

CropLife Africa Middle East Annual Report 2013

Breakthrough Year for the Spray Service Provider Concept

SPRAY SERVICE PROVIDERS (SSPs)

for better and safer application of pesticides on your cocoa



Higher Yields

Protect your Farm against Pests and Diseases

No More Fake Pesticides

Collection of Empty Containers

Benefits of using a Spray Service Provider to spray your cocoa

A Spray Service Provider (SSP) is a registered agro-input dealer or farmer who has received special training to apply pesticides and who hires out his services to cocoa farmers to spray their lands. How to recognize an SSP? A trained SSP carries:

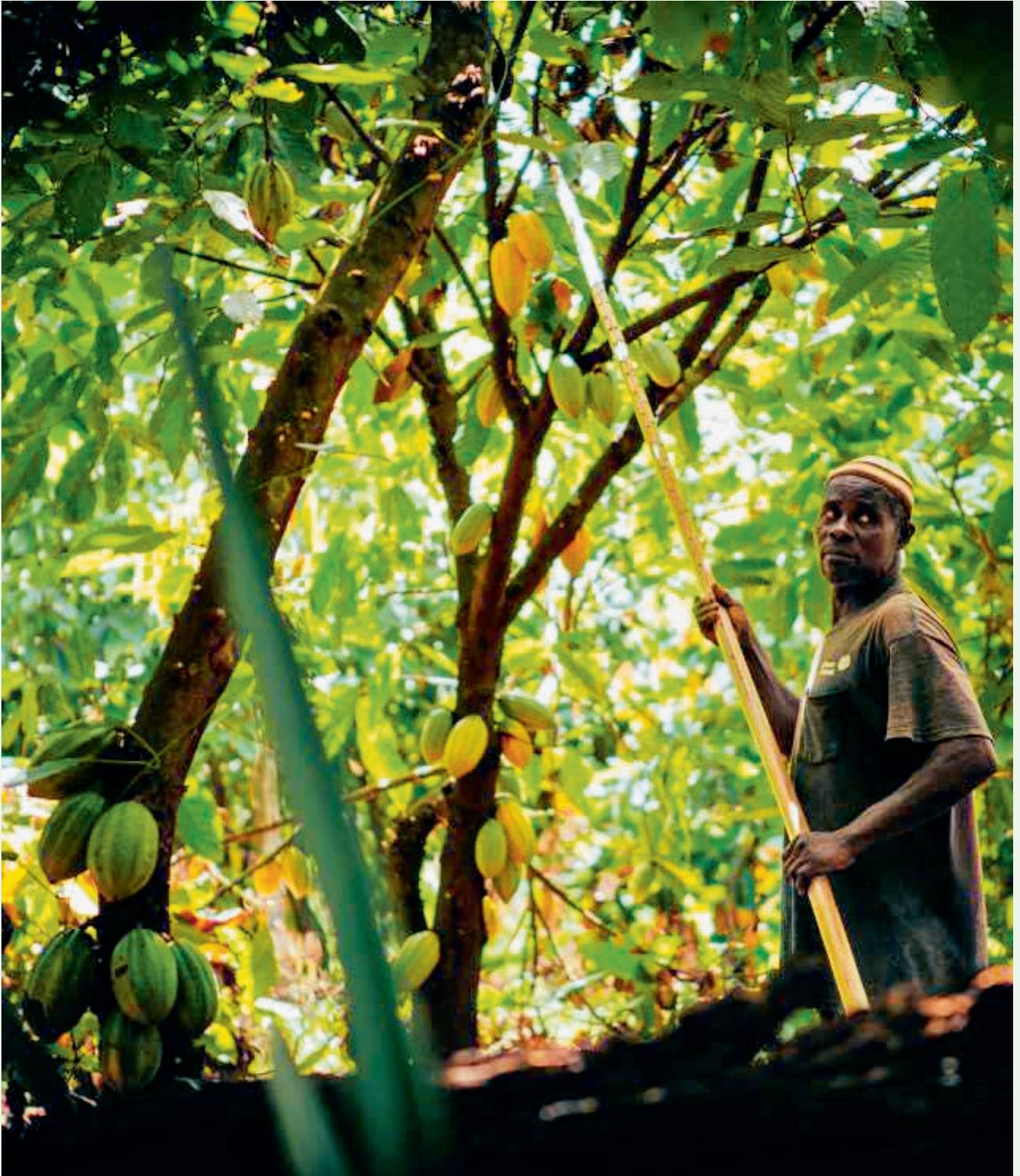
- Yellow overalls with CropLife logo
- A badge with picture and CropLife logo





Want to hire a Spray Service Provider or become one?
Contact CropLife Ghana on 0244-273 075





Vision, Mission and Values

Vision:

Working together for sustainable agriculture.

Mission Statement:

As a global network we act as an ambassador for the plant science industry, encouraging understanding and dialogue whilst promoting sound science and agricultural technology in the context of sustainable development.

Values and Beliefs:

Respect:

- Respect the views and values of others and act with honesty, humility and humanity.
- Seek the respect of others for our values and beliefs.

Openness:

- Communication is a fundamental priority in all our activities.
- We will act with openness in all our dealings with stakeholders and actively engage in dialogue, exchanging opinions and facts, in order to increase society's understanding of our industry and our understanding of society.

Commitment:

- We are committed to serve our members and stakeholders operating to the highest possible standards of professionalism ensuring the effective and prudent management of our resources.

