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COMPACI-News

Competitive African Cotton Initiative

Motivation and Qualification of Extension Personnel – A Key Factor for Compaci Success

Dr. Ben Sekamatte assists the Compaci subgrantees GLCC in Malawi, Cargill in Zambia and, beginning recently, Plexus Mozambique in training their extension personnel. Part of his mission is a detailed evaluation of the motivations and qualification of extension staff. This article resumes some lessons learnt over the last 2 years.

In trying to achieve farmer empowerment in the past, many projects and governments invested "heavily" in the development and mass production of different extension materials, especially books and manuals containing research outputs. Many of these can still be found on dusty shelves of institutional and personal libraries, but find little or no demand despite the poor state of extension for the cotton sector. Is the information obsolete or there are just no appropriate users? The answer is that both cases are true to some extent. There are signs from the lessons learnt from the first year of COMPACI that low levels of motivation and quality characteristics of extension staff responsible for farmer training make usability of comprehensive reading materials difficult. These factors, which have not been strongly emphasized in the past, seem to be cardinal in determining approaches for the training required by the extension service provider and the impact of extension on farmer performance.

This article is based on deliberately generalized results from an assessment of motivational aspects and characteristics of extension staff of three COMPACI sub-grantees, Cargill Zambia, Great Lakes Cotton Company Malawi and Plexus Mozambique.

The Approach

It is felt that beyond numerical capacity, the extension service provider (trainer) needs to have good knowledge of the personnel that interact with the farmer in the empowerment process. These include lower and middle level extension managers and supervisors whose individual capacity to roll out the much needed loyalty-inducing type of extension program is key for effective and sustainable farmer empowerment. Information was collected about who the individual personnel are in terms of: mental maturity (age), level of formal education, accumulated knowledge/experience in the cotton sector, as well as their level of acquaintance with their current employer (COMPACI sub-grantee). An assessment was also made of their perceptions of prescribed job responsibilities (as per job description), as well as attitudes towards broad issues e.g. price, and side selling pertaining to the industry.

Results and Discussion

From the 512 participants who attended pre-season training sessions of the 3 companies, we learned that between 65% and 80% were individuals in the age range 18-30, largely (75 -90%) secondary school drop outs with between 1 -3 years working experience in the cotton sector. For all companies, a small proportion (<10%) of extension staff comprise long service individuals aged over 45 years, mostly without formal education, but long working experience in the sector. On the other hand, there exists within these companies a small (<2%) group of above diploma level staff, but less than 0.5% of them in possession of extension experience, but rather having spent more years either as ginnery supervisors / managers or accounts personnel. >>

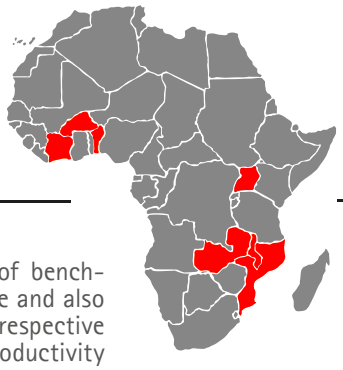
COMPACI & Cotton Made in Africa: Stakeholder Workshop in Berlin, September 2010

Between 12-15 September, the annual Stakeholder Conference was held in Berlin/Germany. Around 70 participants from Africa, Europe and the USA participated in seminars and workshops to discuss the development of COMPACI in each project country in sub-Saharan Africa, but also the marketing side of Cotton Made in Africa.

You can find the complete documentation of this event on the website of the Aid by Trade Foundation:
http://www.cotton-made-in-africa.com/Partner/en

If you do not have a partner login, please do not hesitate to contact **Lara.Mockewitz@abt-foundation.org.**

Participants of the COMPACI & CmiA Stakeholder Conference in front of the Reichstag building (seat of the German Parliament) during their Berlin-visit.



Subjected to key attitude statements designed to assess how they perceived the task of farmer training and farmers' ability and willingness to change, 65% overall believed that smallholder farmers want to do things their way and are very complicated towards change. Between 43% and 68% held an attitude that cotton production cannot be profitable to smallholder farmers because of low and fluctuating prices of seed cotton. In addition to the perception that their employers bare the larger portion of the blame for poor sector performance, over 70% believe that their workload is too heavy to allow them higher efficiency.

The high mix of individuals of low and high ages and academic levels is viewed both as advantageous and problematic. From one vantage point, companies have young and still malleable brains to orient to modern approaches to smallholder farmer extension. The very low academic levels of the extension teams may also be advantageous in the sense of company wage bills, but a disadvantage on the other hand, in that existing extension approaches and materials in support institutions e.g. universities, research centers and libraries in the region, are still elitist in style and no school and college curricular yet has focused on alternative models to fit these low education types of personnel. The greater danger is for extension service providers / trainers to overlook this, as the result will be, as has often happened, miserable returns to investment in farmer extension. For COMPACI, this would be debilitating and based on these findings, due consideration is being taken while designing training content and approaches in Malawi, Zambia and Mozambique..

In preparation for COMPACI second year cropping season, therefore, pre-season training sessions have been more tailored to suit the now fairly better understood extension staff. No "extension bibles" or any training materials to be produced are being participatorily developed. Training of both trainers (ToTs) and farmers is being encouraged to be more practical and every module emphatic on staff ability to develop farmer-ginner loyalty. More focus is deliberately being given to enabling a change in the personnel's retrogressive attitudes expressed above than on technical agronomics with the view that this will trickle down to the disloyal farmer, who defies pre-financing contracts and promotes the industry-killing habit of side selling. On the basis of just one year's training efforts under COMPACI, a number of Cargill Zambia field staff can now totally agree to the statement they totally disagreed to before the 2009/10 cropping season. "The habit of side selling is also related to quality of extension" is the statement over 80% participants disagreed to during the commencement of COMPACI training in the second half of 2009. An additional improvement in extension training in the second year involves a simple method of benchmarking farmer performance and also the performance of the respective extension staff based on productivity levels. The approach maps out productivity bands of farmers of each extension agent and challenges them to relate better with their farmers to enable them to produce better yields and progressively move into better productivity bands. Not only will this enable companies to quantify the impact of farmer training after 2012, it will also provide a transparent means of quantifying the efforts of individual or groups of extension staff. However, a number of academically constrained participants clearly could not comprehend this, while others found it extremely easy to apply even as a training tool.

