPs to improve the actual application of pesticides, with the focus on reducing over-application, which is a common practice among vegetable farmers in the project area. In March, 15 SSPs trainers followed a Training-of-Trainers. The next two SSP training programs will take place in May. The period of June and July will be used for monitoring and coaching.

Les Hillowitz

## Stewardship Meetings: Brussels



Participants at the Container Management Project Team meeting in Brussels

From 6 – 8 April CropLife International held Stewardship, IPM / Responsible Use and Container Management meetings in Brussels.

With regard to IPM, CropLife Africa Middle East updated the group in that more than 500 SSPs were trained on IPM during 2015 and that a further 475 are expected to be trained during 2016 in Cote d'Ivoire, Ghana and Nigeria. In East and Southern Africa, Zambia trained 145 new SSPs in 2015 and plans are in place to roll this out further. Plans also include Malawi to train 220 SSPs during 2016.

CropLife Ethiopia entered into a 3-year partnership with SNV Netherlands Development Organization that will train 270 SSPs impacting on more than 30,000 farmers; the project will kick off in July. On Stewardship the importance of Resistance Management was covered in some detail as was the need to include "impact assessment" in all projects.

With regard to Container Management, CLAME will focus on South Africa, Kenya Ethiopia and Zambia as key countries in 2016.

Les Hillowitz

## Annual Report Back of the PR-PICA

The report back workshop took place between 13 – 15 April in Ouagadougou, Burkina Faso at which 150 participants representing the cotton companies in the key countries of West Africa (Benin, Burkina Faso, Cote d'Ivoire, Mali, Senegal and Togo) members of the regional programme for integrated protection of cotton in Africa (Programme Régional de Protection Intégrée du Cotonnier en Afrique, PR-PICA), the key cotton organizations in these countries, the national agricultural research services, the African Cotton Producers Association (AProCA), input suppliers, and organizations such as IFDC and USAID, attended

The workshop was organized for the presentation of the annual report of the PR-PICA and recommendations focused on the following:

- Country reports on the 2015-2016 crop-year showed a difficult year due to the late onset of the rains and also a short rainy season. This situation led to reduced cotton acreages in all six countries, and late sowing which, unfortunately, is favourable to high infestation later in the season mainly during the flowering stages.
- Monitoring of pest infestation revealed noticeable incidence in all six countries though the levels of infestation differ from one country to another, as well as the pest populations.
- Assessment of yield losses due to pest infestations showed little to moderate losses in all six countries; however, the losses confirm the overall loss trend over the past five years.
- Efficacy of new active substances and protection programmes indicated that these new actives can be integrated into the protection programme to control whitefly, bollworms, etc. A programme with a 10-day spray interval proved effective. However, there is need to evaluate the socioeconomic benefits of such frequency.
- Other topics covered related to soil fertility with new formula of fertilizers, post-harvest technologies and genetic improvement with local varieties.

An important recommendation was that the technological innovations be fully introduced into the cotton protection programmes in all the countries so that the emerging pests and constraints be controlled, rather than the option for cheaper products from the tender systems.

Bama Yao



The workshop chaired by the President of the Board of the SOFITEX the cotton company of Burkina Faso (Above) was attended by about 150 participants addressed mainly the management of major pests in cotton production in the 6 countries as indicated by the research services

## Regulatory

### Continental Workshop on Harmonization of Pesticide Regulations in Africa

A continental workshop was held in Cairo, Egypt, April 17 – 19, 2016 organized by two Africa Union institutions; Inter-African Bureau for Animal Resources (IBAR) and Inter-African Phytosanitary Council (IAPSC). The key objectives for the workshop were to review and validate the framework for harmonization of pesticide regulations in Africa and to draft guidelines to minimize impacts of pesticides on bees. The workshop brought together over 90 representatives from 41 Africa Union member countries, Regional Economic Communities, scientists, private sector and beekeepers.

