



Growing organic cotton and food crops in Benin: the role of OBEPAB and farmer organisations

History and objectives

The not-for-profit Organisation for the Promotion of Organic Agriculture in Benin (OBEPAB) was founded in 1996 to contribute to the reduction of pesticide use in agriculture. Much of the annual ill health and fatalities in rural areas in Benin are caused by pesticides.

OBEPAB's objectives include:

- Promote organic agriculture and develop capacity in environment-friendly farming systems
- Build self-sufficient and sustainable organic supply chains, which are profitable and socially just
- Promote action research in environmental health, food safety and farm family health;
- Train and inform extension agents, consumers, farmers, processors, researchers, students and decision makers on pesticide hazard issues
- Contribute to improving farmers confidence and capacity
- Facilitate access to information for various stakeholders on pesticides and alternatives

OBEPAB's approach is to put people at the centre, via participatory approaches which value local knowledge, and build the capacity of farmer groups for self-help.

Organic cotton and food crops

OBEPAB pioneered organic cotton production in West Africa, to address serious human health and environmental problems linked with use of hazardous pesticides in Beninese farming. Following a pilot project with 17 farmers in 1996 to assess technical feasibility, in 1999, technical expertise was provided by Dutch organic consultants Agro Eco, before expanding production and setting up a training programme for farmers. In the last decade, OBEPAB has developed effective, locally appropriate and cost-effective pest management methods and an Internal Control System for the farmer groups involved. The programme currently includes over 1,000 farmers and harvested 650 tonnes seed-cotton in 2007. Organic production methods are well adopted by farmers and harvest of seed-cotton varies from 400 kg to 1,200kg per hectare, the upper figure almost as high as yields in conventional cotton production in Benin. Input costs in organic cotton production are far lower than for conventional farmers because pest and soil management methods are based on free or low cost local materials. Through cost savings, organic farmers

are economically better off, an important goal of OBEPAB's work.

OBEPAB is also involved in organic and Integrated Pest Management methods for vegetables, pineapple and staple food crops.

Training and info services for farmers

At the beginning, farmers only slowly adopted new cultivation techniques, partly due to the inadequacy of conventional 'knowledge transfer' methodology. In the 2000/01 season OBEPAB introduced a participatory, action-learning methodology of Farmer Field Schools (FFS). Through season-long sessions in the field, farmers learn to identify pest insects and beneficial insects, understand how to preserve soil fertility and compare cultivation practices on organic and conventional fields. Since then, OBEPAB has progressively adapted a version of FFS best suited to the local circumstances. FFS are run each year in all regions where OBEPAB operates, combining experienced and new farmers to organic methods.



Discussing observations on cotton crop health in the Farmer Field School. Credit: OBEPAB

Farmer Field Schools have contributed to practical experimentation, for example, introducing a resource-saving fertilizer using "leftovers" of local palm oil production, mixed with ash from household rubbish and dung. Additionally, FFS participation often leads to farmers improving the lint quality of their cotton.



Processing and marketing support

OBEPAB has 12 years experience of organic cotton farming with small scale farmers. The organisation currently supports 1,000 farmers, and has facilitated the role of marketing, selling over 1,000 MT of certified organic seed-cotton on behalf of farmers over the past 10 years.

OBEPAB arranges for organic certification by French certifiers Ecocert International S.A. and markets the cotton, for which farmers receive an organic premium of 20%. In 2003 a business wing, Organic Benin, was set up to promote and facilitate the export of organic cotton and other crops. Organic cotton from OBEPAB's programme has been sold in cotton wool packs in France, Morocco and India. OBEPAB is currently undertaking a feasibility study on Fairtrade certification potential for the farmer groups, supported by Dutch NGO Solidaridad. Small amounts of organic food crops, including cashew nuts, have been sold locally.

Working with PAN UK and donor TRAIID, OBEPAB is developing a measurably sustainable and profitable business model to expand and help over 2,100 cotton farmers engage in organic cotton productions systems during 2009-2011. Business plans are to market 80 tons organic food crops by 2011.

Field research on organic methods

OBEPAB carries out practical research with farmers, based on the production problems identified in training. Finding locally available resources to replace agrochemical inputs has been high priority, conducting field assessment of local plant extracts against pests in cotton and food crops. Since 2007, OBEPAB staff in liaison with a Ghanaian entomologist from Australia's cotton research institute have field tested 'Envirofeast' food sprays to attract predatory insects into the cotton crop to feed on pests, adapting a commercial product used in Australia, to make use of locally available resources. Combining the yeast-based food spray with trap cropping of maize and cowpea reduces the pest levels and gives farmers a higher gross margin compared to conventional and organic pest management practices. OBEPAB also conducts research on pesticide use problems in different crops and collects data on pesticide poisoning incidents in rural communities.