Conclusions

The results in this assessment pertaining to staff characteristics and perceptions are by no means fixing age or academic standards for extension teams of cotton companies, but may assist in focusing on medium to long term staff recruitment and development strategies to deal with the well-known challenges of productivity and farmer loyalty. The high proportion (56%) of participants blaming their employers for poor business performance, and not themselves at all, points to low motivation. This perception, however, could also be dictated by the other characteristics, notably limited experience in the sector.
Quite often also, comprehensive M&E components are built into projects, but rarely, are they simple, participatory and transparent enough to be appreciated by those they target. For COMPACI, each day's extension staff activity counts on the attainment of desired productivity and income enhancement targets. The productivity based approach provides a motivating, inter-staff competition asset and a management tool to promote the quality of extension. An outline of recommendations for sub-grantees to support the evolution of quality extension and to allow in-house monitoring of the impact of farmer training on productivity follows. The requirements for the sub-grantee are to:

(i) Appreciate that to revive the sector's extension service, it will be imperative to adopt some staff recruitment and development standards.
(ii) Develop staff recruitment plans based on a defined set of characteristics and attitudes.
(iii) Benchmark performance of both the extension agents and farmers (disaggregated by gender whenever possible) and employ transparent and participatory approaches that allow self assessment,
(iv) Enable extension agents and farmers to practically link own activities to profitability,
(v) Tailor extension and farmer training programs based on good understanding of their key characteristics.
(vi) Remember that under the liberalized sector environment, farmers have a wide range of options both in terms of alternative crops and copanies to grow cotton with. Thus, a focus on farmer–ginner loyalty becomes a critical aspect of extension.

Dr. Ben Sekamatte is a Research & Development Consultant – currently providing extension and farmer training services to COMPACI sub-grantees in eastern Africa.

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The Commitment of the Bill & Melinda Gates Foundation in Africa

By Davon Cook

Davon Cook

COMPACI partners have expressed a desire to learn more about other Bill and Melinda Gates Foundation projects in your geographical areas. This is a brief overview of selected projects in which you might be interested. Perhaps you will identify areas of common interest that may lead to future cooperation. The Foundation's investments in Africa are generally focused in Global Health and Global Development (which includes agriculture and will be the focus of this article). This list is not comprehensive, but rather a snapshot.

Since 2009 Davon Cook works as an agribusiness consultant advising Bill & Melinda Gates Foundation on cotton value chains, including this COMPACI/CmiA project. She has a Bachelor's and A Master´s degree/MBA in Agricultural Economics and a Master's degree/MBA. Davon Cook was raised working on a cotton farm in Texas and managed a cotton ginnery eight between 2001–2009.

Description	Benin	Burkina Faso	Cote d'Ivoire	Malawi	Mozambique	Zambia
Since cash crops represent 15% of the SSA economy and 35-40% of exports, the Foundation has targeted investments across five value chains (cocoa, cashews, cotton, coffee, and fruits) to impact 1 million smallholder farmers and their families. Richard Rogers is the program officer for all of these cash crop grants, two of which operate in COMPACI countries:						
Cashews: GTZ manages this project to increase productivity and quality, as well as build local processing capacity. The project includes multiple global and local companies such as Kraft Foods, Olam International, Global Trading / Whitebird International, Oltremare, Intersnack, Ahold, 15 local cashew processors to-date, a multitude of cashew traders, and others.	●	●	●		●	
Cocoa: The Cocoa Livelihoods Program partners with private sector players including cocoa traders (e.g. Olam, Armajaro, Ecom Trading), manufacturing/branded food companies (e.g. Kraft, Hershey, Mars), and processors (e.g. ADM, Cargill, Barry Callebaut). The aim of this project is to improve farmer incomes through higher productivity, marketing efficiency, and access to finance.			●			
AGRA Soil Health program: Increase smallholder access to locally appropriate fertilizer; extend integrated soil fertility management practices including efficient fertilizer and organic matter use	●	●	●		●	●
PASS: Program for Africa's Seeds Systems: To increase access to improved crop varieties using a variety of production and distribution strategies		●		●	●	●
Drought Tolerant Maize for Africa: Development and dissemination of drought-tolerant maize varieties	●			●	●	●
Purchase for Progress: Innovations to Connect African Low-Income Farmers to Markets: Connect smallholder farmers to food purchase programs		●				
SASHA: Sweet potato Action for Security & Health in Africa: Accelerated breeding for crop improvement	●			●	●	●
STRASA: Stress-Tolerant Rice for Africa and South Asia: Development and dissemination of rice varieties tolerant of abiotic stresses	●			●	●	●

Description	Benin	Burkina Faso	Cote d'Ivoire	Malawi	Mozambique	Zambia
Agricultural Water Management (AWM) Landscape Analysis: To create and disseminate a portfolio of promising technologies/interventions that can be deployed in support of agrarian poverty reduction		●				●
Expansion of Root Capital's lending activities to grassroots enterprises in Africa: To increase the availability of capital to grassroots enterprises, both producer organizations and commercial entities, via direct lending and the mobilization of third party commercial capital				●	●	●
Working with Savings Banks in order to Double the Number of Savings Accounts: To double the number of poor people with access to appropriate savings accounts in selected savings banks		●				
Soy Value Chains: Linking small-scale soy producers to industrial feed processors to develop soy as source of income, nutrition, and soil health benefits through new production and improved yields					●	●
HarvestPlus II: Reduce micronutrient deficiencies by breeding higher levels of essential micronutrients into staple crops					●	●
Home-grown school feeding programs: Comprehensive approach designed to provide tools for governments, NGOs, UN agencies, etc., to implement				●		●
Microinsurance Innovation Facility: To support the emergence and evaluation of microinsurance models		●				
Weather surfaces: To develop a source of agricultural weather data				●	●	●

There are also health related projects, which are not listed here, as well as more additional agriculture grants. Davon Cook can discuss a more comprehensive list of grants operating in your country. davon@dbcook.net

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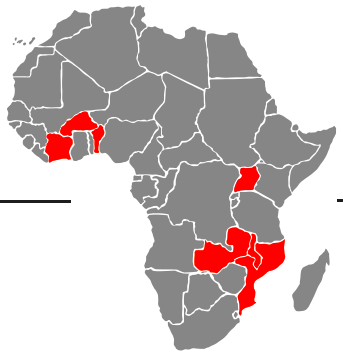

COMPACI Partner Feedback

By the COMPACI Management Team

Prior to the Stakeholder Conference in Berlin, BMGF consultant Davon Cook asked the COMPACI sub-grant partners in writing and orally about the quality of the COMPACI management. She interviewed 7 CEOs, as well as 4 sub-grantee Implementation Managers and 3 consultants who regularly work within the framework of COMPACI.
The Compaci Management Team (Wolfgang Bertenbreiter, Constantin Brinkmann, Marco Christ, Rudy van Gent, Stefan Kachelriess-Matthess, Christoph Kaut, Claudia Makowski, Lara Mockewitz, Roger Peltzer and Sarah Schneider) has discussed these results and drawn the following key conclusions based on the evaluation:
The main results of the survey are summarized in the following table and are then commented.