The first day was dedicated to background presentations on pesticides, agriculture and biodiversity in Africa followed by countries sharing experiences. Presentations were as follows :

- \* Pesticide Utilization in Africa
- \* The distribution of pharmaceutical and plant protection products in Cameroon
- \* Pesticide Use Compatible with Pollinator Health : Mitigating Potential Risks
- \* Effects of Pesticides on Honey bees in Egypt
- \* Neonicotinoids and Honey Bees
- \* Egypt's experience in beekeeping and pesticides use
- \* The experience of Tanzania in regulating the impacts of pesticides on bees

The second and third day were dedicated to validating the framework for harmonization of pesticide regulations in Africa and drafting of guidelines to minimize impacts of pesticides on bees. The discussions were preceded by two presentations titled Global Harmonization of Pesticide Regulation: why and how? and Pesticides Utilization in Africa: status and trends respectively. Workshop participants provided comments for consideration in the finalization of the framework for harmonization of pesticide regulations in Africa. Some of the key issues highlighted for consideration in drafting guidelines to minimize the impact of pesticides on bees included:

- \* Inadequate pollinator friendly pesticides policies, regulations and guidelines in Africa
- \* Lack of data and information on impacts of pesticides on bees and “decline of bee colony populations”
- \* Inadequate knowledge on Good Apiculture Practices (GAP) and contamination of bee products
- \* Inadequate knowledge on the economic value of pollination services
- \* Inadequate transboundary policies in management of biodiversity and pesticides usage.
- \* Pesticide application methods of e.g. aerial application, is more detrimental, time of application, and crop requirements
- \* Inappropriate use of pesticides around bee colonies to control mites and ants

**Stella Simiyu Wafuho**

Left to Right: Director of IAPSC, Dr. Jean Gerard Mezui M'ELLA; Chief Animal Production Officer AU-IBAR, Dr. Simplicie Nouala, Director of Plant Protection, Minister of Agriculture and Land Reclamation, Arab Republic of Egypt; Dr. Mortada Ahmed Eissa and, Director AU-IBAR Prof Ahmed A. El-Sawalhy



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## Anti-Counterfeiting

### Training Workshop for Enforcement Agencies in Cote d'Ivoire



Left: Participants at the workshop were addressed on the issues of shared responsibility to combat the illegal trade of pesticides, and were presented certificates by the Secretary General of the Prefecture of Korhogo (Below)



The workshop which took place on 21 April, in Korhogo, Cote d'Ivoire attracted 37 enforcement officers.

The workshop was organized under the regular support program to provide knowledge and tools to the participants to enable them to identify and seize illegal pesticides on the market.

The presentations and subsequent discussions highlighted the following:

- CropLife Cote d'Ivoire and the industry network contribute to the agricultural productivity in Cote d'Ivoire through the supply of quality pesticides and other agri-inputs.
- That pesticide regulations focus on the registration process to guarantee the quality as well as monitoring for enforcement and compliance of pesticide laws and decrees.
- That pesticides contribute to sustainable agriculture (production and productivity), in the fight against hunger and poverty reduction, and the improvement of livelihoods in rural areas as well as the protection of the environment.
- That counterfeit and illegal pesticides have a direct risk on human health and the environment together with financial and socio-economic impacts.
- That cooperation among enforcement services is needed in a concerted fight against illegal pesticides under the "Departmental Pesticides Committee" to be created throughout the country. CropLife CI and CropLife AME offered to provide support in strengthening the capacity of these committees.

The closing ceremony was chaired by the Secretary General of the Prefecture of Korhogo who expressed his wish for the training to be extended to the administration for a better understanding and for providing support to the enforcement bodies.

**Bama Yao**

## Association Management

### CropLife Kenya Appoints New Chief Executive Officer

CropLife Kenya announced the appointment of Ms. Evelyn Lusenaka as the new Chief Executive Officer, effective May 1st 2016. Evelyn is the former Stewardship manager/Deputy CEO for CropLife Kenya, a position she held since 2005. She replaces Richard Sikuku who was the CEO of the association for the past 17 years and who retires on 30 June 2016.

Evelyn has been instrumental in leading the Stewardship portfolio for CropLife Kenya, making it the leading country in stewardship activities in Africa. She has over 10 years' experience in senior management focusing on strategic planning, capacity building, regulatory, advocacy, corporate governance, partnership development and resource mobilization.

Under the stewardship portfolio, she developed strategic partnerships with numerous donor agencies including the World Bank, SNV, SIDA, CABI and USAID covering projects such as the Spray Service Provider project, Container Management, Agro-dealer development, Responsible Use and IPM training.

Evelyn also served as a master trainer for CLAME having trained for a number of international organizations as well as for CropLife Africa Middle East in a number of countries.

Evelyn is currently pursuing a Post Graduate Diploma in Pesticides Risk Management at the University of Cape Town. She holds a Master's degree in Project Planning and Management from the University of Nairobi, a Bachelor's degree in Horticulture from Jomo Kenyatta University – Kenya. She is married and has two children ages 9 and 4 years.