Technology:

- We believe in the benefits that technology brings to human development and progress, and to sustainable agriculture.
- We believe in the complementary and synergistic nature of technologies developed and offered by the plant science industry.
- We believe in science as the engine of innovation and the core principle of regulatory decision-making.

Sustainability:

- We are committed to promoting full and effective stewardship (the responsible and ethical management of a plant protection or biotechnology product throughout its life cycle) to the field level, and recognize that the appropriate management and use of our products is an important element underpinning sustainable agriculture.
- We will strive to work together with others to achieve a proper balance between all dimensions/pillars of sustainable development.
- We will strive to maintain a healthy, ethical and viable business environment for the plant science industry.



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1. Message from the President



Dear Reader

The major challenges of our region are a rapidly growing population and the related growing need for increased food production. There is no doubt that this region needs new and more productive agricultural technologies consisting of modern inputs in the form of crop protection products, improved seed varieties, plant biotechnology and better fertilizers. The needs of the region are far greater than in any other part of the world. At the same time these improvements must be safe for users, the environment, as well as for export markets and consumers, both locally and abroad.

The real breakthrough during the year was the signature of the contract with the World Cocoa Foundation through the African Cocoa Initiative (WCF-ACI) project to initiate the Spray Service Provider (SSP) program in cocoa production in W. Africa. Through this SSP program, CropLife AME and the affiliated national associations in the beneficiary countries will train more than 3000 SSP's who in turn will spray the cocoa farms for 40000 small producers. It is worth mentioning that cocoa in W. Africa, the world's largest supplier of cocoa beans, is produced by small holders, and the use of pesticides on these farms is critical. The SSP program is intended to ensure that pesticides are used in a responsible way on these farms thus avoiding misuses and reducing the presence of illegal pesticides with the associated risks on human health, the environment and the socio-economic disasters for these producers. This is only one of the many examples of how CropLife Africa Middle East can contribute to the challenge of transforming Africa's agriculture.

At this point, I would like to sincerely thank our executives led by Rudolf Guyer, the Director General, for the tremendous work they are engaged in and for expanding our expertise to other stakeholders.

I would also like to thank my colleagues of the Board for their support to such initiatives, which are reinforcing the credibility of our organization.

I am indebted to the CropLife International teams for their continuous support to our regional organization and to all the other stakeholders with whom we share the success of this year 2013.

Yours sincerely,

Eric Bureau
President of the Board of Directors

2. Message from the Director General



Dear Reader

I am particularly gratified at what our regional association achieved during 2013. There is no doubt that the World Cocoa Foundation project covering four countries was the highlight of the year. This project clearly demonstrated the strengths of the Spray Service Provider (SSP) concept which embraces our stewardship standards in a most effective and simple manner. Considering the enormous challenge for our industry to reach out to the 100 million smallholder farmers in Sub Saharan Africa (SSA) and to educate them on the responsible use of pesticides the Spray Service Provider concept holds real promise to actually master this challenge. With well trained SSP's it will become possible for small holder farmers and in particular also for the many woman farmers in SSA to get access to and adopt effective and modern agricultural technologies – including the use of herbicides to replace the painful and often ineffective hand weeding. Also the broader adoption of water saving no-till agriculture – which will become necessary with the expected climate change in Africa – will require well trained SSP's to make these technologies available for the small holder farmers. The rollout of the SSP concept will therefore be a driver for our organization for the next several years and will be implemented with a growing number of partners and organizations across the region.

At the Board meeting in June, the Board took two strategic decisions, these included:

- A greater focus on Intellectual Property Rights / Anti-Counterfeiting
- The strengthening of our regulatory and advocacy abilities.

With the ambition to achieve real impact with our efforts on anti counterfeiting it was decided to prioritize activities in three flagship projects, namely Egypt, Kenya and Cameroon. Whereas the Egyptian project is already in full implementation the Kenyan and Cameroon projects are planned to be launched by mid 2014. In order to strengthen the regulatory and advocacy capabilities Stella Simiyu Wafukho joined the CropLife AME team on 1st June 2014. In her previous role Stella was primarily engaged with the build up of enabling regulatory environments at country level in order to facilitate the adoption of needed modern agricultural technologies by small holder farmers. These skills will be essential in our efforts to convince national and regional regulatory authorities to make their own and independent choice of what modern technological solutions will best serve their countries' farmers, consumers, environment and economies. We wish Stella success and satisfaction in her new role.

On behalf of CropLife Africa Middle East, I would like to thank all our stakeholders for their support during 2013. We look forward to working together in 2014 and beyond.

Yours sincerely,

Rudolf Guyer
Director General

3. Key Data and Hub Structure

CropLife Africa Middle East A.I.S.B.L. represents the Plant Science Industry in the countries of Africa and the Middle East. The Plant Science Industry includes manufacturers and distributors of crop protection products (pesticides), seeds and biotechnology products.

At the end of 2013 the association consisted of:

- 11 company members
- 26 national associations
- 1 professional organization engaged in the promotion of biotechnology solutions for the African continent

CropLife Africa Middle East was registered as an international non-profit organization in Brussels in November 2002. The association is legally fully independent but maintains a strong link with the global CropLife network.

