Organic cotton

Enormous amounts of synthetic chemical pesticides are used in conventional cotton cultivation worldwide. Many of these pesticides are highly poisonous and dangerous to humans and the environment. Organic cotton cultivation offers a sustainable alternative and is already being practiced by an increasing number of farmers. Organic cotton cultivation places, above all, emphasis on the precautionary principle. Measures are taken which support the ecological balance and avoid the negative economic effects of pests, or at least reduce them. If pests attack, generally natural, locally available products are used to combat them.

Organically produced cotton in Africa

In many African countries cotton is of great economic importance as an agricultural export product. In Burkina Faso for instance, every year 440,000 tons of cotton fibre are produced on an area of 500,000 hectares. Cotton is the most important export of this West African landlocked country. Simultaneously, the problems associated with conventional cotton production in developing countries are to be found in various African states. Cases of poisoning, sometimes ending in death, are not rare. Poisonous pesticides which are licensed for use in cotton cultivation are also used to grow foodstuffs, resulting in a further load. Many water sources contain pesticides residues, which not only affects humans, but also the animal and the plant world. In order to offer farmers an alternative, many countries have started projects promoting the cultivation of organic cotton. The initiators are often aid development organisations or also private companies from the textile sector. The production of organic cotton offers many advantages to farmers, their families and their communities.

No meaning?

„It is said that organic cotton cultivation is relatively meaningless, but I know that for the families involved in producing it and who have found reliable partners, it is of great consequence“.

Sara Ratter, advisor to organic cotton projects.

Individual Projects

Statistics alone do not illustrate the positive aspects of organic cotton production. These positive aspects often have far-reaching effects, well beyond farmers and the families which participate in the cultivation programmes. The following projects act as an example.

Egypt
SEKEM is the most important grower of organic cotton in Egypt. This project involves the complete production chain, from cultivation to the manufactured product. In cultivation and manufacturing areas, the project supports the economic development of the population as well as various health and education projects. What is so special about SEKEM is that not only the farmers profit from SEKEM’s experience. Ibrahim Abouleisch, head of SEKEM and winner of the alternative Nobel Prize, was able to convince the Egyptian government to take advantage of SEKEM’s knowledge and experience and put it to use in conventional cotton cultivation. This has resulted in 400,000 hectares of integrated cultivation, sparing humans and the environment the effect of over 30,000 tons of pesticide every year.

Organic Cotton Projects in Afrika

<table>
<thead>
<tr>
<th>Country</th>
<th>Initiative</th>
<th>Start</th>
<th>Statistics for production season 2004/05</th>
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<tr>
<td></td>
<td>Producer</td>
<td>Area</td>
<td>Crop/Season</td>
</tr>
<tr>
<td>Egypt</td>
<td>Sekem</td>
<td>100</td>
<td>154 ha</td>
</tr>
<tr>
<td>Benin</td>
<td>OBEPAB</td>
<td>671</td>
<td>422 ha</td>
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<tr>
<td>Burkina Faso</td>
<td>Helvetas</td>
<td>75</td>
<td>30 ha</td>
</tr>
<tr>
<td>Mali</td>
<td>Helvetas</td>
<td>561*</td>
<td>298 ha*</td>
</tr>
<tr>
<td>Senegal</td>
<td>AGROCEL</td>
<td>253</td>
<td>98 ha*</td>
</tr>
<tr>
<td>Senegal</td>
<td>ENDA</td>
<td>300*</td>
<td>120 ha*</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Remei AG</td>
<td>1.483</td>
<td>6.160 ha</td>
</tr>
<tr>
<td>Uganda</td>
<td>Lango</td>
<td>12.000</td>
<td>6.075 ha</td>
</tr>
</tbody>
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* Season 03/04, as no figures available for 04/05
# Estimates for the season 04/05

Pestizid Aktions-Netzwerk e.V. (PAN Germany)
Alternative Nobel Prize
In 2003, Ibrahim Abouleisch and the SEKEM initiative were awarded the alternative Nobel Prize for their activities in sustainable development. The prize was awarded in recognition of their development of organic cultivation methods. Apart from eco-textiles made from Egyptian cotton, SEKEM also produces herbal teas and organic foodstuffs. The initiative was particularly praised for its work in the field of fair trade, the income from which is used to finance Kindergarten, Waldorf Schools and soon, a free University.

