## INTERNATIONAL PLATFORM

# Towards microfinance at the service of health

In the Koudougou region of Burkina Faso, microcredit and the highly nutritious alga spirulina have been combined in order to improve the health and income of rural Burkinabe people. The adaptation of a classic marketing methodology and on-site immersion with the local actors were the key to the success of the pilot project. The current objective is to optimise this model so that it can become sustainable and be replicated, taking into account different contexts.

Spirulina is a microscopic green alga which first appeared more than 3.5 million years ago and thrives rapidly and naturally in the alkaline lakes of hot and sunny regions. Its nutritional composition makes it a unique food source. Consumed traditionally by the Aztecs and by the Kanembu people of Chad, this cyanobacterium was rediscovered by scientists some 40 years ago. Since then, researchers, particularly in the United States and in Asia, have been working to compile and explain the therapeutic effects of spirulina. In fact, 5 to 10 grams a day, that is two spoonfuls sprinkled on any dish, contribute to fighting malnutrition and strengthen the body by remarkably boosting the immune system. Its effects are explained by its rich protein content together with numerous and rare trace elements which play an important physiological role.

■ The unjustified stocks

Burkina Faso is the main producer of spirulina in West Africa despite the fact that this plant is hardly known and consumed there. Stocks have even been

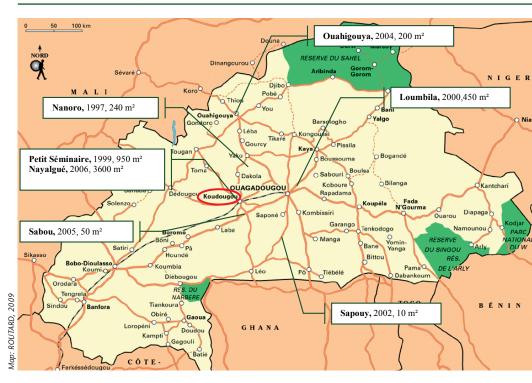
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Agricultural engineer Caen, France raphaellebirot@hotmail.fr accumulating in the farms, particularly since 2006. That year, production began on the Nayalgué farm, situated in Koudougou, not far from the Petit Séminaire farm, which was the first to be established in 1999 (see map). The State and the Ministry of Health supported the construction of this large farm which in an initial stage doubled the national production area and will eventually treble it. By the end of 2009 the national production area had thus increased from 1,900 m² to more than

3,500 m<sup>2</sup>. Unfortunately, neither the distribution networks nor the promotion mechanisms have been developed to keep pace.

Entrepreneurs du Monde ("Entrepreneurs in the World" – see Box) arrived in Burkina Faso in 2008 with the intention of promoting spirulina among the poor rural populations of the Koudougou region (in the Centre-West of the country). An enlightened choice against a backdrop where microfinance failures

#### Localisation of seven spirulina farms in Burkina Faso



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#### Entrepreneurs du Monde

Entrepreneurs du Monde is a French microfinance association based in Poitiers and created in 1998. It operates in nine countries (Philippines, Haiti, India, Vietnam, ...). In 2008, it supported 49,000 micro-entrepreneurs and granted 66,800 loans with an average sum of 138 euros. Funds for the loans come from individual donations, private partners (enterprises and foundations) and public funding. To increase the likelihood of achieving sustainable results, the association works only through local microfinance institutions.

www.entrepreneursdumonde.org

are often linked to health problems. Indeed, even in cases where illness does not prevent a person from actually working, it often drives them to use the credit to seek treatment for themselves or for another family member, instead of investing it in their incomegenerating activity that will allow them to reimburse the loan.

It is an inconceivable situation that large stocks of spirulina exist in the farms while one out of every five Burkinabe child is malnourished. The association decided to respond by working out a detailed project that would really address the local difficulties and needs. In this simplified context of a misalignment between supply and demand, Entrepreneurs du Monde took inspiration from classic marketing methods and tools and adapted them to the context of a development project. The first stage involved a diagnosis of the value chain and was carried out with the actors along the chain: producers, Ministry of Health, healthcare promoters, pharmacists, and urban and rural consumers and non-consumers. It revealed the people's real need for a rich foodstuff like spirulina, particularly among the rural population. However, numerous hurdles had to be overcome: not only was the product unknown, but the distribuLoumbila, one of the seven spirulina farms in Burkina Faso.

tion network was also limited and the retail price too high. A further element was identified, namely that malnutrition is not only caused by difficulties in accessing a quality diet but also by lack of nutrition education.

#### An income-generating activity at the service of community health

In order to anchor the project locally, Entrepreneurs du Monde associated itself with AslEnA. It is a Burkinabe association working in the rural environment, usually alongside women's groups. It supports them in their savings and credit activities and also in improving income-generating activities and certain aspects of everyday life (such as providing training in hygiene, nutrition, or husband-wife relationships). To this end, the women meet at the Mutuelle de Solidairité (Mutual Solidarity Group - MUSO, see Box) once a month. Entrepreneurs du Monde and AsIEnA created an action plan in order to develop the sales network for marketing spirulina and disseminate its nutritional benefits. A project coordinator was recruited to develop and supervise two spirulina sales networks. The "village sales network" proposed one person from each group to take several one-day training courses. During these activities, the course participants become familiar



with spirulina, learn how to manage stocks and create customer loyalty and, above all, they are trained in nutrition awareness in order to talk about this aspect with their customers. As from the first training session, an initial batch of spirulina packets is offered to each person. They then go back and sell it in their own villages and in the surrounding area. The retail price is the base price in the national market: a little less than 1 euro per 25 grams. Once this stock has been sold, the person repays the loan and can purchase a new batch. The second network, called the "social sales network", is aimed at the members of microfinance groups. At every monthly meeting they can purchase spirulina at half price and the project coordinator raises their awareness of the importance of nutrition and the benefits of spirulina. This reduced price is granted by the