Staff capacity

The organisation currently employs 24 people:

- 1 Coordinator
- 4 project coordinators (technical, internal control/ gender, socio-economic and farmers' organisation)
- 1 accountant
- 15 field agents, based in several districts
- 3 support agents

Coordinator Dr Simplicie Davo Vodouhê trained in agricultural socioeconomics in Benin and Nigeria, followed by an MSc in Management of Agriculture Knowledge Systems from Wageningen Agricultural University (The Netherlands) and a Ph.D on Communication and Innovations Studies. Davo worked for five years as a District extension officer and has been working in organic cotton since 1996 when he founded OBEPAB. Project coordinators are all agronomy graduates. The headquarters are located in Cotonou and local field agents operate from small satellite offices in 3 districts.

Collaboration

OBEPAB collaborates with International Institute for Tropical Agriculture (on cropping practices); Benin Centre for Sustainable Development; Solidaridad (on farmer organisation); Organic Exchange; Agro Eco Consultancy; PAN Germany, PAN UK and PAN Africa. It works with national organisations, including the Benin Institute for Agricultural Research, the state cotton company SODECO, Abomey-Calavi University and is a founder member of the NGO network in the national farming research system. OBEPAB's Coordinator participates in National Committees for biosecurity, pesticide policy and the Stockholm POPs Convention.

OBEPAB plays an active role in policy influence and education, organising national workshops on alternatives to synthetic fertilisers and pesticides and hosting African international conferences on organic cotton. It is member of PAN International and the International Federation of Organic Agriculture Movements (IFOAM).



OBEPAB field staff prepare an 'insect food' to attract predatory insects to attack cotton pests.

Credit: Damien Sanfilippo

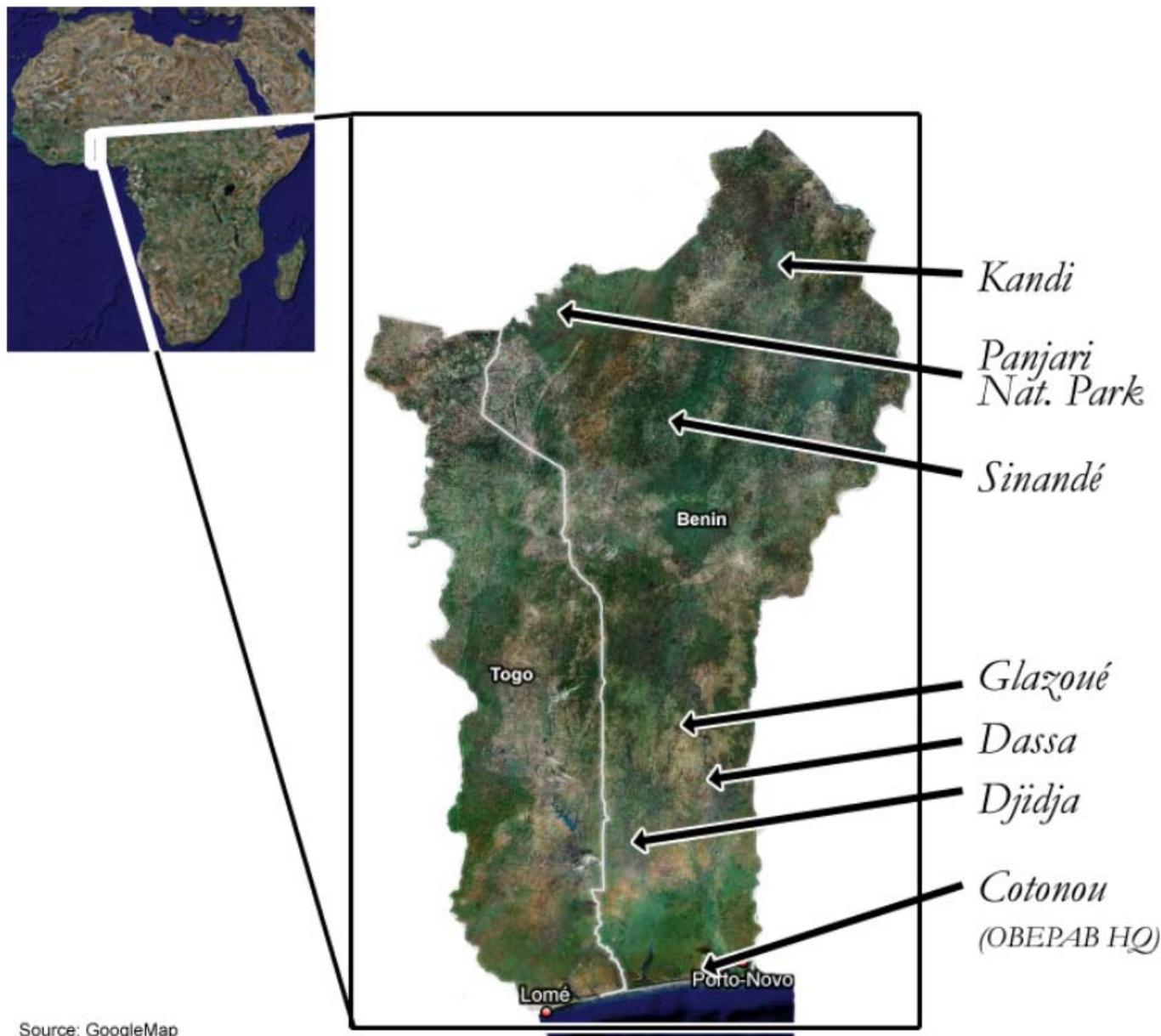
Farmer organisations working with OBEPAB

