epopa
Export Promotion of Organic Products from Africa

№ 3 – September 2006

EPOPA news-letter

Bigger Holes for Bigger Fish

One of the benefits of being an EPOPA country manager is that, at least once a year, you are required to visit all the projects to meet the stakeholders and see how the project is going, especially at the grass-roots level. Perhaps "grass roots" is an ill-chosen phrase in this case. It was, after all, fish, and not plants, that I was to view during a visit to the Greenfields Organic (or, more correctly, "Sustainably Harvested") Fish Project.

This project is based on Lake Kyoga, which spreads out like a hand across central Uganda. It is a lake of diverse features. Some areas are very deep and are favoured by Nile perch. Others are shallower and favoured by the growing fingerlings and the tilapia. The river Nile bisects the lake. As we raced across the lake in the project boat, it all looked (to my unskilled eye) like endless brown lake water. The accompanying project officers, all of whom are fishermen to the core, knew better. They told me exactly when we had entered the flow of the Nile through the lake and when we had left it.

It has been quite a struggle for the EPOPA project leader, Hilde De Beule, and the project field staff, largely employed by Greenfields, to find the right communities to work with. The village where the processing facility (where the fish are washed, marked that they have been caught using legal methods, and then immediately put on ice) is based has proved to be less than enthusiastic about the project, because of the very diverse tribal makeup of the community. However, the fishing villages across the lake have proved to be much more co-operative and have joined the project with enthusiasm, apparently because they have lived in that area for generations and know that the supply of fish from their precious lake will be their major source of income for many years to come. Hence on the landing site at Kiga, you see a whole flotilla of brightly painted yellow and green canoes--a clear sign that these are project fishermen and that they will be using legal nets and proper fishing techniques.

1: Giant Nile perch caught by the project fishermen being stored in an icebox boat. 2: Small fish caught using illegal tackle. 3: Organic fish being washed and marked at the project base. Photos: Alastair Taylor.

It is in this regard that I learned the major lesson of my visit and gained the inspiration for this article and, I suppose, the whole project: The Kiga fishermen (among whom are several women) told me that, with the legal nets of the recommended net size, you catch fewer, but larger, fish. Because payment is by weight, these few large fish add up to more than the many small fish that non-project fishermen catch using undersized nets.

Bigger fish, greater weights, higher payments--and many small fish remaining in the lake to become more big fish and thereby continue the sustainable fisheries process!

If you want to learn more about the sustainable fish project, and how perhaps to get a hold of the fish, check www.kyogawild.com/contact.html.

Alastair Taylor – country manager – EPOPA Uganda

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EPOPA project – Kawacom export of organic coffee

Project Ends with a Flourish

Within the EPOPA project from 2002 to 2005, Kawacom increased its exports of organic coffee, the number of contracted farmers, and the number of field staff working with extension. Targeted sales at the end of the project were 1,000 tons per year; at the end of the project, sales were more than 2,000 tons. Even more encouraging is the fact that their business with organic coffee from the project areas keeps growing.

How it all began

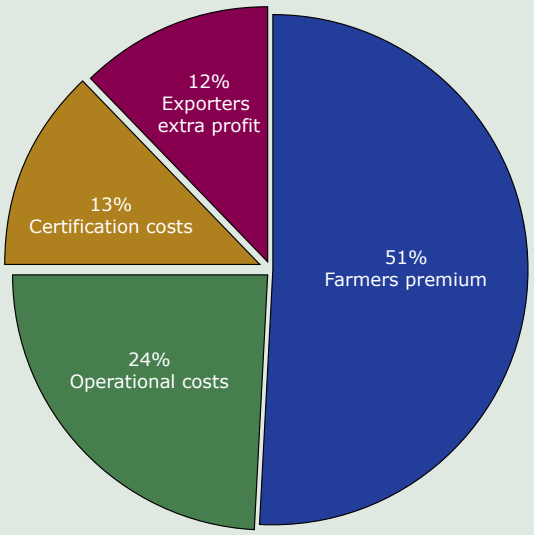
There had been a project with Kawacom in 1998 in Bushenyi. In 2002, the project was transformed to include the Sipi and Paidha areas. The project now involved all types of coffee produced in Uganda:

1. Robusta coffee from the Bushenyi District
2. Bugisu Arabica coffee from Sipi, Kapchorwa District
3. Okoro Arabica coffee from Paidha, Nebbi District

The goal of the project was to consolidate the three areas, increase farmers' incomes, and improve the sustainability of the farming system. Five thousand farmers in the Nebbi District, 6,000 farmers in the Kapchorwa District, and 4,000 farmers in the Bushenyi District were targeted as beneficiaries.