**Les Hillowitz**



Evelyn Lusenaka

### **Saying Goodbye .....**

After 17 years dedicated service we bid adieu to Richard Sikuku who will shortly take retirement from the National Association.

Richard's wisdom, hard work and achievements will be sorely missed. The footprint left behind will be a source of inspiration to those that follow.

This is not a goodbye, only "hasta luego" or "see you later".



## CropLife Zambia holds 2016 AGM

CropLife Zambia held their Annual General Meeting for 2016 on Friday 6 May at the Chrismar hotel, Lusaka. The meeting was attended by 17 members, 3 partner organizations, an official from the Zambia Environmental Management Agency (ZEMA) and 1 CropLife trainer. In the past year membership of CropLife Zambia increased with 3 new entrants namely ; Care Crop, ETG Group and AgChem.

Among the successes reported was the recognition of CropLife Zambia by the Ministry of Agriculture which required all companies participating in the E-voucher (Farmer Input Support Programme) to be members of CropLife Zambia. This initiative provides the association with an added attraction and an opportunity to have more influence on the industry. Not only will this increase membership of the Association but it also shows that Association members are seen to be reliable and therefore the suppliers of choice. ZEMA was also given an opportunity to make a presentation which covered the new requirements for pesticide registration, the details of which were noted by the participants.

One of the burning issues was the needs for the pesticide registration process which ZEMA outlined as follows:

- \* Safety Data Sheet
- \* Efficacy reports
- \* Certificate of analysis
- \* Draft Label of the product
- \* Certificate of registration from the country of origin or in the SADC region
- \* Letter of consent from the supplier/manufacturer to distribute
- \* Proof of competency in the responsible handling of pesticides
- \* Certificate of incorporation within Zambia
- \* Payment of importation fees

Chola Kamaki was re-elected as Chairman for the following 2 years. Other office bearers included Jeremiah Shakubanza (BASF Zambia) - Vice Chairman, Mark Stokes (MRI-Syngenta) – Secretary, Richard Nonde (Hygrotech Zambia) – Treasurer and Collins Chibbonta (Amiran Zambia), Ken Bowker (Precision Farming Limited) and William Mwaya (ATS Zambia) as committee members.

The AGM agreed on the following actions over the next 12 months with the focus on to improve association management:

- \* Revise the Constitution to include different categories of membership. This would help to raise the funds needed for programmes but also to bring clarity to all levels of the industry. This would include redefining the fee structure and the rights and benefits of each level of membership.
- \* Develop a mechanism for self-policing in order for industry through the Association to be more credible.
- \* Continue developing partnerships with partner organizations in order to offer more services to the members.
- \* Define what constitutes benefits to members to enable the Association to become a more attractive organization.

**Perry Ngoma**



Chairman of CropLife Zambia,  
Chola Kamaki

## Plant Biotechnology

### Uganda Government Officials Appraised on Relevance of Biotech in Agriculture

The National Agricultural Research Organization (NARO), through its special initiative-Uganda Biosciences Information Centre (UBIC), has assumed the front-place position of sensitizing its key stakeholders on the relevance of modern crop technologies such as biotechnology, in addressing major crop challenges and increasing agricultural productivity in Uganda. As a consequence, on March 16, 2016, NARO and UBIG organized a seminar to appraise officials from the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) on on-going pluralistic research under NARO, and to devise strategies to reduce the information gap between researchers and the lay public, so as to facilitate uptake of products of agricultural research in Uganda.

Although NARO has over the years conducted immense research to address issues of food security and low productivity, through relevant technologies, a significant majority of government officials, especially at the Agriculture Ministry had limited awareness on modern technologies such as biotechnology, which Ugandan researchers are exploring to address some crop challenges.

Dr. Yona Baguma, NARO's Deputy Director General in-charge of research, informed participants that NARO is using a spectrum of contemporary agricultural technologies including conventional breeding and genetic engineering to make crops more resilient to drought, resistant to a range of pests and diseases among other environmental challenges as well as richer in valuable nutrients.



Dr. Barbara Zawedde

Furthermore, UBIG coordinator, Dr. Barbara Zawedde, made a presentation on the genesis and progress of agricultural biotechnology research in Uganda and globally, expounding on some of the public's common concerns about biotechnology and genetic engineering. Commenting on the National Biosafety framework in Uganda, Dr. Zawedde stressed the importance of enacting a law and establishing regulatory framework to regulate the development and application of biotechnology in Uganda. Currently, Uganda has a National Biotechnology and Biosafety Bill, 2012 which is yet to be made into law.