In order to achieve the highest impact at country and sub regional level, a decentralized hub structure has been established:

- North Africa Middle East sub region covering all the countries belonging to the Arab League. Following the retirement of Ali Mohamed Ali, Rudolf Guyer acts as Regional Coordinator for this hub and obtains needed support from the Vice President and Hub Chair, Michel Chartouni.
- West and Central Africa is managed by Yao Bama, Regional Coordinator based in Abidjan, Ivory Coast. This sub region again follows respective political groupings where sub regional regulatory harmonization and alignment is envisaged.
- East and Southern Africa is managed by Les Hillowitz, Regional Coordinator based in Johannesburg, South Africa.

It is our association's mission and objective to motivate and engage as many partners and stakeholders as possible to help in the promotion and development of state of the art technological solutions needed for productive and sustainable agricultural systems in Africa and the Middle East. Despite the fact that the membership of multinational companies in national associations is rather limited across the region, it is the ambition of our association to convince and motivate all these local members to observe and implement the same international standards and apply all stewardship measures and activities as defined by the International Code of Conduct to which all members of the CropLife network are committed.



Our company members are:

- Arysta LifeScience
- BASF
- Bayer CropScience
- Cheminova
- Dow AgroSciences
- DuPont
- FMC
- Monsanto
- Sipcam Oxon
- Sumitomo
- Syngenta

National CropLife associations and the sub regional hubs

4. 2013 – The Breakthrough Year for the Spray Service Provider Concept

4.1. What is the Spray Service Provider Concept

A Spray Service Provider (SSP) is a farmer who has received special training to apply pesticides and who hires out his services to fellow farmers to spray their lands. This implies that untrained farmers will no longer handle pesticides, and that this application will only be undertaken by those who are adequately trained and certified. When pesticides are handled by those that are trained, the risk towards human health and the environment is greatly reduced, the correct pesticides are used at the correct time and rate thus ensuring efficient and effective control of pests and diseases, therefore increasing yields. The dosage of the products used will be correct, the purchase of pesticides will be better planned so less obsolete pesticides will accumulate, and empty pesticide containers will be triple rinsed, punctured and collected leading to possible container management schemes. Therefore, an established network of Spray Service Providers is highly beneficial.

4.2. How was the SSP invented and developed

The Spray Service Provider Program was an initiative aimed at promoting the responsible use of pesticides among the small-scale farming sector in Zambia. The initiative started in 2008 by CropLife Zambia with its partner PROFIT/USAID. The main reason for starting this program was the observation that small-scale farmers are at most risk from using pesticides. It was clearly recognized that farmers needed a “hands-on” approach on the responsible use of pesticides and how to apply these safely and effectively. It was unrealistic to think that CropLife Zambia could train all the small-scale farmers in the country, so a way needed to be found involving all the CropLife member companies in an all-embracing program. This was the creation of the Spray Service Provider concept.



Globally about 50% of pesticide use relates to the use of herbicides. Without herbicides hand weeding is the dominant weed control technique which in developing countries is mostly performed by woman. This is an extremely laborious and painful activity taking an average of 200 hours per hectare.

Three years into the program, a study was conducted to look at the impact of building capacity of community based Spray Service Providers (SSP's), by CropLife Zambia in conjunction with its partners, on the livelihood of small-scale farmers, in the Eastern, Central, Copperbelt and Southern provinces of Zambia. This study and survey – which was conducted by CARE Zambia – revealed that SSP's had a direct positive impact on the livelihood of the many smallholder farmers. In addition, indirectly, there was a trickledown effect on small-scale farmers through learning by observing the productive fields of the spray service providers who are themselves

farmers in their respective communities. Spray service providers have indirectly enlightened these farmers on the positive effect of pesticide use such that most of the farmers interviewed benefited and experienced a reduction in both the duration and cost of weeding per unit piece of land. More than 80% of respondents in Eastern, Central and Copperbelt provinces and 60% in the southern province all reported positive feedback on the use of herbicides.

Most of the farmers in all the four provinces experienced an increase in the yield of maize from about 1.5 tones to as much as 4.5 tons per hectare. This remarkable increase in yield translated into increased household income and increased household food security. It logically follows that an increased outreach in training of the farming community in the use of pesticides goes a long way in increasing crop yields, reducing time and cost of weeding thereby releasing household members for other chores such as attendance to school by children. In addition, effective weeding methods significantly increases food production at household level as currently many of them are only utilizing a relatively smaller area of their farms due to weeding constraints.

As a result of some of these positive results of the spray service provider program, it was strongly recommended that the training of SSP's by CropLife continue in the farming communities of Africa.

4.3. The Flagship SSP Project with the WCF – ACI

The year 2013 successfully saw the introduction of the Spray Service Provider (SSP) concept into the cocoa sector in West Africa. During the year a total of 1,150 SSP's were trained in Cameroon, Côte d'Ivoire, Ghana and Nigeria, and are actively selling their services to small-scale cocoa farmers. These activities were made possible through the support by the World Cocoa Foundation (WCF) under the African Cocoa Initiative (ACI) project.

In early 2013 CropLife Africa Middle East received a grant of \$600,000 from the World Cocoa Foundation to improve access to quality agro-inputs among 40,000 cocoa farmers through the SSP concept. In each of the four countries, the national CropLife association is responsible for the implementation of project activities. National coordinators were appointed in all countries, and in Ghana and Nigeria, a field coordinator was included. The SSP training manual developed in 2012 by CropLife was adapted to cocoa. A baseline study was undertaken in all four countries and will be used to measure impact at the end of the program.