Nothing less than success

During the project period, about €430,000 has been spent on implementation, while the farmers have sold coffee worth about €4.9 million. About 12 per cent, or €600,000, was extra income because of the organic premium.



Graph 1. Distribution of the organic premium. The pie chart shows the average for the three projects. Note that the farmers get the lion's share.

To achieve the goals, there were six major activities in the extension proposal, five of which were completed:

1. stepping up field officer training
2. increasing the number of activities with the farmers
3. development and diversification of markets
4. support in certification costs for Nebbi
5. providing communal pulping stations

From the start, there was also a plan to develop a second organic crop in the areas. This never took off, as Kawacom only trades in commodity products, and the quantities of the crop never would have been very big. But five out of six is really good.

Impacts and results have been followed up in surveys

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Table 1. Objectives and achievements

Kawacom Coffees	Intervention logic	Objectively verifiable indicators	Achievements at end of project
Overall objective	Improve the livelihood of the rural population in the project areas through improved organic exports.	Higher income from coffee sales compared to conventional farmers	Higher income for farmers in all three areas (i.e., Sipi, Bushenyi, and Paidha)
Project purpose	• The three projects are to be consolidated • Farmers' incomes are to increase • Organic coffee exports are to grow to reliable, sustainable levels	• Exports of 200 tons Okoro Arabica; 500 tons of Bugisu Arabica; 300 tons of Bushenyi Robusta • Exporters continue to be interested	• In 2005, exports of 1,167 tons of Okoro Arabica, 366 tons of Bugisu Arabica, and 589 tons of Bushenyi Robusta • Kawacom is expanding its organic-coffee trade
Results	• Increased exports of organic coffee into various countries • Higher income for the coffee farmers • Improved financial sustainability for exporter • Compliance with Utz Kapeh code • Extension system in place	• Exports to various countries • 25 per cent higher income from coffee • Exporter makes profit on coffee from all sites • Utz Kapeh compliance accepted • Training manual	• Kawacom exports to the Netherlands, followed by Sweden, the United States, Belgium, and Germany • An average of 17 per cent higher income for farmers • Kawacom has a limited profit of export of organic coffee • Bugisu and Okoro Arabicas are Utz Kapeh certified. The certificate has opened up exports to the U.K. market • Training manual has been developed

Continued from page 2: 'Project ended – business flourish'

conducted for the various parts of the project. In table 1, you can see a summary of objectives and achievements.

As shown in table 1, the volumes of exported coffee at the end of the project were much larger than targeted.

Flexible management

One of the keys to the success was the flexibility in the project management. Kawacom found that the U.K. market had a need for Utz Kapeh certification rather than organic certification. This was not in the original plan, but the certification was implemented, the buyer was happy, and Kawacom could satisfy a larger market than before.

Kawacom has found that organic coffee is good business. Even though support from EPOPA has ended, Kawacom has kept up the pace and is even expanding.

Environmental awareness

The field activities have raised farmers' interest in trees and, as they feel the effects of deforestation, farmers are starting to plant trees in the area. In some areas, they face the added threat of landslides. The actions taken by EPOPA in erosion-control awareness have resulted in some of the farmers actively practicing erosion control.

Capacity building was conducted with the project staff, and the project not only continues to run, but it has also expanded from 13,000 to 16,000 farmers. There has also been a subsequent expansion in the project staff.

Business continues

Since support from EPOPA has ended, Kawacom has made contact with Starbucks, which is interested in the Okoro coffee. To boost production, they have added 3,000 farmers to the projects.

Kawacom has also continued to run annual training programmes for the field officers. Nursery support in the project areas has been continued, as have demonstration gardens and village seminars.

Pelle Fredriksson – EPOPA newsletter

No More Talking. We Need to Be Practical about Research

People say that growing vegetables organically is a most difficult task. For us in the organic movement, however, difficulty is not an issue; our task is to ensure that we do everything we can to make our vegetables as organic as possible.