#### The Mutuelles de Solidarité ("Mutual Solidarity Groups" – MUSO)

MUSO are freely formed groups of 15 to 30 people, generally women, who meet once a month with an external coordinator. The initial concept is for every member of the MUSO to contribute a fixed amount per month so that a savings base is gradually built up. This sum is shared out monthly as microcredits to the members who need it. They invest the money in their income-generating activities to pay themselves an income, repay borrowed capital and pay the loan's interest. The interest is added to the savings pool thus increasing the groups' available credit fund. Within the group, members choose "to regroup in order to achieve similar objectives, to advance together on the road to self-employment thanks to the pooling of money and sharing experiences at the social, economic and financial level" (Practice Note Entrepreneurs du Monde).

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Woman from a solidarity mutual of the Burkinabe Asiena association buying spirulina at half price during a social sale.

■ Benefits to be developed

A project assessment carried out at the end of the first year of implementation revealed both strengths and weaknesses. The men and

women vendors feel proud of their new activity and the nutritional advice has been understood by the population. Vendors need further training and require close support to motivate them and help them sell. Consumers appreciate spirulina and report an improvement in their health, but the price is still too high. This is usually the case between July and November when granaries – and purses alike – are empty and work is needed in the fields to prepare the next harvest.

In the first place, therefore, the project coordinator has to maintain close on-site contact in order to follow up on the sales activities and to provide methodological support to the vendors. This job engenders costs to the executing agency without generating any income, since the total sales profits are left for the vendors. Moreover, spirulina would have to be sold at the social price of 0.10 euros per daily dose in order to make it a viable offer.

At present it is impossible to attain this price, but if vendors are able to boost demand on site it is hoped this will lead to an increase in production and a drop in the producers' cost price.

#### ■ A promising future

In the meantime, Entrepreneurs du Monde and AslEna consider that poverty reduction can also be achieved by reinforcing the local employment network and supporting entrepreneurship among the poorest.

It is from this perspective that the "spirulina and microfinance" project will be replicated in other regions of Burkina Faso. The strategy used and the results obtained were presented in March 2010 at the 3rd Pan African Colloquium on spirulina. Organisations from Benin and Mali attending the Colloquium also expressed their wish to replicate this experience, adapting it to their own countries.

For more information on spirulina visit: www.antenna.ch www.technap-spirulina.org www.spirulinaburkina.org

To buy spirulina in Europe, support the Petit Séminaire farm in Burkina Faso and help promote spirulina for the destitute visit: www.spirulidaire.org and info@spirulidaire.com

farms. Even though still high, it is aimed at facilitating the dissemination of spirulina in households with a food budget below 0.25 euros per person per day, which is equivalent to 5 grams of spirulina at the regular market price.

### ■ Encouraging results expressed in numbers

By the end of the first year of the project, 26 vendors had been trained for the village network. Two of them dropped out but the other 24 sold 69 kg at a profit of 6.7 euros per kg. The two top vendors made a profit of 8 euros a month without fulltime dedication to this activity. Through the social network, more than 900 people received awareness training on the properties of spirulina and 35 kg were consumed. So in all, about 100 kg were sold, which amounts to 25 percent of the annual sales volume of the country's second farm which has existed for ten years.

#### Zusammenfassung

Spirulina ist eine hochwertige Alge, die in Burkina Faso produziert wird. Durch ihren besonders hohen Nährstoffgehalt spielt Spirulina eine wichtige Rolle in der Behandlung unterernährter Menschen oder von Menschen mit geschwächtem Immunsystem. Vor diesem Hintergrund wollen eine französische und eine burkinabeische Organisation gemeinsam ein Projekt zur Förderung von Spirulina und zur Ernährungsberatung in ländlichen Regionen realisieren. Dabei werden lokale

Mikrofinanzgruppen ermutigt, sich für den Spirulina-Verkauf und die Ernährungsberatung fortbilden zu lassen. Das Projekt schafft neue Einkommensquellen, trägt zur Diversifizierung des lokalen Arbeitsmarktes bei und hat zudem positive Auswirkungen auf die Gesundheit der Menschen.

#### Resumen

La espirulina es un alga de alta calidad producida en Burkina Faso. Dadas las especiales características de su composición nutricional, la espirulina juega un rol eficaz en la recuperación de las personas desnutridas o con sistemas inmunológicos débiles. Tomando en cuenta estos hechos, una entidad francesa y una burkinesa han formado una asociación para desarrollar un proyecto dirigido a promover la espirulina y ofrecer asesoramiento nutricional en áreas rurales. Se alienta a los grupos locales de microfinanzas para que se capaciten como vendedores de espirulina y asesores nutricionales. Esta actividad generadora de ingresos ayuda a diversificar el empleo local y tiene un impacto positivo sobre la salud de la comunidad.