Participants took part in a question and answer session in which they engaged the scientists on a plethora of issues; from modern agricultural biotechnology and biosafety to extension services that influence the public's uptake of new technologies. Finally, NARO was challenged to keep updating MAAIF on latest developments in agricultural research and development; as well as to advance consistent and frequent community awareness symposia to trigger technology adoption.

ISAAA



## GM Maize in South Africa planted on nearly 20 million ha in 16 years

*Presented by Andrew Bennett, Technology Development Manager, Monsanto, for Africa and Asia, and Chairman of the South African Agricultural Biotechnology Industry (ABI), at the annual ABI media conference in Pretoria on Tuesday 3 May 2016.*

The year 2015 marked the 20th anniversary (18 in South Africa) of the global production of GM crops (1996–2015). The first GM crop in South Africa, cotton, was planted in 1998. GM yellow maize followed in 2000, planted on only 3000 ha. From 2000 to 2015, in 16 years, nearly 20 million accumulated hectares of GM maize were grown in South Africa, yielding well over 50 million MT of grain.

Farmers' adoption of this new technology escalated at an unprecedented rate. GM maize peaked from an initial 3000 ha to a record 2.36 million ha in 2013. This makes biotechnology the fastest-growing crop technology in recent years. South Africa ranks ninth as a global GM crop producer.

In 2015, the worst drought in 35 years took its toll on biotech crops in South Africa. The biotech hectareage for all GM crops decreased by 700 000 ha (25%) from the intended 3 million ha to 2.3 million ha (2.7 million in 2014). GM maize was planted on 1.8 million ha at an adoption rate of 90% (2.14 million in 2014). White maize accounted for 1.03 million ha, 86% of the total white maize grown. Yellow maize at 0.96 million ha was 92% GM. GM soybeans at 95% adoption rate on 508 000 ha (552 000 in 2014). Biotech cotton 12 000 ha, 100% GM (8000 ha in 2014).

Economic gains for South African farmers from biotech crops 1998–2014 are estimated at US\$1.8 billion and US\$245 million in 2014 alone. (Brooks & Barfoot) Dryland yields of maize before the advent of GM averaged 1.5t/ha. Today average yields are 5t/ha for GM maize, an increase of 70%. GM maize under irrigation varies from 12t/ha to 20t/ha.

According to Mr. Wandile Sihlobo, economist at Grain SA, in order to meet the shortfall due to the drought, South Africa is likely to spend between R13 billion and R14 billion between May this year and April 2017 to import 3.8 million tons of maize.

It is interesting to note how much more maize South Africa would have had to import were it not for the advent of the latest biotechnologies (GMOs) and modern maize germplasms.

The 1991/92 season was the last drought South Africa experienced before the adoption of GM crops. In that year the average maize yield was 0.85t/ha. The 2014/15 and 2015/16 seasons have both been drought years. With the adoption of GM maize, the average yield today is estimated at 3.72t/ha.

If it were not for GM maize and our yield was still 0.85t/ha, we would have produced only 1.65 million tons of maize. To meet our local requirements, we would have had to import 9.4 million tons instead of 3.8 million tons, at an estimated additional cost of R33 billion.

The first WEMA (Water Efficient Maize for Africa) DROUGHT TEGOTM WE 3127 conventional white maize hybrid was launched by the Agricultural Research Council (ARC) in the 2014/15 season for planting by smallholder farmers in five provinces. In Limpopo, yields increased from an average of 0.6t/ha to 1.4t/ha. In North West, four smallholders increased their yields from 1.5t/ha to an average of 2t/ha. A biotech drought tolerant maize is expected to be launched in 2017.

Ms. Tepsy Ntseane, a smallholder farmer and president of AFASA for the Gauteng province, planted 40 ha of GM maize dryland and increased her yield from 2.3t/ha conventional to 7t/ha.

Researchers at Purdue University in the USA calculated what the world would look like if GM crops were removed from agriculture in the USA. Their conclusion was that maize yields could drop by 11.2% and soybean yields by 5.2%. More dramatically, cotton yields could drop by 18.6%. To fill these voids, 250 000 acres of US forests, pastures and 2.7 million acres globally would need to be converted into cropland. In addition, commodity prices would rise drastically – maize by 28% and soybeans by 22%.