The small trials on the EPOPA properties have taken a step forward. A vegetable garden of half an acre has been established at Nana Farms in Kayunga District. The trial is being done on the use of materials available freely (or very cheaply) that can be used in organic pesticide formulations. These include plants such as pawpaw leaves, challis, ash, and Lantana camera. Pawpaw leaves are being used to spray crops against fungal diseases such as tomato blight, while the rest of the materials are being used against common tropical insects such as grasshoppers, cutworms, caterpillars, aphids, and ants.

Among the crops on trial are tomatoes, cabbages, cucumber, and white onions. The first nurseries were raised around April 2006, and the first batch of the seedlings was transplanted in late May. The research aims to discover the specific weights of material and dilution with water required in each formulation, the correct period of fermentation, filtration, dosages, and the number of times spraying is required. Trials will be carried out on various crops using different formulations.

At the end of the research, we should have come up with solutions to the problems faced by organic farmers wishing to grow vegetables organically.

Thanks to EPOPA Uganda for allowing me to use the office garden for the first trials since 2004.

Lucy Senya – local expert – EPOPA Uganda

EPOPA initiative against Climate Change

Results from the carbon baseline study in Tanzania

The clearing of fallow vegetation by slashing and burning is still common in Tanzania.

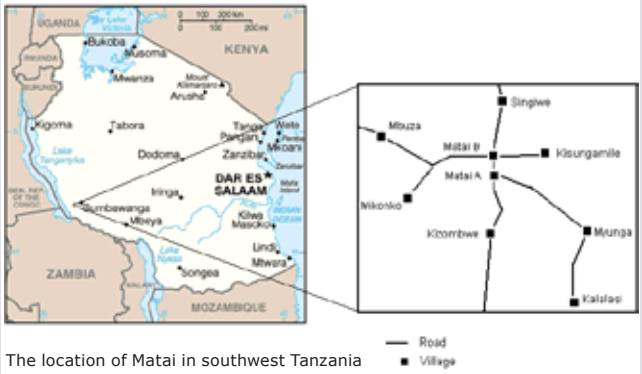
Climate change and organic agriculture

Climate change, caused by increased amounts of greenhouse gas in the atmosphere, is a growing concern. Generally, two strategies are followed: mitigation and adaptation.

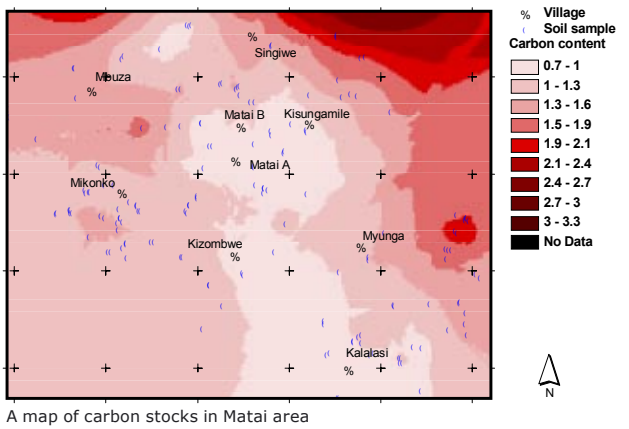
Climate-change mitigation aims at reducing emissions (e.g., by reducing fossil fuel use) and at capturing greenhouse gases (e.g., through carbon sequestration in forestry plantations). Industrialised countries can achieve part of their emission-reduction targets by investing in climate-change mitigation projects in exchange for "carbon credits".

Climate-change adaptation aims at protecting vulnerable populations (e.g., through reinforcing dikes to avoid flooding by the rising sea level). In large parts of Africa, rain-fed agriculture will face more droughts and more extreme rainfall events, which calls for an agricultural adaptation strategy.

Organic farming, especially in combination with conservation farming (reduced tillage and crop-residue mulching) and agroforestry, has the potential to mitigate climate change by reducing emissions (avoiding chemical inputs) and sequestering carbon in soil and trees. Organic farming is also better adapted to climate change by the increased capacity of the soil to hold water.[1]



The location of Matai in southwest Tanzania



A map of carbon stocks in Matai area

Since 2004, Agro Eco has studied the possibilities of organic farming benefiting from the funding of climate-change mitigation projects. Climate projects working with agriculture or forestry require a baseline study of the carbon stocks in the soil and vegetation to enable the subsequent evaluation of the effect of the carbon sequestration.