Main Messages from the Survey Response

Communication — Generally positive about communication but some desire for more sharing

Technical Interaction — Desire for more interaction between technical implementation managers and more focus on hands-on field experience vs. classroom training

Response to Communication/Technical Interaction: In evaluating the Stakeholder conference in Berlin it also became clear that the CEO's, in particular, and on the technical level, the Implementation Managers, desire a more intensive exchange regarding successes and challenges of the implementation of COMPACI within the individual countries. In 2011, this will be reflected in three different forms:

I) The next Stakeholder conference is supplemented around a format, which is dedicated exclusively to the exchange of experience between the management of the sub-grantees regarding the Compaci management's successes and challenges.

II) In preparation of the next stakeholder conference and based on the April 2011 reports of the sub-grantees' baselines and focus group interviews, there will be a detailed overview of the implementation status of COMPACI in all partner countries.

III) In 2011, Compaci will allow (among other regional workshops) more individual visits between the different partners to provide for the exchange of experiences on even better basis. Such visits were already organized spontaneously by the partners in 2010.

Collaboration — COMPACI management praised for being collaborative and problem solving; opportunity to continue developing cotton sector and country specific knowledge

Response to Collaboration: The problem-oriented and flexible form of collaboration will continue.

CmiA Relationship — Desire for continual and more specific updates on CmiA progress and relationship

Response to CmiA Relationship: From now on future issues of the Compaci newsletter will regularly include detailed information on the current marketing of the CmiA production, as well as the economic performance of the Aid by Trade Foundation. We aim for maximum transparency.
Compaci and the Aid by Trade Foundation are firmly committed to strive for mutual benchmarking of CmiA and the Better Cotton Initiative (BCI), as well as for CmiA and FairTrade standards. We assume that this benchmarking can be carried out and completed in 2011. As a result, this should improve the marketing opportunities for the Compaci cotton producers. With every completed verification the on the ground, verification staff will be more familiar with the CmiA criteria and verification procedure, which will lead to more flexibility and practicability during field verification.

Income goal — Concerns that 34% income increase goal is dependent on uncontrollable factors and difficult to measure

Response to Income Goal: The West African partners point out that it would be difficult for them to achieve the Compaci targets of a 34% increase in income due to the large number of non-controllable factors.
In fact, the level of productivity in West Africa was relatively high at the start of this project. Therefore, it is likely that the Compaci partners in southern Africa especially will achieve a significant increases in income for cotton farmers as a result of increased productivity. On basis of the available information of all partners, the Compaci management, however, assumes the target of an average of a 34 % increase in income for the entire Compaci program remains realistic - compared to control groups of non-participating farmers.

GM cotton — Need to resolve approach to GM cotton

Response to GMO Cotton: : In 2011, the Aid by Trade Foundation will discuss the further use of transgenic cotton. This discussion also incorporates the suggestions of the African partners of Compaci / CmiA. The proposals of the management of the Foundation will be discussed in the Advisory Board of the Foundation, the Board of Trustees, and during the Stakeholders' Meeting with the African partners during the 2nd part of 2011.

Reporting — Desire for ongoing revisions to reporting forms

Response to Reporting: The fine tuning of reporting formats is a gradual process. The Compaci Management would like to point out that meaningful reports are essential not only for project management, but also for the verification, monitoring and evaluation. Valuably reports are essential for the qualified exchange of experiences between the partners.

Acknowledgment: The COMACPI Management would like to thank Davon Cook for conducting the evaluation! •

Vamissa Diomandé (Ivoire Coton, Faso Coton), Roger Peltzer (COMPACI Project), Emmanuel Mbewe (Cargill Zambia) and Gracious Hamatala (Dunavant Zambia) during the Berlin Stakeholder Conference, September 2010 (from left to right).

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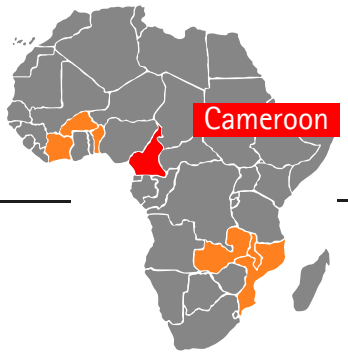

Diversification in the cotton sector of Cameroon

By Daoudou

1) Approach

Since 2007 and in light of the crisis in the cotton sector, Sodecoton has been contemplating measures of how to make cotton cultivation more attractive on the one hand, and of opening up new sales markets, on the other. Such measures would enable full capacity utilization of Sodecoton's oil mills with other produce to make them more independent of currency fluctuations to the US dollar and the euro without constituting competition with cotton. The first measures, which have already been taken, include:

- adjustment of the purchasing price of seed cotton
- reduction of the purchasing price for the inputs
- improvement of the yields by means of species variety (L484 and L 457) and intensification of cultivation practices
- diversification of cultures

2) Diversification of Cultures

Protein and oil plants, with a focus on soy beans, were shortlisted. Small quantities of soy beans are already grown locally by some farmers, who are supported by monks. The technical details of soy cultivation are known and efficient plant material is available. The production of soy oil is inexpensive and requires extraction through hexane, which is why the market appears to be controllable by Sodecoton at first glance. The sales market for fodder (soy press cake) and fodder for poultry and pigs is currently expanding.

Comparative Parameters for Soy Versus Cotton

Soy	Cotton
1. 700 to 1,500 kg/ha of soy beans 2. 125 to 270 L of refined oil per hectare 3. 550 to 1,200 kg/ha of press cake holders:	1. 400 to 750 kg/ha of cotton seed 2. 70 to 135 L of refined oil per hectare 3. 280 to 520 kg/ha of fodder

Compared to one hectare of cotton, one hectare of soy yields double the amount of refined oil and fodder, requires 50% less in costs for the farmers' support (equivalent to FCFA 23,000 FCFA/ton of harvested soy beans), will cover 50% of the fixed cost for seed cotton (support, harvest, transport, maintenance of the roads, etc.) and/or 200% of the fixed cost for oil and press cake compared to oil from one ha of cotton.
From an agronomical point of view, soy is a legumenose crop, which does fix nitrogen. Depending on the variety and the climatic conditions, soy can fix 120 kg of nitrogen per ha and year. The first tests done by IRAD show however, that cotton does not present a very good performance when following soy. This finding can be caused by a lack of potash, because soy needs in averge 22 kg/ha of potash in order to produce a yield of 1100 kg/ha.