### Africa

Adoption of GM crops in Africa is making good progress. Confined field testing of GM crops is currently under way in Burkina Faso, Cameroon, Egypt, Ghana, Malawi, Nigeria, Swaziland and Uganda. Biotech cotton is already successfully grown in Burkina Faso and Sudan. In 2015, Sudan increased its biotech cotton by 30% to 120 000 ha (90 000 ha in 2014). Egypt has also produced some GM maize in the past but is not planting at the moment.

The safety of GM crops, including food and feed derived therefrom, is underscored by the millions of farmers worldwide who have planted these crops continuously for 20 years. Not a single incident of adverse effects to humans, animals or the environment, anywhere in the world, has been recorded. Yet for the past 20 years anti-GMO activists continue claiming, without substantiated medical or scientific evidence, that GM crops are a threat to human and animal health and the environment

One of the most critical campaigns, targeting glyphosate – the world's market leader herbicide for more than 40 years in 130 countries, claimed it to be "carcinogenic". However, the European Food Safety Authority (EFSA) rejected this claim outright, stating that "glyphosate is unlikely to pose a carcinogenic hazard to humans". Canada Health followed with a similar assurance "that glyphosate does not pose a health risk to farmers and other occupations that handle the product". Hundreds of scientific institutions globally concurred.

An outcry in the EU to ban the product was rebutted by the EU parliament on April 13, 2016, who voted that glyphosate should be authorised for the next seven years. Globally in 2012, glyphosate was used on 120 million ha of GM and non-GM crops.

#### **Latin America**

Ten countries in Latin America grew biotech crops. In 20 years, Argentina approved 20 GM crops.

#### **European Union**

Five EU countries planted 116 870 ha GM crops. Spain leads with 107 749 ha. Spanish farmers in 2012 reported an additional gross margin of €11 million for Bt maize. Nineteen of the 28 EU countries have banned GM crops. They do not plant it, but import more than 33 million tons of soybeans from the USA, Brazil and Argentina, 90% GM, used in 7000 food ingredients in addition to animal feed.

They are strongly food labelling minded. Ironically, 10 million tourists from the EU visit the USA annually, where 80% of the food is GM derived, but don't ask for labelled menus.

#### **Globally**

Globally in 2015, some 18 million farmers in 28 countries planted 179.7 million ha of GM crops (181.5 million in 2014). The one percent decrease was due to droughts in various regions and that major biotech countries, including South Africa, have reached saturated adoption in most GM crops. However, strong growth is expected in developing countries. In 20 years globally, GM hectareage grew from 1.7 million ha in 1996 to 179.7 million in 2015. It is estimated that in the 28 countries farmers have benefitted by US\$150 billion from GM crops. (Brooks & Barfoot)

Several new approvals for GM crops were registered in the USA, mainly fruit, potatoes and alfalfa. The first GM animal was approved – a faster growing GM salmon. It is expected to enter the food chain in 2018. Atlantic salmon normally takes three years to harvest on fish farms compared to only 18 months, or half the time, for GM salmon.



Andrew Bennett

# UPCOMING EVENTS

<b>ISAAA Press Conference, Pretoria, South Africa</b>	<b>May 3</b>
<b>WCA Hub and Regulatory Meeting, Abuja, Nigeria</b>	<b>May10-11</b>
<b>UNEA meetings at UN-Gigiri, Nairobi, Kenya</b>	<b>May 23 – 27</b>
<b>Science and Policy Forum, Nairobi, Kenya</b>	<b>May 19 – 20</b>
<b>Global Major Groups and Stakeholder Forum, Nairobi, Kenya</b>	<b>May 21 - 22</b>
<b>Sustainable Innovation Forum, Nairobi, Kenya</b>	<b>May 24 - 26</b>
<b>Anti-counterfeiting training workshop for enforcers in Northern Cote d'Ivoire,</b>	<b>May 23</b>
<b>Address CropLife South Africa ExCo</b>	<b>May 31</b>
<b>IPM training of SSPs in Malawi</b>	<b>June 13 - 17</b>
<b>Anti-counterfeiting training workshop for enforcers in Western Cote d'Ivoire</b>	<b>June 23</b>
<b>BEECON, South Africa</b>	<b>July 1 - 2</b>
<b>TOT for SNV Ethiopia</b>	<b>July 4 – 9</b>
<b>IPM training of SSPs in Zambia</b>	<b>July 25 - 30</b>
<b>ESA Hub and Regulatory Workshop, Dar es Salaam</b>	<b>Aug 30 - 31</b>



Photo: Wikipedia



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