EPOPA carbon baseline in Tanzania

EPOPA, through the learning and sharing programme, has invested in a carbon baseline study in Matai Ward, an area where the EPOPA Tanpro peanut project runs from 2005 to 2008. Janneke van Dijk and Marleen de Blécourt (Wageningen University) looked at current farm practices[2] and soil carbon stock.[3] Béatrice Riché (Oxford University) looked at farmers' perception of climate change and took farmers to demonstration sites where some of the improved practices were on display.[4]

An average farm family in the Matai area consists of seven persons. It has 15 hectares of land, of which seven hectares are cultivated and eight hectares lie fallow. The most important crop is maize, followed by sunflowers, beans, and peanuts. Crops are grown in rotation, but there is no use of green manure or improved fallow. Anyone can enter fallow fields to collect firewood or allow animals to graze. Most farmers burn the fallow vegetation and the crop residues.

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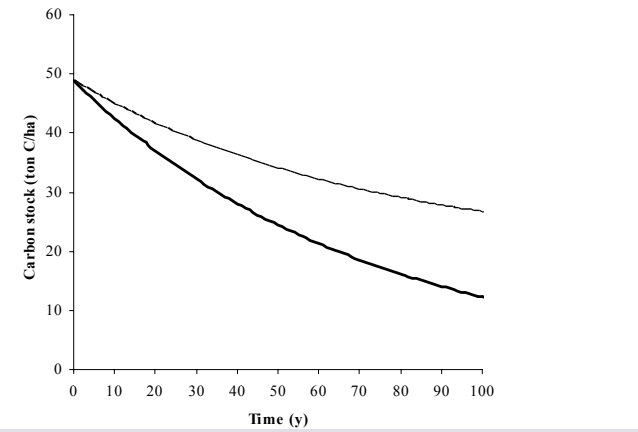
Continued from page 4: 'EPOPA initiative against climate change'

Although many farmers (63 per cent) have cattle, only a minority (23 per cent) uses manure to fertilize their fields. The main constraint is the lack of a cart for transport.

Farmers have experienced a later start of the rainy season and more erratic rainfall. Data from the last 30 years do indeed show a decrease in the rainfall in October.



Simulated changes in carbon stocks over time. The bold line shows the continuation of current practices. The thin line shows application of cattle manure and a cease in the burning of crop residues.

The average organic-carbon content of the upper 30 centimetres of soil is 1.25 per cent, representing a carbon stock of 49 tons per hectare. A simple soil-carbon simulation model predicts that under current farm practices, the carbon stock decreases to 37 tons per hectare in the next 20 years. That's bad news. If farmers stopped burning crop residues and applied all manure to their fields, the carbon stock would still decrease to 43 tons per hectare.

Promising improved practices

This means than even more intervention is needed to maintain or increase carbon stocks. Researchers and farmers in and around the Matai area have tested two promising options: conservation farming and improved fallows.

In conservation farming, the soil is not turned over but only opened along a narrow sowing line, using an oxen-pulled ripper, leaving crop residues as mulch. Farmers from Matai who visited the demonstration sites were enthusiastic about the reduced tillage but saw the lack of the special ripper as a major constraint.

Improved fallow can be planted with perennial shrubs such as *Tephrosia* or pigeon pea, and annual cover crops, among them *Mucuna* and *Crotelaria*.

Improved fallow with the leguminous shrub *Tephrosia volegii* promises to restore soil fertility and increase stocks of organic carbon.

Farmers experienced improved crop yields, and they find this practice appropriate because of the abundance of fallow land. Problems included insect damage, the accidental introduction of grazing animals, and fire.

When discussing a possible carbon project, farmers set the priorities for (1) carts for the transport of manure, (2) tree seedlings, (3) rippers for reduced tillage, and (4) seeds for green manure and improved fallow.

The next step: finding funding

Although there is much interest in this project, we still need to find funding. This baseline study will help convince potential donors that EPOPA is taking a serious initiative against climate change.

Ferko Bodnar – EPOPA – September 2006

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2. De Blécourt, M. 2006. Baseline survey, Tanpro groundnuts Tanzania. EPOPA, Grolink / Agro Eco, Bennekom.