3-1) Positive experience

Soy is a culture which primarily serves the nutritional needs of humans. Furthermore, this culture helps the farmers to achieve a diversification of their income, since soy is sold prior to the cotton harvest, i.e. they have some money at their disposal for the family expenses and are prevented from selling – sometimes at crash price – food crops which they need for their own consumption. Some farmers used the income from the soy harvest to pay the workers assigned for the cotton harvest. The soy beans are sold directly on the local market and the sales are always adjusted to the farmers' needs. Since soy is sowed one month before cotton, the farmers have enough time for cotton cultivation. The expenses involved in inputs and working hours are half as high as with cotton and the income from maize and soy largely compensate for them.

3-2) Negative experience

The first difficulty arising from soy cultivation is the sowing process, as the distance of 6 cm and 18 cm for one bean or three beans, respectively, is not always kept by the farmers, which results in a very lax density. This then has an effect on the production. Dehiscing husks is another major problem which the farmers are confronted with. Last year, the ripe husks were opened towards the end of the rainy , resulting in a considerable loss to the farmers' production. As far as the 2010/2011 season is concerned, some of the farmers systematically shifted the sowing to late July/early August, thereby accepting the risk of the plants not being able to fulfil their life cycle.

Sodecoton soy yields

Year	Acreage (ha)	Production (t)	Yield (kg/ha)
2008	1,200	500	417
2009	6,800	7,500	1,102
2010	10,000	in process	

4) Prospects

The short-term prospects concern a production of 30,000 tons up to 2011. In the medium term, the production will be dependent on the local and regional demand. Even in the event of a recovery of cotton production beyond the threshold of 230,000 tons of seed cotton per year, Sodecoton has potential for 50,000 tons of soy. A mechanization of the sowing process is being considered and the research into the (premature) opening of the soy husks promoted with the aim of offering less dehiscent species. •

Daoudou of Sodecoton and his colleague Patchouki Sobgombe (left to right)

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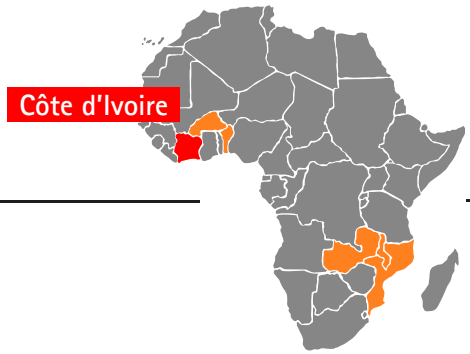

Ivoire Coton and its Social Projects

By M. Seydou Diabagaté

Seydou Diabagaté (Ivoire Coton, left), Roger Peltzer (second from the left) and Aba Achi (Ivoire Coton, third from the right) during a visit to a water pump in a village.

Brief History of Ivoire Coton

In the summer of 1998, the cotton company Ivoire Coton was found in order to promote economical and social development in Northern Côte d'Ivoire through cotton production incorporated in a sustainable system of crop rotation

Social activities and projects of Ivoire Coton

Already in 2001, two years after the privatization of Ivoire Coton, the company established a special division responsible for the implementation of community projects. This division focuses on projects in the following areas:

1. Microcredit
2. Health
3. Education

Importance of Community projects

The community projects of Ivoire Coton are very important. On the one hand they allow for an improvement of living and working conditions of the farmers and on the other hand they increase the loyalty of the smallholders against the cotton company. Ultimately, the farmers produce in this way more and in higher quality.
At the village level Ivoire Coton takes care for the repair of hydraulic pumps and the drilling of new wells, which allows the farmers access to drinking water at any time during the year and in the vicinity of their homes and cabins.
Ivoire Coton also promotes health stations in villages and supplies them with drugs the cotton company purchases at wholesale prices on the international market. The users of the rural health centers directly profit from these prices..
To date, more than 180 health stations have been built with the support of Ivoire Coton. These stations permit Ivoire Coton furthermore to implement a comprehensive HIV/AIDS prevention program in the entire catchment area of the cotton company.

Participatory action

All these community projects are not implemented top down. The villagers themselves contribute to the financing of the activities and with their active engagement

They contribute:

- With 2% for the drilling of new wells
- With 0.5% and 2% of the maintenance and repair of water pumps in villages
- With 17% to establish a health station in a rural region.

All these activities are carried out in collaboration with NGOs and organizations such as DEG.
Thus until today Ivoire Coton has succeeded independently and with the support of DEG to repair more than 800 hydraulic pumps in the rural villages. In addition, new acquisition of 46 water pumps has been initiated.

Education

In the field of education, especially literacy in the local language Dioula is promoted. Thus educated farmers play an important role in the villages, in leading positions of cooperatives and as trainer for other farmers.

School and kindergarten projects

The support of schools and playschools is a new project to be launched in the beginning of 2011.

Background:

The ongoing political crisis in Cote d'Ivoire has also massive negative consequences for the schools in the north of the country.
The disastrous conditions in education are characterized by:

- The absence of teachers,
- The absence of students or extremely low attendance rates,
- The looting and devastation and ultimately closure of schools.

Moreover, there is always the problem that mothers are forced to take their children with them while working on the fields because there are no other childcare options.
Against this background, Ivoire Coton will pilot a project to support primary schools and nurseries in selected villages – with the support of the Otto Group as well as DEG. In addition to the construction of playschools, these measures include the provision of school uniforms and school kits (e. g. exercise books, pens, pencils, erasers, chalk etc.), the equipping of schools with benches and tables and the establishment of school canteens and gardens. •

Seydou Diabagté, a former teacher and General Inspector of State Education, is responsible for the social projects at Ivoire Coton.

Newly built Health Station in a village in Côte d'Ivoire

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2nd Thematic COMPACI Workshop on Conservation Agriculture

By Rudy van Gent


Rudy van Gent

A 2nd second thematic workshop following the one on IPM held earlier this year in Benin was held from the 17th20th of October, 2010, in Lusaka, Zambia. The subject this time was Conservation Agriculture / Soil and Water Conservation. Participants were drawn from the COMPACI partners in Benin, Burkina Faso, the Ivory Coast, Mozambique, Malawi and Zambia. Also participating were representatives of Sodecoton (Cameroon) and the Swaziland cotton sector.