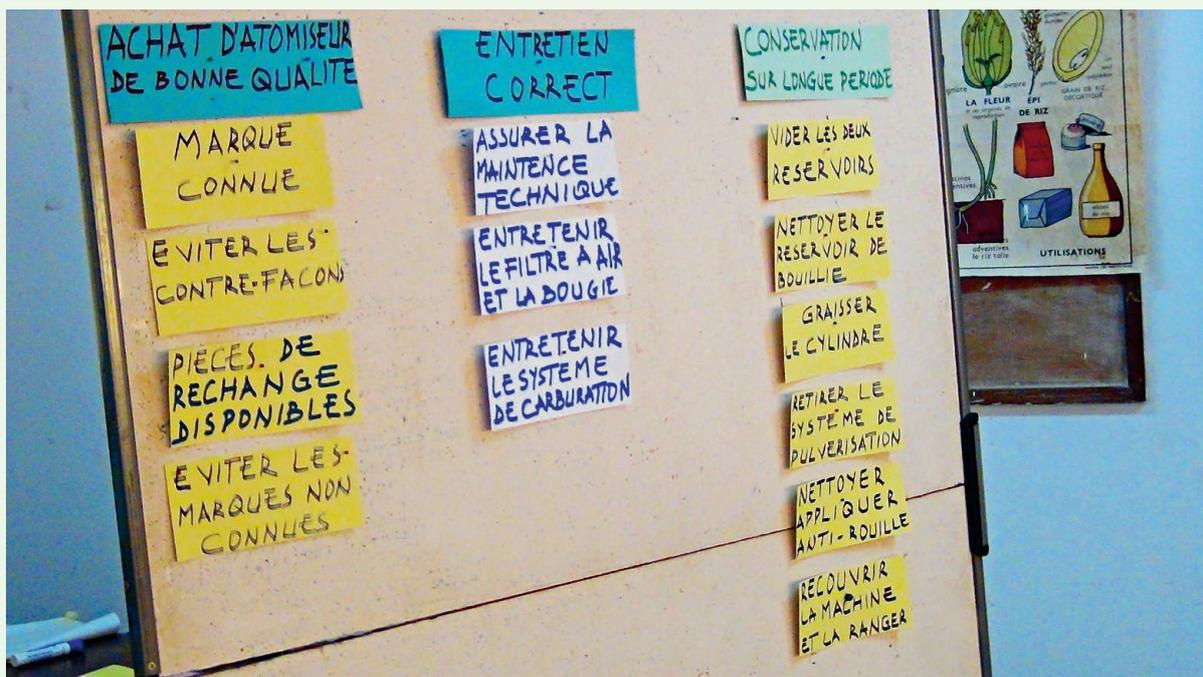
Launch event in August 2013 in Ivory Coast together with the Conseil Cacao et Café. The SSP team led by Kinda Kassum with the president of CropLife Côte d'Ivoire Mariame Dosso.

Training Programs

After the initial preparations, meetings with all member companies of the national CropLife associations in the four countries were organized to assess their level of interest. One of the conditions for the SSP concept to be successful is for the SSP's to be linked to member companies in order to assure access to good quality agro-inputs. Notably in Nigeria, member companies were very enthusiastic as they saw this as an opportunity to expand their client base in a crop that is not of a high priority in their country.

The next step was the organization of training programs. National Master Trainers from all four countries trained the staff of member companies and partner organizations to become SSP-trainers. A total of 96 SSP-trainers were trained in 2013, who in turn trained 1,150 farmers to become SSP's. Almost all the farmers are members of farmers' organizations and most of these organizations are certified either by UTZ, Rainforest Alliance or Fairtrade.

During the training program potential SSP's learned "in the field" how to apply pesticides to cocoa. Each SSP undertook a test at the end of the program to evaluate the level of capability necessary for the task of an SSP. If an agro dealer or lead farmer succeeded with the test, he was officially certified as an SSP by the national CropLife association for a period of two years. Each certified SSP received an Identity Card which states the period of certification so farmers could easily recognize if someone is still certified or not.



Specific training on the application equipment – from a training session in Ivory Coast



Fred Boamong, National Project Coordinator in Ghana (L) and a proud SSP in Ghana (R)

Selling Services

Following the training program, SSP's started selling their services to fellow farmers. Farmers have the freedom to select their own SSP and can change if not satisfied with the service they receive. This encourages competition among SSP's to deliver good service. Farmers negotiate a price directly with the SSP. Although prices vary per country, it was observed that daily rates of \$5 to \$10 are paid to applicators in three of the four countries. If the spray service provider is paid on a per acre basis the cost in Ivory Coast and Ghana varies between \$2 and \$5. The crop protection products are purchased either directly by the SSP or by the farmer on recommendation of the SSP. Only crop protection products that are registered in the country where the program is being implemented are recommended.

Each SSP was given a ledger in which records on application and product used can be entered. Record keeping is an important aspect of the project as this is used to collect data and to follow up on the activities of SSP's. In addition, every SSP was given a set of Personal Protective Equipment (PPE) including an overall, gloves and boots to protect them when spraying. To stimulate the demand for the services of the SSP, a poster was developed and distributed in communities supported by radio jingles via rural radio stations.



Record keeping by SSP's



Business Training for SSP's

Country Specific Activities

Although the SSP concept is the same in all four countries, the implementation of activities was adapted to the local situation.

In **Cameroon**, the project was implemented under the partnership between CropLife Cameroon and the Ministry of Agriculture and Rural Development. The apex farmers' organization CONAPROCAM is also providing support to the SSP project.