3. De Blécourt, M. 2006. Soil carbon stocks and the potential for soil carbon sequestration through organic agriculture: A case study in Southwest Tanzania. Intern report, Wageningen University.

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Soil and Water Conservation in Moshi, Kilimanjaro

The continuous cultivation of coffee on steep slopes is a major cause of diminishing crop yields.

Although many efforts have been made by various organizations (among them the Pamoja Trust and the Irrigation Training and Economic Empowerment Organization [IRTECO]) to stimulate conservation activities, the effects reached only a few organic coffee growers in the region. With KNCU (the Kilimanjaro Native Co-operative Union), EPOPA made a big contribution to efforts within the export project. Sons and daughters of coffee growers were trained in various soil- and water-conservation measures suitable for the area.

Farmers being trained in the excavation of fanya juu. Soil- and water-conservation measures have led to increases of up to 100 per cent of coffee harvests on the slopes of Kilimanjaro.

The training of paraprofessionals (the children of coffee growers) has created capacity at the grass-roots level and made skills available within the community. Implementation has had a good impact, as indicated by reduced soil erosion and water loss, the improvement of soil fertility, water infiltration, and harvests that have increased by 50 per cent to 100 per cent. Water that used to move down the slope, washing soils away, is now a useful resource, through the excavation of water-harvesting ditches, fanya juu, and the construction of bench terraces.

Capacity building

Paraprofessionals or village technicians are individual farmers selected within the villages who have received training according to each individual's needs. EPOPA focused on increasing their capacity to conserve the soil water and the environment as well as improving their understanding of general organic-farming practices. The main objective of training these farmers is to get trainers of farmers who can assist in the layout and demonstration of different soil and water conservation measures suitable for their area.

Training of field officers

EPOPA trained 24 KNCU field staff in soil and water conservation. These field officers were taught the skills needed to design various soil- and water-conservation measures. The learning was a participatory process which enabled each farmer to develop a land-treatment plan. They were also trained in monitoring and evaluation of soil- and water-conservation measures.

Measures implemented are fanya juu, bench terraces, trash lines with live pegs, and the planting of *Desmodium* for fertility management and soil cover.

Fanya juu

Fanya juu involves the development of a terrace with an embankment at the upper side of the trench so that, over time, the erosion process itself is used to form a terrace. Fanya juu is recommended in areas with slopes below 35 per cent. Steeper slopes require that the specification be adjusted and should be combined with other measures, for example cut-off drains (COD) or collection infiltration detention ditches (CIDD).

Bench terrace

A bench terrace is recommended for areas with good soil depth (not less than 90 cm deep) with clay and loamy soils. In the Kilimanjaro region and Mbeya Ireje District, farmers have been trained on the proper layout of the measures and construction.

Follow-up by EPOPA

EPOPA is making a regular follow-up as part of the on-the-job training of field officers and paraprofessionals. During this course, the field officers, paraprofessionals and farmers are trained in fertility management of terraces and the proper planting of crops on terraces. For moisture and fertility management, the project leader advised farmers to apply farmyard manure and mulching on coffee fields, whether terraced or not.

Samuel Zongolo – assistant project leader – EPOPA Tanzania

Organic Sector Development Training

In the last phase of the EPOPA programme, training was given to a limited number of staff persons working for the exporters. Training was then focused on providing field staff with the knowledge and skills needed in their daily work. But there are many more persons and companies with an interest in organic agriculture, in developing organic activities, and in setting up organic export projects. One can use the experience gained within EPOPA in Tanzania and Uganda to build capacity on a more general level, by training representatives of farmers' groups, entrepreneurs, managers of development agencies, representatives of rural NGO's, and some regional and national authorities. This will strengthen the organic sector, creating a better framework and strengthening the organic-export base.

On this basis, Organic Sector Development Training (OSDT) was conducted in Uganda and Tanzania for the first time in 2003. This year it was given in Tanzania, Uganda, and Zambia.

The objectives for the training programme are

- to create a broader knowledge base about organic agriculture on which organic-export activities can thrive
- to facilitate the establishment of appropriate supporting structures for organic agriculture by ensuring that there are sufficiently trained persons
- to make decision-makers more aware of the opportunities for and threats to the organic sector
- to stimulate the emergence and implementation of new organic projects, some of which have export potential

In Uganda, there were contacts with Uganda Martyrs University from the first year. The training programme is now under their umbrella and is part of their regular course catalogue. The programme has been adapted to suit Ugandan conditions and seems to be much appreciated by the organic sector in Uganda. This is also a complementary objective that the organic sector in the respective countries will find a model of how this type of training programme can continue.