The focus of Soil and Water Conservation (SWC) in the West African countries is very much on soil reclamation following years of exploitation characterized by bad agricultural practices combined with severe soil erosion and resulting in declining soil fertility and decreasing yields. SWC approaches include stone and/or earth structures and e.g. grass contour bands and wind brakes aimed at reducing or reverting erosion. These structural improvements are combined with good agricultural practices, including crop rotations (especially leguminous crops) and the use of cover crops or natural vegetation to create a permanent soil cover. These mechanical and biological approaches are complemented by different techniques of composting and use of organic manure, although use is limited due to a lack of biomass and high transport costs. The use of concrete compost pits has received the most attention. With the exception of Cameroon, where reduced tillage is encouraged under what is referred to as Système de Culture sur Couverture Végétal (SCV), ploughing is still the common practice in the West African countries.

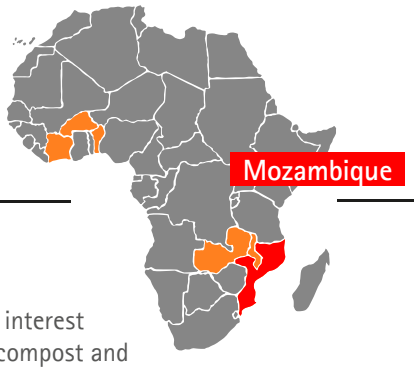
In the East African countries the focus is more on conservation agriculture approaches that not only improve soil fertility, but also aim to make optimum use of the growing season by encouraging minimum tillage, either through basins (for hand hoe farmers) or ripping (for those that have access to draught power). Minimum tillage allows for early land preparation and early planting while reducing labor peaks. In combination with good agricultural practices (crop rotations, optimum plant population, timely weeding, soil cover and the use of Faidherbia albida, the fertiliser tree), minimum tillage has been demonstrated to result in improved soil fertility and 25-100 % higher yields depending on the entry situation as compared to conventional alternatives under similar input regimes. The economic benefit of conservation agriculture approaches to smallholder cotton farmers was amply demonstrated through a large statistical study carried out in Zambia.

Challenges for conservation farming

Despite many efforts to promote conservation agriculture / soil and water conservation, adoption rates remain relatively low. Several reasons for this were put forward:

- Sharply reduced numbers of draught animals in Zambia due to diseases over the last two decades, with few smallholder farmers having access to draught power. Appropriate equipment (e.g. rippers) is expensive. There is an attempt to alleviate these constraints by setting up of small businesses providing oxen or tractor tillage services. Labor constraints are further addressed through the use of herbicides, but this approach is still under-developed and requires thorough practical training.
- There is competition for biomass to fulfil the needs for maintaining soil cover, animal feed and composting. Transport costs of manure and biomass to points of composting may be a limiting factor. The cost of constructing concrete compost pits (West Africa) is high. As a result, it is being seen that certain techniques are being abandoned when external support to producers is reduced.
- The cost for anti-erosion control measures with stone walls, as practiced in West Africa, is very high, and has only been possible with external funding. In East Africa, particularly in Malawi where cultivation is often found on slopes, erosion through run-off of the soil is a problem. This is being countered by low-cost techniques, such as check dams and vetiver grass bands.
- Ploughing, which is known to contribute to soil degradation, is still commonly practiced in West Africa, with the possible exception of Cameroon, where minimum tillage is advocated under the SCV system. >>


Field visit to the Golden Valley Agricultural Research Trust (GART), where demonstrations were given of a oxen-drawn ripper and planting equipment.



Way Forward

After two days of country presentations on conservation agriculture / soil and water conservation efforts in the respective countries, keynote presentations on specific aspects of conservation agriculture, and a field visit to the Golden Valley Agricultural Research Trust and a Regional Centre of the Conservation Farming Unit, the participants were asked to formulate what could be done, when, and by whom in order to improve conservation agriculture technology and transmit the knowledge to smallholder farmers, encouraging its adoption in their respective countries and thereby looking for opportunities to collaborate with each other, as well.
The outcome of this exercise varied according to the region or even by country, which is not surprising, as conservation agriculture approaches are not a 'one-for-all' and have to take into account local conditions and practices. The most salient outcomes are:

- Benin, Burkina Faso and the Ivory Coast were very interested in the SCV system (reduced tillage, permanent soil cover, seeding under mulch) developed in Cameroon, and are planning to set up experimental plots in the coming season to evaluate its suitability under local conditions. The use of rippers for minimum tillage generated a lot of interest, although the participants from West Africa would like to have seen its application under farming conditions, rather than just at the research station. An exchange visit in the near future would be appropriate.
- Zambia expressed a keen interest in incorporating the use of compost and manure pits in their conservation agriculture approaches, and shared an interest with the Ivory Coast and Burkina Faso in developing appropriate extension aids to promote these techniques.
- For Malawi, where the conservation agriculture approach in cotton is relatively new, the first priority is to demonstrate the positive impact on cotton production in order to justify carrying the process forward. The introduction of Faidherbia albida was considered relevant for Malawi.

The participants of the Zambia workshop were very well aware of the opportunities that are there, but also of the challenges facing them. Specific plans of action for their respective countries with the aim of promoting the adoption of conservation agriculture / soil and water conservation approaches were formulated, and opportunities for collaboration identified. The COMPACI program will continue to support them in their endeavours. •

Rudy van Gent (based in Lusaka, Zambia) works for GTZ as a COMPACI Principal Advisor for Zambia and Malawi.

Cotton Production in Mozambique

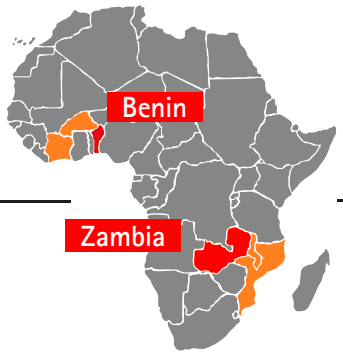
By Manuel Barbosa and Faustino Catingue

Name: Catingue, 32.
Surname: Faustino
Nationality: Mozambican
Professional Qualifications:
Jul | 2003 to date:
Plexus Mozambique – CFO
Nov | 1999 – Jun | 2003:Ernst & Young – Senior Auditor
Education:
2003: Bachelor in Accounting and Audit

Cotton production in Mozambique is governed by a system of concession allocation. Only concessionaire cotton companies are allowed to operate and are obliged to provide, on a credit basis, all inputs to cotton farmers, to supply extension services and technical assistance, and to buy all cotton produced inside the concession area where those cotton companies are operating.