SSP Training in Cameroon (L) and the distribution of PPE in Ondo State Nigeria (R)



In **Côte d'Ivoire**, the SSP project was officially launched on 14 August 2013 in Abidjan. Approximately 100 invitees attended the program, including representatives of the public sector, private sector, technical partners and farmers' organizations. In addition, PROCACAO (a project implemented by the German Development Cooperation GIZ) and ICRAF (the World Agroforestry Centre) became partners and paid for a training program to train their staff to become SSP trainers.

In **Ghana**, the project partnered with Solidaridad, an international organization active in several cash crop value chains. One of their cocoa farmers' organizations, AHANSUCOFA, has more than 5,500 UTZ certified members and embraced the SSP concept from its inception. CropLife Ghana trained 3 of their staff members to become SSP trainers and they in turn trained several hundred of their members who are actively selling their services to other members. In addition, Solidaridad purchased mistblowers for each of the 150 community groups in which members are active and each community developed a special "collection bin" for empty pesticide containers.

In **Nigeria**, Continaf, an international cocoa buying company, showed interest in the project and paid CropLife Nigeria to train 14 of their technical officers to become SSP trainers. They trained several dozen SSP's who are now selling their services to the 1500 members of the farmer organizations that sell their produce to Continaf.

Because it was observed that some SSP's saw their spraying activities as an opportunity to start-up a small business, a special business program was organized for a group of selected SSP's in Ghana and Nigeria. During the training, SSP's were taught what an entrepreneur is, how to calculate their pricing, how to plan activities and how to actively look for clients.

In Côte d'Ivoire and Nigeria, TechnoServe, with funds from the World Cocoa Foundation, set up a credit system in which farmers that make use of the services of SSP's can receive credit for the purchase of their agro-inputs. In Ghana, Solidaridad set up a credit system for members of their farmers' organization involving a CropLife member and a credit institution.

For 2014 greater emphasis will be put on record keeping by SSP's in order to provide accurate figures on how many farmers were actually serviced. In addition, at the end of the project in December 2014, an impact assessment will be undertaken and compared with the baseline study to measure the impact of the SSP's.

4.4. Implementing Stewardship with SSP's and other Benefits

As a further positive outcome of the SSP concept we see a more realistic chance to establish sustainable empty container collection schemes in the respective project areas. We also believe that through the respective training and coaching of the SSP's we will establish a higher barrier against the sales and use of illegal and fake products and will also be in a much better position to implement successful resistance management strategies where these are necessary.

In conclusion, our experiences to date with a number of SSP projects has led us to believe that the concept is an extremely valuable approach for all involved along the inputs supply chain in that it provides an excellent mechanism to implement all the components of our industry's stewardship commitment as set out in the Stewardship Vision 2020.

"Spray Service Provider Projects – Putting Stewardship into Practice"

4.5. Baseline Findings from the Flagship Project in Cocoa

Monitoring and Evaluation (M&E) are key components and deliverables for most projects that are implemented with the support of public or private donor funding. As a component to the African Cocoa Initiative (ACI) the sub-award agreement between the World Cocoa Foundation and CropLife Africa Middle East provided the necessary funding to perform a detailed baseline study. This to cover the current practice of inputs purchases and inputs application by smallholder cocoa farmers across the 4 countries Ivory Coast, Ghana, Nigeria and Cameroon. More than 2'500 farmers were interviewed and completed a very detailed questionnaire which

was then analyzed and summarized by Andel Consulting – a Ghana based firm specializing in baseline assessment for development projects in West Africa.

Notable conclusions and results from the baseline study are:

- The detailed demographics related to the cocoa growers in the 4 countries regarding farmer’s age, gender, family workers, dependable household members, etc.
- Agronomic and financial farm data such as farm size, cocoa plot size, tree age, yield level, certification schemes, farm income, cocoa price, cocoa income, etc.
- The use of inputs such as fertilizers and crop protection products, especially fungicides and insecticides.
- Information on the purchase of crop protection products and use. Source of information on pesticides, source of purchase, application (spraying) of products, applied stewardship practices, etc.

Cameroon seems to have the largest cocoa farms and cocoa plot sizes followed by Ivory Coast and Ghana. The average cocoa farmer owns between 2.5–5.0 ha farm land. As regards the age of the farmers, Nigeria reported the largest group of farm owners above 60 whereas in Ghana and in Cameroon almost 50% of farmers are below 45 years. Cameroon and Ghana have about 30% of farms owned by women. This share is only 13% in the Ivory Coast. Ghana reported 52% of cocoa gardens with trees below the age of 13 years whereas Nigeria reported 55% of gardens with trees older than 30 years.

Farm Size and Ownership by Gender (%) in Ivory Coast, Ghana and Nigeria

		Farm Size ha	Male	Female	Total
CI	Total (614)	< 2.5 (84 farms)	90.5	9.5	100%
		2.5 – 5 (136)	87.2	12.8	100%
		> 5 (391)	86.8	13.2	100%
		All (614)	87.3	12.7	100%
GH	Total (649)	< 2.5 (260)	58.1	41.9	100%
		2 – 5 (222)	73.0	27.0	100%
		> 5 (165)	81.8	18.2	100%
		All (649)	69.3	30.7	100%
NG	Total (850)	< 2.5 (332)	71.3	28.7	100%
		2.5 – 5 (229)	78.7	21.3	100%
		> 5 (281)	83.3	16.7	100%
		All (850)	77.5	22.5	100%

Ivory Coast reported highest yield levels with 54% of farms above 400 kg/ha. Based on the collected data there seems to be almost no correlation between tree age and yield in all four countries. Interesting is the very low use of fertilizers ranging from only 3-5% in Nigeria to about 45% of farms in Ghana. In contrast to the very low use of fertilizer, pesticides are applied by about 80% of growers in Cameroon and by over 90% in the other countries. Pesticide application is done mostly by family/household members in Cameroon whereas in the other countries contract spraying prevails with 62% in Ivory Coast, 79% in Nigeria and 82% in Ghana. The fact that contract spraying is already widely in place in all 4 countries is yet another reason to expand and intensify the SSP concept beyond the project period.

