

Sustainable Agricultural Initiative: Three Food Giants Reinvent 21st Century Agriculture

By Marsha Johnston, SBI Commissioning Editor

Any investor knows that one of the primary keys to ensuring profitability for a manufacturing concern is secure access to the top-grade raw materials necessary for the finished product to meet consumer expectations for quality.

Securing access to all of the agricultural raw materials needed for quality food production has always been an intricate task. But in our era of multiple tainted food scandals, a ballooning world population and shrinking resources such as arable land and water, securing such access has taken on a particular urgency.

"If all of the predictions are correct, we will have to produce, with remaining natural resources, twice as many calories. We have to make sure that, over the next 20-30 years, with the growing demand for raw materials, we will have enough," says Hans Joehr, Nestle's corporate head of agriculture. Jan Kees Vis, head of Unilever's sustainable agriculture programme, says that world population growth coupled with higher disposable incomes and the consequent increase of protein in diets will strain current agricultural practices to the breaking point. "We just can't do it," he says simply.

Last May, Danone, Nestle and Unilever were brought together by a common conviction that they had to find a solution other than organic farming to ensure food quality for masses of increasingly skeptical consumers.

Says Jean-Francois Molle, Danone's director of food safety, regulatory and environmental affairs: "We knew organic farming could never represent the totality of the business, due to a lack of raw organic materials, and its elevated prices. The organic market would grow, certainly, but would remain a niche." Even for environmental protection, says Molle, organic farming is not necessarily the answer, requiring huge expertise and extremely careful implementation. He said, adding that yields are generally lower than those from conventional farming, for some crops up to 50%. Obviously, he concludes, "For the mainstream, we had to redefine agricultural practices that are modern and intelligent, even if they are not necessarily organic."

Beyond Competition

Thus, the three giant rivals of global food production put aside their competitive armor to launch what they are calling the Sustainable Agriculture Initiative (SAI). Along with TNO, a Delft, Holland-based consulting firm for applied scientific research that was hired as an independent project coordinator, they developed a business plan and position paper that outline the importance of sustainable agriculture and the issues pertinent to it. In those documents, they define "sustainable agriculture" as follows: "A productive, competitive and efficient way to produce agricultural raw materials, while at the same time protecting and improving the natural environment and social/economic conditions of local communities."

Under that philosophical banner, the initiative's objectives are to:

- Catalyse development and implementation of internationally accepted principles and standards for sustainable agriculture;
- Contribute to the development of sustainable agricultural practices by acquiring and sharing knowledge and expertise;
- Support research programmes and other related local and international activities;
- Communicate with key opinion makers to ensure alignment with national and international agriculture policy making as well as mainstream consumer concerns;
- Enable others to join the initiative.

"Sustainable agriculture is the future," says Jaap van der Vlies, current SAI platform manager who

works for TNO's sustainable development department. "It is therefore vital that knowledge and experience are spread and shared broadly if the supply of efficiently and sustainably produced crops is to be guaranteed for the longer term. But not all of the questions that revolve around sustainable agriculture have been asked, let alone addressed. So, to find out what the issues are and how to deal with them, Danone, Nestlé and Unilever have come together in this pre-competitive collaboration."

Reform Must Be Unified Effort

The founders' willingness to let down their habitual guard is a measure of the urgency of the need and of their commitment to achieving results. After joking about how "distasteful" it is to cooperate with rivals, Danone's Molle gets serious about why Danone did not go it alone. "Despite our position as world leader for certain markets, Danone's weight alone is too small to be able to change agricultural practices and image worldwide," he says. So it wouldn't be sufficient for us to pound the table and say, 'This has to change.'"

Secondly, he says, had each company reformed its agricultural practices alone, it would likely have created a marketing war with competitors about whose practices are truly sustainable. "After a while, the consumer would have lost all confidence in the concept, saying, 'This is not for real, because if it were, they wouldn't be fighting over it.' We have tried to come up with a mutual, reasonable definition that would not us get into a marketing war," he says.

Indeed, says Nestlé's Joehr, his company simply considers access to raw materials worldwide a "pre-competitive issue." "We would really try to enhance agriculture as a whole, worldwide, to produce as much as possible, because we believe that competition starts at the factory, developing products, and not at the level of having exclusive access to raw materials," he says.

The same cooperative attitude will prevail for other food industry competitors who are expected to join SAI soon after it is established this summer, says Unilever's Vis. He adds that, since the three founders are Europe-centered, a number of US-based companies "will be among the first 10 or so companies we approach." "SAI needs to be global to deal with agricultural reform on both sides of the Atlantic. To get as many crops into the mix as possible, we need companies that deal with crops we don't deal with, or don't buy enough of, or for which we don't have good enough access to those farmers," Vis says.

