



Supporting small-scale farming in Kenya



The Green World
Food Chain
Partnership Project



Bayer CropScience

How it all started

The Kenyan economy is largely agriculture-based. The agricultural sector accounts for approximately 25% of GDP, over 80% of employment and 57% of national income, both directly and indirectly. 80% of Kenya's population live in rural areas, deriving their livelihood mainly from agriculture-related activities. The Kenyan agricultural scenario is composed of a stagnant large-scale and a growing small-scale sector. Growth in agriculture plays a significant role in poverty alleviation and is therefore a vital component in achieving the millennium development goal number one.

Over the years, the realisation of agriculture's full potential in Kenya has been hampered by some of the following key factors:

- Decreasing farm sizes with an increasing number of farm holdings as a result of land demarcations
- Inadequate use of appropriate and modern farming technologies
- Flooded market with adulterated and fake products
- Too many generics with no owner identification and reference
- Lack of sensitisation and technology transfers to farmers and stockists on environmental issues and the safe use of agricultural pesticides
- Lack of association forums between small-scale farmers and pesticide multinationals

The Green World project started against this background and the fundamentals of the project revolved around finding sustainable solutions to the many challenges faced by the small-scale farmers in Kenya. Much of Kenya is arid, with only 20% of the country's 582,650 square kilometres being arable land. It is therefore vital that small-scale farmers are empowered to make the best of the little land they have. In order to reach out to as many farmers as possible, Bayer CropScience involved the farm input shops where the small farmers buy their fertilisers, seeds and pesticides.

The rationale for this was that farmers always relied on these outlets for advice on pesticide use and best practices in farming. The big question here was: were these small traders informed well enough as to pass on the right advice to farmers?

The answer was obviously no. The Green World project was therefore directed very specifically towards recruiting selected traders who were established in the highly productive rural areas and enhancing their ability to advise farmers on best practices in agriculture through Bayer training courses. The selected shops became Green World shops. These small shops have a key function in enabling important information to reach the producers.



Farmers Training: Open Day targeting mango farmers on the lower eastern savannah of Kenya.

There are currently more than 3,000 farm input traders in Kenya. Bayer CropScience initially started the project in the area around Mount Kenya, a potential and fertile belt of land used predominantly for vegetable and corn production. The produce here is mainly exported. Thirty Green World shops were involved in the first stage of the project in the summer of 2006. The number grew to sixty by the end of 2007 and is currently standing at a hundred.

Who got involved?

1. GTZ

The majority of the small-scale farmers lacked any knowledge of integrated crop and pest management. Therefore, Bayer CropScience and GTZ, a German development aid organisation, started a training programme in the autumn of 2006 by means of a public private partnership (PPP). Up to 150 trainers (multipliers), including staff from the Ministry of Agriculture, were trained and then passed on their knowledge to farmers. More than 10,000 farmers have been reached every year through this training programme.

The training programmes bring together information on crop protection products (appropriate use, dosage, spraying time, risk attributed to counterfeit products, etc.) and on good agricultural practice (GAP). GTZ went an extra mile to co-sponsor capacity building training for all Green World stockists in the area of sound business management. Through this training programme, the stockists improved their business management skills and became better managers of their businesses. This approach made sense for Bayer as it assured sustainable future business with the traders. BCS aimed at increasing its market share by delivering services in the selected Green World stores, whereas GTZ aimed at accomplishing the development goals numbers one and seven.

Objectives of Green World-GTZ Public Private Partnership:

- Enhance agricultural productivity and quality through information exchange and capacity building
- Increase export opportunities for vegetables grown by small-scale farmers
- Integrate the food chain partnership approach to ensure continuously high quality food supply for exporters and consumers
- Involve farmers and stockists on environmental safety issues as they handle pesticides (safe use education)
- Select innovative, affordable/tailor-made crop protection solutions from Bayer CropScience
- Promote highly efficient and genuine crop protection products in smallholder suitable packaging
- Transfer technology from Bayer CropScience to the stockists and farmers through Bayer CropScience's specialised technical service
- Champion the food chain partnership concept through joint efforts in upholding GlobalGAP standards for exports, as well as local consumers and exports, thus securing Kenya's position as a reputable agricultural exporter
- Safeguard the environment through the responsible use of pesticides and disposal of empty containers

2. Fresh Produce Exporters (FPE)

In a bid to create sustainable business, Bayer CropScience is currently working closely in the Green World project with exporters of French beans, snow peas, baby corn and other vegetables in what has come to be called the food chain partnership community. Here, the FPE operates through their out-grower schemes where they contract thousands of farmers, some with as little as a quarter of an acre of land to grow the agreed crop for them. Green World outlets in the areas where the FPEs are operating are responsible for delivering the right crop protection products to inquiring farmers and giving them appropriate advice on the proper use of pesticides and general farming. These outlets have been properly trained to handle challenges related to growing the crop in question.



Farmers Day in Kerugoya.

3. Equity Bank (microfinance bank)

A microfinance bank is also involved in this partnership. The bank advances seasonal credit to farmers for them to be able to buy seeds, fertilisers and crop protection products. The farmers are organised into groups of about fifty and the lending is at group level. Once the loan has been approved, a cheque for the approved amount is drawn in favour of the respective Green World outlet. The farmer buys the necessary inputs from the Green World outlet as per the agreed budget between the FPE and Bayer CropScience. In this way, the farmer does not handle cash and hence there is no risk of fund diversion. The FPEs pay for farmers' deliveries through their bank accounts with the microfinance bank. The bank deducts the money advanced to farmers and remits the balance to their accounts. This partnership aims at promoting the sustainability of our business with the farmers.