5. Regulatory Matters and Harmonization Initiatives

During 2013, we continued to carry out activities under the guidance of the global project, "Principles of Regulations" (POR) and with the generous participation and support by Dr. Bernhard Johnen, Director of Global Regulatory Affairs at CropLife International. The presentation and discussion of the 8 principles as set out in the POR project document was continued at all 3 regulatory meetings in Accra in April, Durban in August and Dubai in October. The gap analysis that was undertaken earlier for all priority regulatory environments was reviewed and updated in these meetings. These discussions enabled us to involve and engage with many additional regulatory experts from respective country administrations but equally important also with many more colleagues from our industry network who benefited from the refresher on the concept of "Principles of Regulations".

The training module and workshops on the Protection of Regulatory Data and Confidential Business Information (PRD and CBI) continued to be a key component in all our discussions with regulatory authorities and also at the three hub meetings. Following repeated emphasis with this training module we are observing a growing understanding among key regulatory authorities for these globally accepted concepts of PRD and CBI. They recognize that only with the adoption of and respect for IPR the leading players in the crop protection industry will make available their most advanced and innovative solutions in developing countries. The easy regulatory access for often low quality "me-too" generics which in many countries has been facilitated with the intention to make agricultural inputs available at the lowest possible cost is no longer delivering the expected benefits. Some countries may actually find it difficult to keep their access to global export markets if their export crops are grown with old and outdated generic solutions.

As a result of intensified discussions on good governance principles (POR) and the need to introduce legislation that recognizes Intellectual Property Rights and Confidential Business Information there is an increasing number of territories where respective legislative changes are being discussed and included when regulations are updated. Good examples are the new guidelines for registration in Ethiopia as well as the guidelines approved for the SADC member states. Another territory where we hope to see improved legislation could be the ECOWAS region. The process could start as soon as the respective legislative directives are issued for the entire region.

6. Anti-Counterfeiting Activities

Our activities against counterfeit and illegal pesticides has attracted and gained a large audience with many stakeholders involved in various projects in the agricultural sector in the region. With this, the regional team as well as the national associations participated in numerous regional workshops organized by either the Interpol Trafficking in Illicit Goods Directorate or the African Intellectual Property Group of the Commercial Law Development Program of the US Department of Commerce. These regional workshops together with our regular Anti-Counterfeiting training program provided opportunities to pursue the awareness raising and sensitization initiatives towards customs officials, the police and other government enforcement agencies on the devastating effects of illicit pesticides. Other topics discussed included the needs to engage and strengthen regional cooperation to combat these crimes, which usually use the “porous” cross-border trade routes. The regional approach to combat counterfeits should support and trigger national enforcement and implementation initiatives.



(L) Customs attending a training workshop together with (R) Pesticides Control Extension Agents



An address to participants during the opening of an INTERPOL workshop

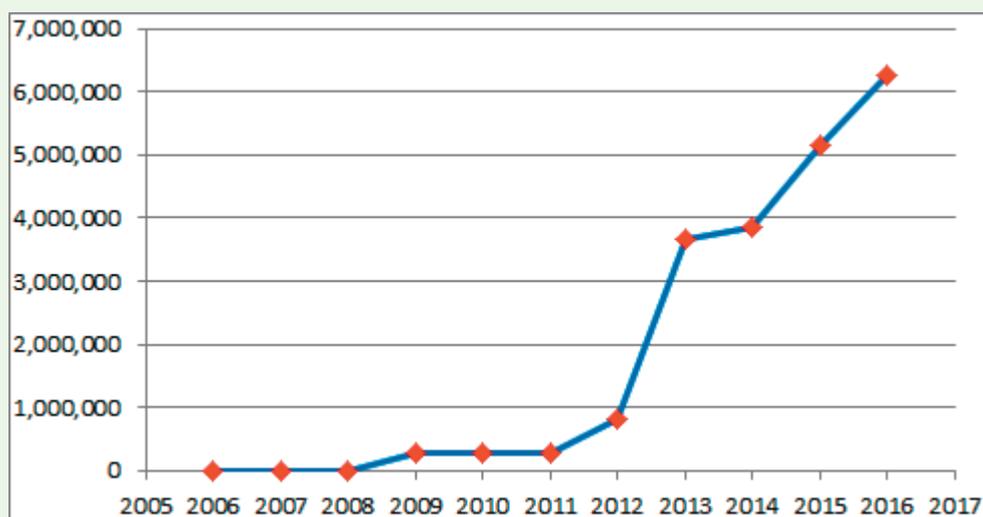
At the Board meeting in June it was decided to use the limited financial resources of our association to fight illegal and counterfeit pesticides in the three countries of Egypt, Kenya and Cameroon. This decision led to the preparation of three so called “flagship” projects of which the project in Egypt is already in full execution whilst the other 2 are to be launched by the mid 2014 at the beginning of the next cropping season.