A Platform «of and for» the Food Industry

"The initiative is primarily on the farm level. It's not one of these new consumer-targeted logo or certification schemes," says TNO's van der Vlies. "First and foremost, it is a platform of and for the food industry—to have a communication channel between food industry members and stakeholders. Farmers, conservation and environmental organisations, as well as governments, are being invited to contribute their opinions and enter into the dialogue. Initial signs point to significant interest in the SAI."

Unilever, Nestlé and Danone are currently looking for a host organization that will provide sufficient synergy for SAI activities. By the end of March, says Unilever's Vis, they will either set up SAI as a foundation in a city of their choice, or find a host association. Such candidates include the Food and Agriculture Organization in Rome, the European Food and Drink Association in Brussels, which goes by its French name of the Confederation Industrielle Agro-Alimentaire, or UNEP's Industry division in Paris.

Van der Vlies says TNO is beginning to survey organisations throughout the world that are occupied with sustainable agriculture to collect their research results and practical experiences. Once SAI's staff of 2 or 3 is in place, they will continue to gather and share knowledge about sustainable agricultural practices from member companies and other sources, he explains. Such an inventory, he says, "is central to the common assessment and implementation of good agricultural practices, which SAI regards, in addition to communication, as one of the main tasks to promoting sustainable agriculture."

The founding companies do not expect the cost of supporting SAI to impact their profitability. "The money Unilever is spending on the Sustainable Agriculture Initiative is not insignificant, but not

compared to our total research budget," says Vis. Unilever spends \$1 million per year on sustainable agriculture, which encompasses more than SAI. Adds Nestle's Joehr, "Sustainable agriculture has its price, but it is primarily a question of changing mindsets."

No Strangers to Ag Reform

Indeed, none of the three is a stranger to environmentally friendly or socially responsible agricultural reform initiatives, often called integrated farming, or simply quality assurance systems. Unilever has been running pilot SAI projects on its tea plantations in Kenya and palm oil holdings in Malaysia since 1998. The sustainable tea-growing practices developed there are being rolled out to other holdings in India and Tanzania, while news of its sustainable palm production will be communicated to stimulate debate on sustainability with the rest of Malaysian industry.

Danone has been working with systems of integrated farming for its dairy suppliers for the last couple of years. In France, approximately 100 agricultural practices for everything from fertilizer use to animal feed guidelines have been defined collectively, with farmers, the government, consumer associations and food manufacturers. Danone has been testing the methods to see how they might be extended to other geographical areas, says Jean-Yves Dupre, director of environmental affairs, and has begun applying quality control mechanisms for milk production to the rest of Europe, including eastern Europe.

Beginning this year, Nestle will begin a pilot project in northern China where it has a network of over 17,000 small farmers who deliver, on average, 40 liters of milk every day. "We will define sustainability, from energy use to waste production and living standards. We want to understand the impact of Nestle in an area where there really isn't any [industrial production]," says Joehr.

Indeed, sustainable agriculture goes further than integrated farming, says Danone's Dupre. "In sustainable agriculture, you take into account the cost of using natural resources, such as energy, which is not done in integrated farming. It also takes into account the impact of the benefit that accrues to local communities. With integrated farming, you are concerned primarily with good labor practices," he says.

Fewer Varieties, Water Big Worries

When it comes to SAI, although Unilever's Vis says there is not one particular issue that stands out as having to be solved, he admits there are a couple that worry the founders more than others. "One of the things that worries us the most is the tendency to rely on fewer varieties. Fifty years ago, 30,000 varieties of rice were planted in India and today 75% of the land is planted with only 10 varieties. They are not all necessarily extinct, but they are not being produced in seed. It would be a good idea to collect and keep them," Vis says.

The second, says Vis, is competition for water. "Agriculture uses 75% of all the fresh water on the planet, and more and more countries are water-stressed. Human consumption already competes with agricultural consumption in countries with limited rainfall, like China. Three of the world's five largest rivers today run dry before they reach the sea due to agriculture drain-off," he notes.

The challenge with all of the issues in sustainable agriculture, Vis adds, is that they are all multi-dimensional.

So, then, what do the founders expect from their initiative, particularly if they succeed in getting their target 12 member companies, including equally heavyweight North American companies such as Kraft, by January 2004?

The oft-cited objectives for SAI include new agricultural solutions with concrete benefits to farmers and increased trust from consumers.

"Talking to partners we have never been involved with before should generate new ideas. A lot of solutions come from NGOs because they are out of the box. It's true that sometimes they are so far out of the box that you can't get them back in! In fact, 90% of their ideas have been tried before, but 10% of them are great," says Vis.