Benin
Cotton is the most important export of Benin, accounting for 64% of the country's exports. Because of the many problems involved in conventional cotton cultivation, the organisation OBEPAB (Organisation Beninoise pour la Promotion de L'Agricultue Biologique) commenced a biological cotton project in the 1996/1997 season. The project was originally aimed to protect farmers from the effects of pesticides. In the meantime, the project has been fruitful: the amount of organically grown cotton has increased from 5 tons in 1997 to 379 tons in 2005. The number of producers also rose from 17 to 671, of which about a third are women. The farmers are very enthusiastic about the project. A significant aspect for participants in the OBEPAB project, apart from its benefits to health, is that farmers have purchasers for their crops and they are paid immediately. The payments are above average due to the premium for organic cotton. Farmers are therefore in the position to send their children to school as they are able to pay the school fees. They are particularly proud of the fact that their children are better in school, as they no longer come into contact with poisonous chemical pesticides. This presumably subjective observation, is supported by scientific studies which have proved that exposure to pesticides leads to developmental disturbances.

Burkina Faso
As already mentioned, cotton plays an enormous role in the economy of Burkina Faso. Since 2002, Helvetas, the Swiss Association for International Cooperation, has been cooperating with UNPCB, the largest cooperative of Burkina Faso cotton farmers. The aim is to establish organic cotton cultivation in the country. The goal of the project is also to establish a marketable crop rotation with crops such as sesame and shea butter. The first success, much due to the close cooperation with UNPCB, has already become apparent during the pilot phase; farmers who normally cultivate in a conventional manner are already, at the beginning of the season, using natural products for spraying and only use more poisonous synthetic chemical products at a later stage of cultivation. This reduces production costs and benefits human health and the environment.

Mali
Mali is the second largest cotton producer in Africa, after Egypt. The “white gold” is the country’s main export and source of foreign currency. In 1998 Helvetas started an organic cotton cultivation project. The program aims to cover the whole of the production chain, starting with the farmers and ending with the finished garment in the shop. The final textile products are marketed by Helvetas themselves and also by well-known Swiss (textile) companies. The harvest of raw cotton was 170 tons in 2003/04. The plans for the coming years envisage a large increase in the crop, as well as in the number of farmers participating.

Motivation of a farmer participating in organic cultivation:
„I noticed that the earth became less and less fertile from year to year. I spent more and more money on manure and pesticides but the harvest became smaller and smaller. Now I am more independent and in the long-term our family will benefit and be able to survive.

Philip Sangare, 59 years-old

Senegal
During the 1995/96 season, ENDA Pronat, a local development organisation, started the first organic cotton cultivation project in West Africa. It had a profound effect on the development of other similar initiatives in the region. This project proved that organic cotton could be grown in West Africa. At that
point in time this was in doubt. Organic cotton production is relatively low at present. On the one hand the project is searching for reliable purchasing partners for exporting their product, on the other, a local grain type, fonio, has become a popular rotation crop for the national market. Farmers can achieve a much better price for this crop than for cotton with its depressed world market price.

**Tanzania**

Cotton cultivation is of great economic importance in Tanzania, especially in the west of the country. About 40% of the population are engaged in the cotton industry. Only small amounts of pesticides and synthetic manures are used in conventional cultivation methods, providing ideal conditions for the cultivation of organic cotton. Since the 1994/95 season, the Gesellschaft für Technische Zusammenarbeit (GTZ) has encouraged farmers in Tanzania to cultivate organic cotton. In 1999 the Remel AG, a Swiss yarn and textile trader took over the responsibility of cultivation and marketing for this project. Since then, the project has been successfully continued under the name of Meatu bioRe Project. In the meantime, 1,483 farmers are integrated in the project, which harvested about 3,000 tons of raw cotton in 2004/05. A new acquisition is a demonstration farm where farmers are educated in successful methods of biological cotton cultivation.

**Uganda**

Agriculture in Uganda is, as in Tanzania, not intensive. Therefore there is great potential in Uganda for organic cotton cultivation. As yet, however, most of the organic cotton produced is sold on conventional markets. Cultivation is mainly in the north of the country where the soil is fertile and the number of pests is reduced by the so-called predator ants, the nginingini. The rotation crop sesame provides a second source of income for the Lango project. This reduces the dependency on cotton and is a further export crop which covers the certification costs associated with organic cultivation.

**Conclusion**

The success of African cotton cultivation projects speaks for itself. More and more farmers wish to participate in the current projects. Other African countries have taken note of their success and there is a move to imitate them. At the same time, it is clear that export demand must rise, as well as national and regional demand, to ensure the survival of such projects. This can only be achieved if consumers are made increasingly aware of the conditions existing in cotton cultivation.
Literature


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