The target group consists of persons seriously interested in developing organic projects or programmes, supporting structures (i.e., extension service, organic sector body, etc.) or policies in the country.

Group picture from the first Organic Sector Development Training held at Uganda Martyrs University in July 2003. Photo: Peter Lustig.

The outline of the curriculum is based on the following five major areas that are covered by the lecturer and in the reading material:

- organic agriculture production
- framework of organic agriculture
- markets for organic products
- standards certification and regulation
- how to set up an organic project

There is a mixture of lectures, group work, individual work, and study visits to ensure that a wide range of learning methods is used. During the programme, each participant shall also work with a real plan that he or she can implement (or help implement) after training. Such a plan can be the development of a project, the establishment of an institution, or the development of national policies. This will give the participants the possibility of putting their knowledge to work and will put the knowledge into a useful context.

During the first year, there were some problems attracting private-sector companies, but that has improved over the years. Now, more and more companies see the benefit of having well-trained staff. We can also see that the larger network that is created with the training programme is strengthening the organic sector year by year.

According to the evaluations, the participants seem happy with the content and the way the training programme is conducted. I end with a quote from one of the participants: "It was a fantastic course! It's like acquiring a BSc degree in two weeks. Thanks to the organizers."

Peter Lustig – Project consultant – EPOPA

News in brief

Annual project-leader meeting

In such a large programme as EPOPA, it is important to constantly share experiences among the various projects. Hence, project leaders, country managers, and programme management gathered for a one-week meeting in Jinja, Uganda, September 11–15. The schedule contained updates of EPOPA, certification requirements, and the current market situation. The meeting then focused on how to further improve the performance in the projects and how to hand over experience and elements of the concept to exporters and service providers in each project and country.

Organic exports fight poverty

KCU – EPOPA summary of end report.

The project with the Kagera Cooperative Union (KCU) started in 2002 and ended in 2005. The project aimed to consolidate a project that had started in March 1999. The project worked with 3,200 farmers in north-western of Tanzania, producing both organic fair-trade (FT) Robusta and Arabica coffee.

In the final season of the project, the project exported 424 tons of Organic FT Arabica coffee. By January 2005, KCU had started the expansion to 5,000 farmers. The project was able to market all the organic FT coffee in the final year. The project also won the award of best organic Robusta at the IFOAM Organic Coffee Conference.

The exporter met the targets for its contribution and covered field costs and certification costs. The exporter pre-financed the crop. The project has continued and has proved to be sustainable.

In total, 160 farmer trainers were trained and were active in training farmers; 82 per cent of the farmers reported having received some training from them.

During the period covered by the project, the farmers increased their incomes from US$8 to US$105 per farmer per year. This extra income is reflected in the increase in permanent buildings and the greater number of farmers owning bicycles, as recorded in the impact survey.

In that survey, 92 per cent of the farmers reported that they had benefited from the project and believe that it has improved their livelihood.

Gerbert Rieks – Project consultant – EPOPA

EPOPA calendar

Date	Place	Topic
5 October	Uganda	National consultations on Organic Standards East Africa
13 December	Nairobi, Kenya	Public forum about regional and international organic standards

Current EPOPA projects

Uganda

barkcloth, Barkcloth
Cardamom, UCIL **New**
dried fruits, Amfri **New**
essential oils, Tamteco **New**
fish, wild-catch frozen "Kyoga wild", Greenfields
fresh and dried fruits, BioUganda
fresh fruits, Biofresh
hibiscus, Nile Teas
honey, Bee Natural Products
processed food ingredients, RECO
sesame, Outspan
shea oil, North Ugandan Shea
vanilla, Ibero Robusta coffee
vanilla, CNPU OAE
vanilla, Lakeside Vanilla and Fruit Products

Tanzania

arabica coffee, KNCU
canned pineapples, Dabaga
ginger in syrup, Golden African
peanuts, Tanpro
honey, Fidahussein
sesame, Biosustain **New**
vanilla, West Lake Agriculture Products

New: Projects designated "New" started in January 2006 or later.

If you want to know more about a certain project please contact the Country Manager; see contact info in box below.

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