IAM (Mozambique Cotton Institute) is the government agency of the Agriculture Ministry that regulates and controls the cotton industry and cotton concessionaire companies' activities. >>

Name: Barbosa
Surname: Manuel
Nationality: Portuguese
Professional Qualifications:
Mar | 08 – Feb | 10: Montepuez Regional Manager for Plexus Mozambique, Lda
Feb | 10 – Present: Chief Operations Manager for Plexus Mozambique, Lda
Education:
1998: Universidade Lusíada Porto – Business and Administration



The minimum price to pay to the farmers is also set every season according to a formula that relates to the "A" Index and is agreed between the cotton concessionaires and farmer representatives at a meeting arbitrated by IAM. The Institute then recommends this price to the government.

In recent years the production level in Mozambique peaked at 122,000 tons of seed cotton (2005/2006) and then dropped to around 38,000 tons in the 2009/2010 season and total number of cotton farmers decreased from 300,000 in the 2005/2006 season to around 200,000 farmers in the 2009/2010 season. A low price on cotton and high prices for other major competitor crops (maize and sesame mainly) are the main reasons for this drastic drop on total national crop. National cotton yields are also lower than in prior years with a country average of less than 450 kg of seed cotton per hectare. This is attributable to less spraying due to costs and the low perceived return.

Plexus Mozambique, Lda (PML) is the largest concessionaire in Mozambique and operates in the northern provinces of Cabo Delgado and Nampula, as well as in the Eráti district.

PML's extension staff promotes cotton and give technical assistance in 6 districts. In 2009/2010 about 50,000 families were growing cotton and, in light of a price increase, it is forecast that about 70,000 families will grow cotton during the 2010/2011 season.

The aim of the Compaci program is to train 50,000 cotton farmers within the next two seasons and to significantly increase their cotton yields and incomes.
In order to train 50,000 farmers within the next two seasons, PML are adopting demo fields, where farmers will be trained in all major cotton operations and in effective techniques. These trainings will focus on four main themes: (i) Best planting techniques and first crop operations, (ii) spraying program and IPM, (iii) harvesting and cotton grade selection, and (iv) conservation agriculture. With this new approach to farmer training, Plexus Mozambique has very high expectations for the program and believes that yields will increase sufficiently forfarmers to consider cotton as the first option cash crop. •

Statements by Cotton Farmers from Zambia and Benin

By Dr. Susanne Neubert, National Opinion Research Center at the University of Chicago/NORC


Dr. Susanne Neubert

In the context of the monitoring and evaluation program of COMPACI, carried out by NORC, group discussions are conducted with the cotton farmers in cooperation with the local partner institutions. The results of these discussions show the living conditions and development in the municipalities, as well as the impacts COMPACI is having on the farmers' lives already today. In addition, they are pointing out the problems and challenges COMPACI will be facing in future.

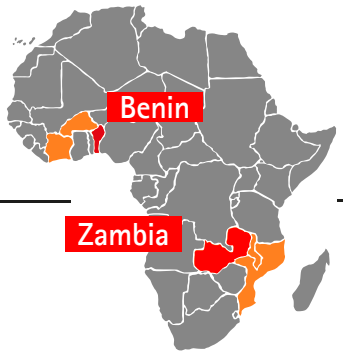
The group discussions are being held in the scope of COMPACI using a participative and context-sensitive method.

The method "Method of Impact Assessment for Programmes and Projects," in short MAPP, is applied to all countries under the COMPACI project. The advantage of this is that the results can not only be compared over the complete programming period, but comparisons can also be made between the different municipalities and countries. In part, results can even be aggregated, as MAPP is used with a point system. The special feature about MAPP is its ability to collect development trends retrospectively only assigning the possible causes of these trends in a second step, thus making it easier to consider effects of programs and projects, COMPACI included, separately from external factors. It is also easier to identify unexpected positive and negative effects.

In the following the results of the group discussions held in Zambia and Benin are presented and compared:

1. Quality of life and factors determining the changes in it

At first the farmers define the factors determining their quality of life by means of a quality of life curve. These factors vary widely between Zambia and Benin. For the Zambian farmers, the cotton price and its fluctuations are a determining factor: "It is the price of cotton and its fluctuations which make us happy or unhappy. " In contrast, the farmers in Benin evaluate their quality of life above all according to their own management skills: "In the past, we had nothing: no skills, no knowledge. Now, with all the train-



ings in the community, we live a better life." This difference in views is due to the fact that the Beninese farmers are only facing minor fluctuations, as the price is regulated by the government and is thereby slightly mitigated. The Zambian farmers, however, are fully exposed to the fluctuations of cotton prices, even within a single harvest season.

2. Development trends, living standard and shortages

The living standard of the cotton farmers has approved considerably in all municipalities during the last 6 – 8 years. This is not least associated with the relatively favorable climatic conditions of the municipalities concerned during this period. Another conclusion, which all farmers confirm, is that this positive trend is due to the improved farmers' skills and knowledge in the fields of technology and land management, which results from combining different programs, from the previous programs CmiA, from COMPACI itself, as well as from organizations providing training programs in the fields of gardening and food crops. These different influences can be demonstrated by means of a matrix.

Whether in Benin or in Zambia: The biggest lack of all farmer families lies in the still missing access to credit in order to obtain working equipment or farm animals. Without access they are, consequently, not able to build up capital.
The biggest discrepancy between Beninese and Zambian farmers is their different level of organization. The farmers in Zambia are frustrated about bad experiences they have had with farming-cooperatives and, consequently, have lost their trust in these. They do not know how to organize themselves and feel they have no influence. They dispose of a very low capacity of being able to take the initiative themselves – this can be described as a very low "adaptive capacity." The Beninese farmers, however, are different. In comparison to the Zambian farmers, they are well organized and more able to express their interests.