The national associations in other countries such as Côte d’Ivoire, Ghana, Namibia, Botswana and Tanzania were able to involve the local media in the different activities, and subsequent large media reports were published in support of the activities.

7. Obsolete Stocks Activities beyond the ASP

The Africa Stockpiles Program (ASP), initiated in 2003, was a multi-stakeholder program that aimed to remove safely and destroy all obsolete pesticide stocks from the African continent. The main implementing partners were the World Bank, the UN Food and Agriculture Organization (FAO), WWF and the Pesticide Action Network (PAN), with activities in 7 core countries: Ethiopia, Mali, Morocco, Nigeria, South Africa, Tanzania, and Tunisia. In addition, CropLife International initiated 4 country projects (Cameroon, Ghana, Kenya and Malawi) to reduce rapidly the risks from obsolete pesticides by repackaging them and transporting them to a central warehouse for secure storage while awaiting disposal – a process known as safeguarding.

The obsolete stocks in Africa are mostly owned by national governments – for example insecticides left over from locust control campaigns - but there are also significant stocks held in the private sector, ranging from large export growers to smallholder farmers. CropLife International's key role in the program continued in 2013: in addition to providing co-finance for disposal of obsolete pesticides and technical support in the ASP core countries, CropLife International completed the 4 safeguarding country projects. The ASP officially ended during 2013 as the last of the country projects closed. However, the major ASP partners are continuing to collaborate on a country by country basis to safeguard and destroy the remaining obsolete stocks in Africa.



Recorded and projected timeline of disposal of obsolete stocks (Kg) in Africa at October 2013.

Key successes in 2013 included the following:

Across the Africa Stockpiles Program and CropLife International Safeguarding Project countries, an additional 1,204 tonnes of stocks have been safeguarded and 1,107 tonnes disposed of by high temperature incineration. This has been done in collaboration with national governments and NGOs and with the strong support of the national CropLife associations. World Bank projects in Ethiopia and Tanzania have been completed with CropLife International Technical Adviser support. The World Bank-led ASP project in Mali that ended without disposal due to security problems is being resurrected by the World Bank with the support of CropLife International. Capacity has been strengthened within national associations, governments and the NGO sector in planning, logistics and financial management, as well as the technical skills required for the sustainable management of obsolete stocks and associated materials. Good collaboration has continued with FAO and projects to be funded by the Global Environment Facility (GEF) are at their final preparation stage in Cameroon and Malawi and will soon

remove and dispose of the obstocks safeguarded by the CropLife International-led projects. The container management scheme initiated by the safeguarding project in Ghana has attracted the interest of the USAID-funded President's Malaria Initiative. 12 million plastic bags (enough to fill 12x 40ft containers) and a significant quantity of plastic bottles from their insecticide impregnated mosquito net distribution and indoor residual spraying programs have now been recycled by a local company.



Safeguarding training in Yaoundé and safeguarded obsolete stocks being loaded into the store in Cameroon

On the basis of specific criteria, the Obsolete Stocks Project Team selected Benin and Morocco as new safeguarding country projects and FAO will provide funds from the GEF for subsequent removal and disposal. Sudan also met most of the criteria but is currently on-hold since no funds have yet been identified for disposal. An effective collaborative model continues to function well, whereby CropLife International is able to move relatively rapidly to reduce the risks posed by obsolete pesticides in the public and private sectors by safeguarding them, while countries and multilateral agencies go through the longer process of acquiring funds and implementing disposal operations.

8. Plant Biotechnology

In 2013, hundreds of thousands of farmers across three African nations, Burkina Faso, South Africa and Sudan, planted 3.6 million hectares of biotech crops – the first time Africa has grown more than 3 million hectares in a single year. This represents a 24% increase from 2012 and a critical milestone in the adoption of biotech crops for the continent. With seven other countries, Cameroon, Egypt, Ghana, Kenya, Malawi, Nigeria and Uganda, conducting field trials and high-profile projects like Water Efficient Maize for Africa showing incredible potential, Africa appears poised for a biotech revolution.

Today, growers in South Africa are reaping the greatest gains from biotechnology with over US\$1.1 billion in farm income gains since the technology was introduced in 1998. Biotech maize farmers report yield increases of over 10% and an extra US\$200 per hectare, which helps boost their national food supply and grow their local economy. In Burkina Faso and Sudan, where agriculture accounts for 80% of employment, these gains can have a dramatic effect on growers' livelihood and community. Bt cotton has transformed the cotton economy in both countries. In Burkina Faso, 150,000 farmers in 2013 experienced 20% higher yields and nearly US\$100 more in income per hectare; an incredible benefit in a nation with a per capita income of US\$300 per year. For the 27,000 growers in Sudan, the improved insect protection from Bt varieties has translated to an extra US\$400 per hectare in 2013. These impressive benefits have spurred Ghana to initiate field trials for Bt cotton and prompted farmers from Mali and Togo to begin petitioning their government for access to Bt seeds.

In the future, new biotech traits and varieties developed specifically for Africa will change farming across the continent. Of the 10 crops undergoing field trials on the continent, five of them are essential orphan crops – banana, cassava, cowpea, potato and sweet potato. If these reached the market, they could more than double the current number of biotech crops globally available to farmers. For African staple crops, the high-profile Water Efficient Maize for Africa (WEMA) and Improved Maize for African Soils (IMAS) projects offer game changing biotech solutions tailored to African needs. A recent report by the International Food Policy Research Institute, "Food Security in a World of Natural Resource Scarcity", demonstrated how drought tolerant varieties in 2050, like those WEMA are developing, could improve East African maize yields as much as 17% in times of severe drought. The report also found that IMAS' nitrogen-use efficient varieties could slash hunger by 11% across Sub-Saharan Africa.