"In the same way that industry has had to become more efficient and innovative, agriculture has to

do the same thing, to be able to produce enough and make enough money to pay for innovation," concludes Nestle's Joehr. "We are looking at the whole infrastructure for improving production, creating more value. Getting more transparency in food production creates trust with consumers for your brands."

Whatever the result of SAI, all three of the founders, like farmers, are patient, knowing that it will take time to effect the changes they desire. They are all targeting their most important raw agricultural materials first and rolling out SAI practices in markets where people are ready to listen and understand the issues. "It will take a long time to roll out in whole Nestle world. That's why we don't want to crow too much about it, because we too have to learn from this process," Joehr explains. "Agriculture changes slowly," adds Vis. "Farmers are conservative, planters even more so. Palm oil is in ground 25 years before replanting, tea for 75. We're talking about at least 10 years before seeing any big changes."

At Danone, Jean-Yves Dupre sums up the general feeling: "We believe in SAI, but we don't know exactly how long it will take, because it's a true revolution!"

BOX:

Sustainable Agriculture, Practically Speaking

In their position paper, Unilever, Nestle and Danone defined the following areas for concern, along with sample actions.

PEOPLE-SOCIETY

Food quality and safety

- ⤴ Producing agricultural products with balanced nutritional content
- ⤴ Ensuring the safety of raw materials produced on the farm
- ⤴ Minimising the risks of residues (e.g. pesticides residues, hormones) in the end-product

Farmers' skills

Ensuring that farmers are able to:

- ⤴ Use their knowledge capacity on locally adapted growing systems
- ⤴ Develop skills on different practices and technologies
- ⤴ Understand how their activities affect natural resources and the environment
- ⤴ Benefit from safe working conditions
- ⤴ Take initiatives to develop and implement sustainable farming activities

Rural social and economic conditions

- ⤴ Improving social relations between farmers and rural communities
- ⤴ Enhancing Empowerment (e.g. by providing facilities to build a strong rural social infrastructure)
- ⤴ Alleviate rural communities poverty
- ⤴ Ensuring and possibly creating employment

PLANET-ENVIRONMENT

Soil

- ⤴ Preserving and improving soil fertility and health to guarantee the performance of crops and livestock, minimising physical, chemical and biological soil degradation
- ⤴ Minimising soil erosion
- ⤴ Ensuring nutrients balance and nutrients correct application
- ⤴ Minimising waste and handling it properly to avoid pollution

⤴ Maximise natural regulation (e.g. by applying biological pest control methods)

Water

⤴ Ensuring that water is managed in an efficient way, minimising losses

⤴ Minimising negative effects of farming methods on drinking water quality

⤴ Minimising water salinity

Air

⤴ Reducing emissions

⤴ Exploring the possibilities of CO₂ sink functions and recovering waste gases

Energy

⤴ Ensuring that energy inputs from non-renewable resources are minimised

⤴ Exploring alternative energy sources (e.g. bio fuels)

Biodiversity

⤴ Maintaining a large number of varieties and species and according to local conditions

⤴ Preserving and possibly improving wildlife habitats

⤴ Exploring how to contribute to biodiversity and biological compensation/regeneration by building up natural assets

Crop & animal health and welfare

⤴ Ensuring that livestock is bred, housed, fed and transported properly

⤴ Ensuring healthy crops

PROFIT-ECONOMY

Food supply

Ensuring high farming outputs by:

⤴ Producing crops with good input/output efficiency

⤴ Promoting the application of modern technologies (e.g. land and crop/animal husbandry; economic analysis, simulation modelling) and exploring the introduction of new farming practices

⤴ Optimising the utilisation of products and minimising losses (e.g. in storage)

⤴ Maximising efficiency by achieving high outputs (e.g. yields) and minimising external input requirements

⤴ Enhancing positive economic externalities

Farmers' income

Exploring how farmers can benefit from:

⤴ Cost savings (e.g. from forms of zero or conservation tillage)

⤴ Increased yields (e.g. from increased soil fertility)

⤴ Market mechanisms that favour production of quality raw materials (e.g. increased traceability and control)

⤴ Making a positive contribution to the public good (e.g. biodiversity and landscape)

⤴ Availability of farming infrastructure, resources and preferable renewable inputs

⤴ Access to global markets

Sustainable food products

⤴ Delivering sustainable raw materials, as basic ingredients for food products, and addressing how to enable raw materials buyers to express their preference for sustainable raw materials? How to generate consumer demand and preference for sustainable products and help promoting sustainable agriculture practices?

⤴ Enabling raw materials buyers to express their preference for sustainable raw materials .

⤴ Exploring ways to generate consumer demand and preference for sustainable products.