3. Impacts of COMPACI so far

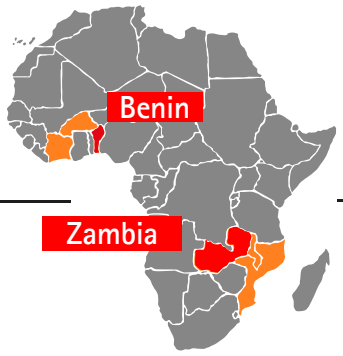
All farmers regard COMPACI as a good initiative and the trainings as relevant and effective with regard to their quality of life. New elements, such as a greater emphasis on and justification of a timely execution of management steps, an early soil cultivation above all, and the execution of conservation in soil cultivation are fully approved of as long as prices are good. In cases of a slump in prices, the Zambian farmers become more critical, which could tempt them to put less emphasis on cotton next year.
The Zambian farmers, however, currently demonstrate an impressive transfer of their improved skills in the field of "conservation farming" to cotton farming. This can be explained as a possible spill-over effect which can be related, among others, to the cooperation of the cotton companies with the Conservation Farming Unit (CFU), which enables minimum tillage and organic fertilization to slowly find its way into cotton farming. The Beninese farmers, however, regard organic fertilization as the biggest challenge, as transport still represents a problem. Balancing compost and dung on their heads and onto the fields represents a very heavy workload, considering that 4 - 10 tons are necessary per hectare to achieve an effective organic fertilization. The cultivation of leguminous crops is also still facing obstacles, but these weaknesses will be tackled.

4. Challenges

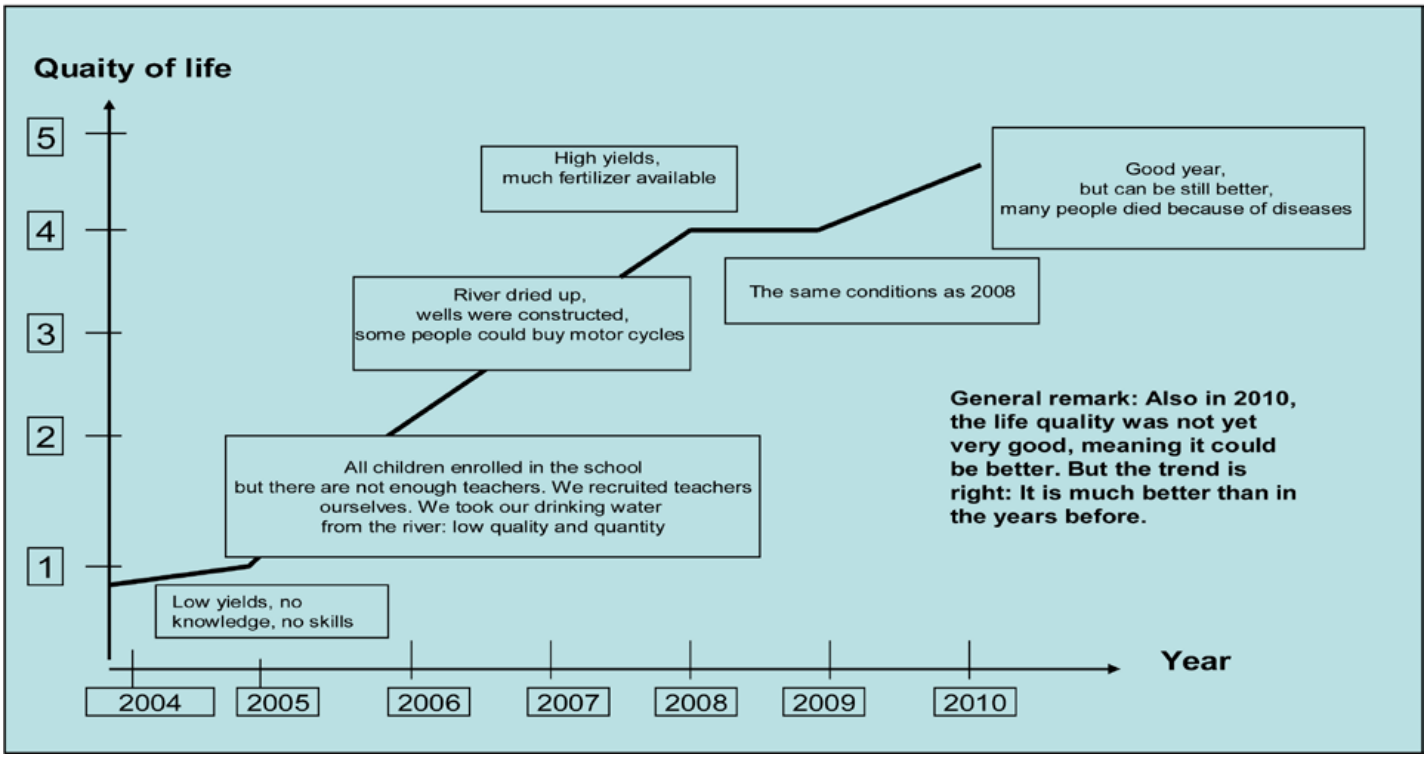
One of the crucial challenges in cotton farming is the improvement of in the field of plant protection. So far only a few farmers wear protective clothing, when it is available at all, to protect them when using pesticides. Zambian farmers, in particular, point to the health related side-effects. Pest threshold principles have also not yet been adopted sufficiently and need to be improved by special training measures. In addition, there is still a great deal of uncertainty where calendar- defined spraying and pest threshold principles are concerned.

About the author: Susanne Neubert holds a doctorate in Agricultural Economics and graduated in Environmental Sciences. She had been employed by the WZB (Social Science Research Center Berlin) in the field of technology assessment and she has been working as a scientist at the German Development Institute (DIE) since 1997. She supervised four major research projects in the field of natural resource management in the African water and agricultural sector, while researching participative methods of impact evaluations, which she also carries out herself, at the same time. She is the author of numerous publications. At present she lives with her family in Zambia and works as a consultant for NORC. She is supervising the use of qualitative methods and training programs in the field of focus group discussions for COMPACI.