In the small West African country of Benin, agriculture is the most important sector in the economy. It employs 85% of the active population and contributes to 40% of the GDP. Cotton is the major cash crop grown in the country, it accounts for up to 80% of export revenues. Over 2 million of Benin's 8.5 million citizens rely on cotton as their main source of income.

Farming communities involved in organic farming are typical of most rural communities in Benin. Farmers are smallholders, cultivating approximately 2 ha of land, and growing cotton in rotation with other crops such as maize, groundnut and sorghum. Farmers can often supplement their income thanks to sheanut or other fruit trees grown in their fields, depending on the region. Organic cotton farmer groups currently work with OBEPAB in the districts of Kandi, Glazoué, Sinandé, Dassa and Djidja.

In order to comply with the requirements of organic certification, farmers must be organised together in formal groups and set up their own internal control system (ICS), for quality control. OBEPAB integrates the ICS with farmer organisational support and village-level decision making, to build mutual responsibility and commitment. New farmers participate in one Field School when they join the project and also participate in one Internal Control System workshop. Farmers subsequently benefit from the visits of their local field agent once every season. OBEPAB coordination team runs two evaluation meetings per year with field agents in each district.

OBEPAB works via village-based farmer groups, facilitated in local language to allow all the farmers to participate, as opposed to favouring the more privileged farmers who are able to communicate in French. The most resource-poor farmers are often the most enthusiastic participants in organic projects. OBEPAB field staff are recruited locally, as it is important to communicate in the local dialects and



understand the local culture. Supporting women as cotton producers in their own right is a major objective. This is usually difficult in the conventional cotton sector where women are often discouraged because the high levels of pesticide use carry too many health risks. Women also have difficulties in accessing farm inputs and have to rely on their husbands or male relatives for these and they are generally not represented within conventional farmer organisations. Organic farming using free, local resources offers women the opportunity to generate their own cotton income and provides them with more financial independence. Women are systematically encouraged by OBEPAB to actively participate (not only attend) in all village meetings and workshops, and to lead field demonstrations. At least 30% of organic cotton farmers in the programme are women.

Village groups are integrated at district level to form Unions of Organic Cotton Producers, which decide on annual Crop Year Action Plans. To enable farmer organisations to take more responsibility and promote more active farmer ownership of the programme, OBEPAB is strengthening the capacity of these district unions, which aim to establish a National Union of Organic Farmers to better represent their interests in negotiations with supply chains and in national policy influence.

OBEPAB Contact details

Dr. Ir. Davo Simplicite VODOUHE, Coordinator,
email: dsvodouhe@yahoo.com
OBEPAB, 02 BP 8033 Cotonou, Benin
(+229) 21 35 14 97 / (+229) 96 69 10 96
www.obepab.bj



“Organic cotton has given me more independence as a woman, because I receive a better income, and I am paid immediately after the harvest. I am now able to buy luxuries, clothing, crockery, something which is a real pleasure because I couldn't do it before. And more importantly, my children's health is no longer at risk.”

Evelyn Atekokale, organic cotton farmer from Glazoué district, Benin.

Credit: OBEPAB

Fibre, Food & Beauty for Poverty Reduction is a joint project of PAN Germany, PAN UK, OBEPAB from Benin and Enda Pronat from Senegal. It aims to raise awareness about the many different food crops grown by organic cotton farmers in Africa and help them to find better marketing options for these, in local or export markets.

The project is funded by Europe Aid Co-operation Office, InWent and TRAIID.

<http://www.pan-uk/foodAfrica>

<http://www.pan-germany.org>