Through new biotech tools, African farmers are increasing their productivity and improving food security of their continent today and will continue to do so in the future. The current adopters, Burkina Faso, South African and Sudan, have led the way, but with 7 countries conducting field trials and new, African varieties in development – the rest of the continent is catching up quickly. Nearly two decades after the first biotech crops were planted in other areas of the world, Africa finally appears ready for its biotech revolution.

9. Alliances and Partnerships

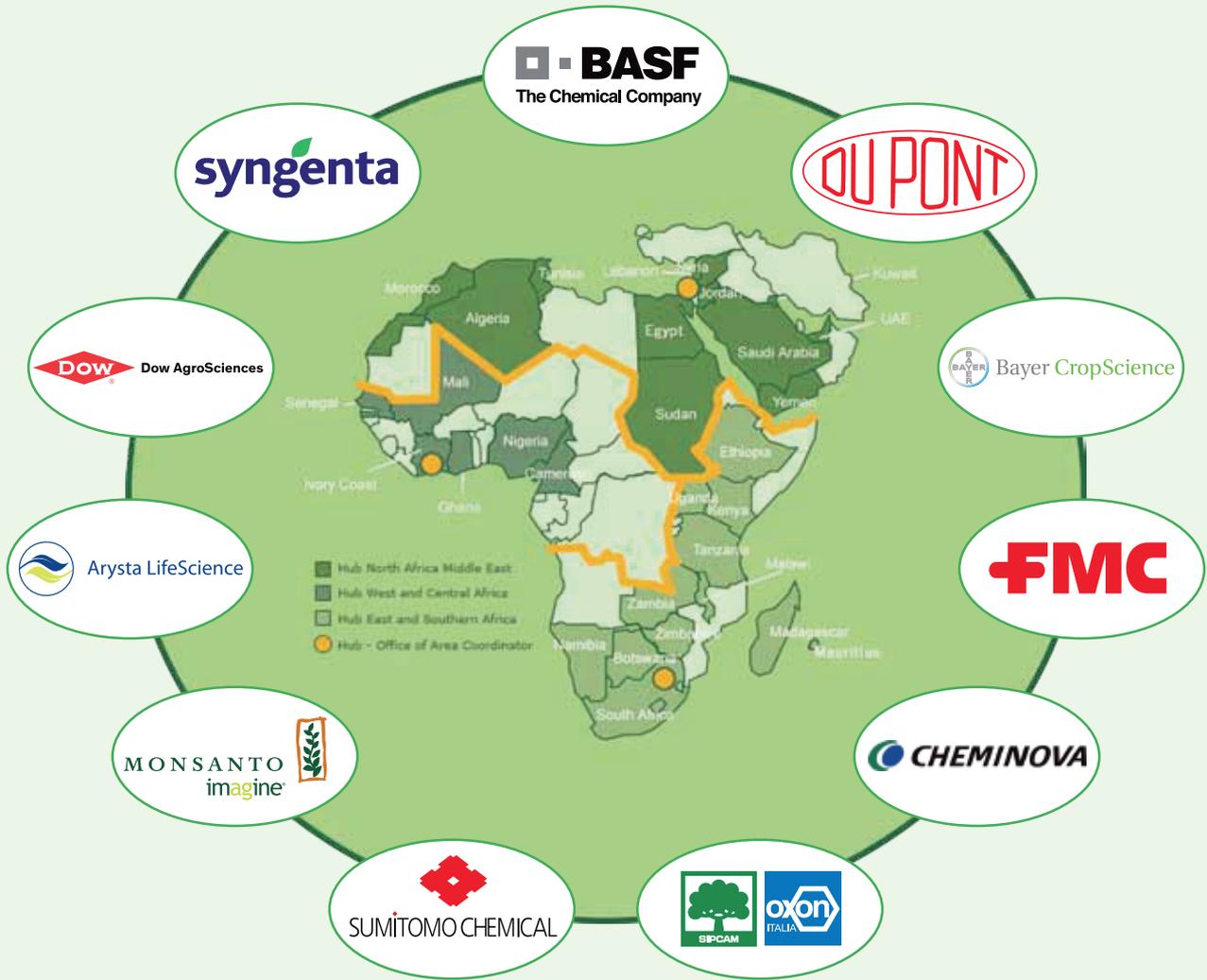
The development and strengthening of alliances and cooperation with other stakeholders and partners has been fruitful for implementing activities throughout the region. Most activities during the past year were conducted in cooperation with various on-going agricultural programs and projects where synergy was created to maximize our inputs and allowed us to benefit from such programs, leading to the recognition of CropLife Africa Middle East as a trusted partner in the agricultural sector.

The major event in 2013 was without doubt the agreement with the World Cocoa Foundation through their African Cocoa Initiative.

Further developments included the anti-counterfeiting project with the Agribusiness Initiative (aBi) Trust in Uganda and the continued SSP project with Musika in Zambia.

The continued relationship with INTERPOL covers anti-counterfeiting activities especially in Sub Saharan Africa. Equally our cooperation with COLEACP on regulatory developments was strengthened throughout the sub-region.





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