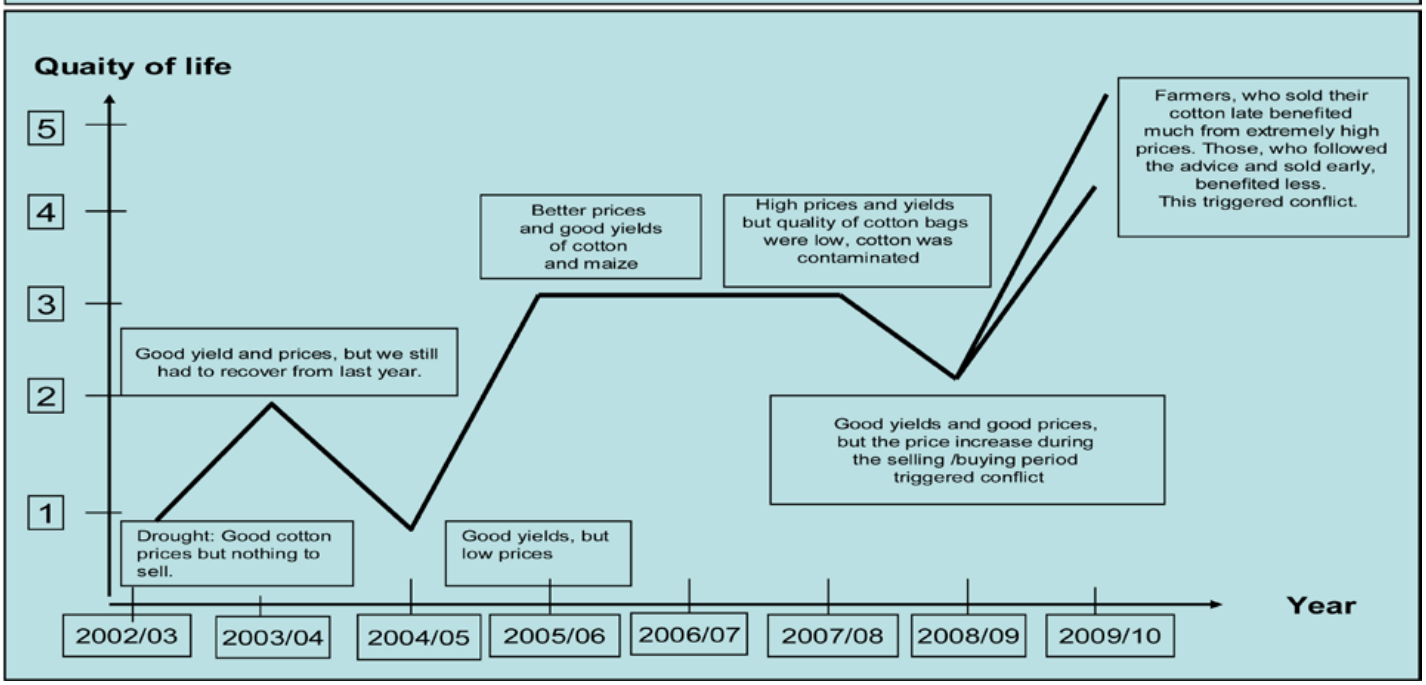
On the next page you will find the curves of the quality of life for both countries >>



Quality of life curve in Materi/ Benin



Quality of life curve in Tithandizane/ Zambia



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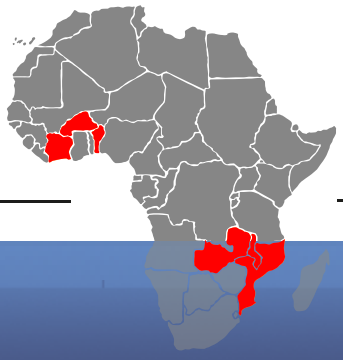

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Jack Uldrich

Highlights Cotton Made in Africa

By Stephan Engel

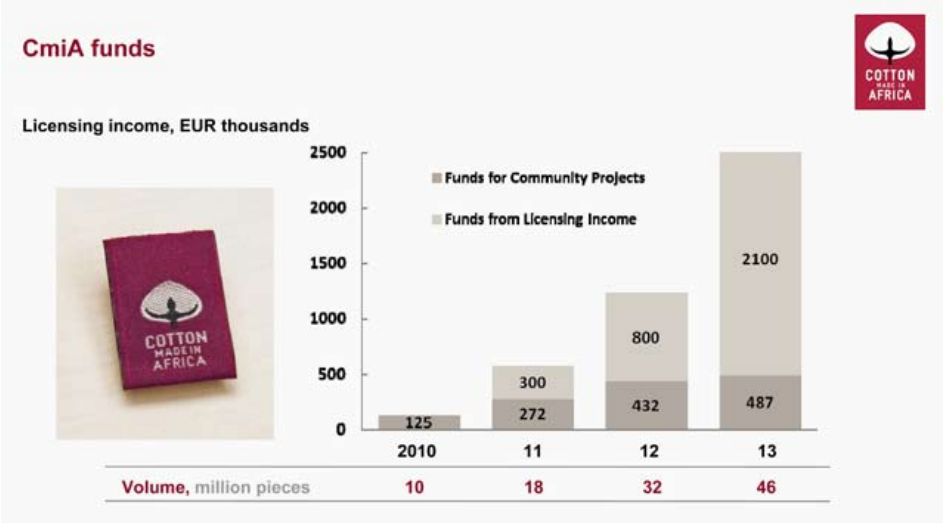
App. 10 million CmiA clothing articles will produced this year (2010). This will result in app. 800,000 EUR of licensing revenues for the Aid by Trade Foundation/Atakora, an increase of nearly 100% as compared to the previous year.

We were able to develop a base of renowned and stable customers over the past 3 years primarily composed of trading houses, such as the OttoGroup, Tchibo, Puma, REWE Group, s.Oliver and Celio, which see CmiA as an important part of their sustainability system and are working to expand these operations.

Cotton made in Africa is now being sold as a seal for the superior production of cotton in the sense of a conservation and responsibility based interaction with nature and fellow human beings. Introducing the verification of CmiA criteria through third parties in 2010 was important aspect for the sensitive public, and thereby for the success of sales. This system makes CmiA particularly robust and credible, which, in turn, makes it a valueable product for companies who want/must to find controlled and transparent systems from which to draw their resources.

Today we realize that the number of such companies will continue to grow in the future. Public pressure on the one hand, and a sense of corporate responsibility on the other, is leading companies dealing with textiles to design their procurement systems according to environmental criteria. For this reason, we believe that the sale of CmiA will develop dynamically in the following years and are currently expecting a yearly increase at a rate of app. 50%. Along with other means acquired through our business activities, our forecasted surplus calculation shows correspondingly high volume, which can be poured into communal projects in the form of dividends and/or shares in the coming years (see graphic). We wish to used this system to strengthen the effect of CmiA and to create structures, which lead to permanent, positive developments even more quickly.

Since February 2009, Stephan Engel is the Managing Director for Sales & Finance of "Cotton made in Africa".



We wish all participants of COMPACI and Cotton Made in Africa a happy and prosperous New Year 2011!

Imprint

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