4. Bayer Tomato Club (BTC)

Through the Green World concept Bayer CropScience has introduced a unique concept for farmers growing tomatoes in Central Kenya: The Bayer Tomato Club (BTC). The club is comprised of tomato farmers, each with at least one acre of the crop. The farmers are organised in groups of twenty. Each group has to be registered with the Ministry of Social Services and must have some set of rules and regulations. The club has 45 groups currently made up of 900 farmers. The objective of the club is to give information to farmers on how they can produce tomatoes optimally through observance of good agricultural practices (GAP).

Bayer is keen to promote sustainable agriculture through the Food Chain Partnership approach, which is the hallmark of Green World. The club was formed against a backdrop of a perennial lack of realisation of the farmers' full potential. Farmers were growing tomatoes, losing almost the entire crop to pests and diseases and had little know-how on the best varieties for the market. The most rampant problem was the Tomato Yellow Leaf Curl virus. Information was given to farmers through the 11 Green World outlets in the region on how to contain the scourge through Confidor drench applications, right from the nursery establishment to the field.

Farmers sorting, grading and loading tomatoes in crates.

Farmers training at a Green World Day.



Farmers are now producing tomatoes confidently as they have seen the advice given to them, through the Green World, working for them.

Thanks to the BTC, participating farmers can produce quality tomatoes that conform to the requirements of KENYA GAP. As a result, our consumers will also be safeguarded from the risks of eating tomatoes with pesticide residues.

To boost the capacity of the club members, the Equity Bank is providing the farmers with seasonal credit through a deal brokered by Bayer CropScience. Farmers are required to repay the credit after selling their tomatoes. Unlike the FPE partnership, BTC is only producing for the local market, as Kenya does not export tomatoes in significant quantities.





Bayer Tomato Club members' meeting.



Training snow peas farmers.





What we aimed to achieve

Training programmes were developed to provide Green World stockists with the necessary knowledge for correct handling of crop protection products together with varied information on general agriculture revolving around good agricultural practices. Special training materials like safe use charts, product brochures and crop spray programmes have been made available at Green World shops for dissemination to small-scale farmers.

The training programmes have also been targeted on farmers themselves through farmers' days and seminars. The company supplies its products in convenient packaging with instructions for use, and the packs can be disposed of in an environmentally appropriate way.

The training provided most of the traders with basic knowledge of the methods of good agricultural practice, correct modern crop protection and safe use of pesticides, which they passed on to their customers with great enthusiasm. In this way, the producers were much more easily convinced and instructed than if a company representative arrived in the village to teach them, since they would judge his motive to be commercially oriented.

Through the Green World project Bayer CropScience sought to increase its participation in the growth sector of Kenya's agrarian economy – the small-scale farming sector. Green World aimed at achieving the following:

- Focus on the small-scale farmer's needs and providing solutions to his problems
- Commitment to tailor-made solutions to problems as opposed to just selling products
- Enhancement of dialogue between traders, farmers and Bayer CropScience
- Provision of cost-effective farm inputs in appropriate packs
- Advocacy for good agricultural practices and integrated pest management (IPM)
- Emphasis on the safe use of pesticides and protection of the environment
- Promotion of brand awareness to facilitate differentiation
- Assist stockists/farmers in business excellence to promote sustainable business
- Close budgeting and monitoring of BCS business progress at stockist level
- Leverage in terms of getting timely market intelligence information



Mr Roland Gallow,
Country Head Bayer
CropScience East-
Africa, addressing
Green World stock-
ists during a capacity
building workshop in
Mombasa, Kenya.



What we achieved

Consistent awareness building on good agricultural practices (GAP) among small-scale farmers: This has led to an increased Bayer CropScience presence in the small-scale market segment. A case in point is the successful introduction of Thunder OD, a new product for the control of sucking and biting pests, which comes in a small and convenient 100 ml pack. Thanks to the Green World training courses small scale farmers now know this product. Almost every other input outlet now stocks it and farmers are specifically asking for the product by its brand name.

The innovative approach undertaken by this project is the integration of various partners and especially food-chain partners (vegetable producers and distributors). Hence the production and the consumption sides are linked, which leads to a more sustainable business as demand and market is created for the agricultural produce. The farmers learn how to raise agricultural efficiency through knowledge provision via the distributors. GAP also reduces the production costs of farmers. This maintains and enhances the economic viability of farms and helps to improve their livelihood. The improved knowledge of GAP also offers the opportunity to produce high-quality vegetables suitable for export – and this is something Green World distributors also benefit from. They can share their knowledge and recommend products to more farmers, who will value the quality recommendations.

The Green World food chain partnership has been able to bring together and actively involve every player in the food chain. We have closely developed synergies with, among others, key horticultural exporters, various NGOs, the government extension service, pesticide traders, seed suppliers and fertiliser suppliers. Our small-scale farmers are becoming increasingly conscious of the need for quality food production.

Safe use education has been very successful through the Green World initiative, and many farmers, farmer groups, agricultural institutions, Ministry of Agriculture extension staff, pesticide traders and produce buyers have been made aware about the need for the safe handling of pesticides. Careless disposal of pesticide containers by farmers has diminished, and many farmers have invested in personal protection equipment (PPE) for use when handling pesticides.





Consumers are becoming increasingly conscious of the need for healthy nutrition. Food chain partnerships help to supply consumers with high-quality fresh produce, which forms the basis of a healthy diet. But such partnerships can only succeed if they involve every player in the food chain – from the farmer and processor to the exporter or importer and retailer. Bayer CropScience has the global experience and cutting-edge expertise to create a successful partnership at every level.

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