

### **Biotechnology Firms and Farmers Cooperatives**

Joint ventures between agribusinesses and farmer-owned cooperatives are becoming increasingly common. Within the past decade Cargill, the world's largest agribusiness, has entered into at least eight joint ventures with farmer's cooperatives, and at least that many deals with other privately owned firms, large public companies such as Dow Chemical and Monsanto, and state-owned enterprises in China. At the same time, CHS Cooperatives, the second-largest farmer-owned agribusiness, has been combining many of its farm supply and feed operations with other cooperatives and private firms. CHS now has more than a dozen joint ventures or ownership stakes in separate companies, mostly formed within the past three years. In January (2002). CHS combined its five flourmills with Cargill's owned 16 to form Horizon Milling, creating a flour miller larger than Archer Daniels Midland, the previous industry leader.

The popularity of partnerships in the food industry is due to the increased market power that they bring. Customers for processed products, such as food ingredients, are getting the ability to demand lower prices from volume buying. In the past year General Mills bought Pillsbury for \$10.4 billion and Pepsico paid US\$14 billion for Quaker Oats. Agribusiness companies have responded by joining, shrinking supply and wrestling back the power. Other benefits of combining operations include reduction of capital costs, creation of better and more reliable relationships with suppliers, less risk for entering in new industry segments or in using new technologies, and faster access to markets by sharing a partner's strength.

However, such partnerships are not always successful. Cargill backed out of deals a year ago that never got launched, and CHS bought out Farmland

Industries last year after a one-year try at a petroleum venture. Also, Cargill helped form e-commerce joint ventures with other companies that crashed after lift off. In May last year, *Forbes Magazine* called Cargill the “most magnetic” company in agribusiness – that is, the company with whom others want to form partnerships. Some farm cooperatives believe that Cargill brings global marketing acumen to their ventures that they cannot match. And conversely, Cargill looks for partners that match its talents, technologies or other resources.

Cargill’s first joint venture was with Miles Laboratories in 1974 when the two firms set out to create processes for making high fructose corn sweetener for the soft drink industry. The model was used in other countries in the late 1970s and 1980s to form ventures in China, Hungary and elsewhere to comply with national laws that demanded local partners.

Cargill’s 17 joint ventures include a deal with a Dutch firm to make lactic acid and a partnership with German firm to make lysine livestock feed ingredients. A good example is the Cargill-Dow Polymers joint venture, which began supplying renewable, agriculture based fibre materials to clothing makers and other manufacturers in November. In this case, Dow has the customer base and marketing experience to sell the fibres. Cargill brings the skills of processing to make the polymers derived from corn starch. For capital-intensive, thin-margin firms, the analysis typically centres on lowering costs to generate greater returns and reducing risk. Moreover, agribusiness and food manufacturing can be capital-intensive businesses, prone to cycles of over-capacity and vulnerable to world economic forces.

Sometimes, CHS finds itself competing with Cargill in some markets while its farmers are selling grains to Cargill in other markets. And at the same time, the two companies may be cooperating formally in the Horizon joint venture and working informally with shippers or overseas customers who are buying simultaneously from Cargill and CHS.

**Source:** RIS, based on *Agrafood Biotech* No. 80, May 7, 2002.

## **EU Environment Committee Sees Heated GM Debate**

Creating a genetically modified (GM) free label, the level of threshold for adventitious contamination and the need to label food which came from an animal fed on GM feed were some of the contentious issues discussed in a heated debate at the meeting of the European Parliament's Environment Committee. The reports by Karin Scheele on GM food and feed and Antonios Trakatellis on traceability and labelling of GM food and feed were presented for the first time.

Commission representative Patrick Deboyser said the original intention of the Commission had been to make no changes to the labelling of GM foods and ingredients but to just introduce a GMO free label. The Commission had also consulted Member States and 13 out of 15 had said that they wanted new labelling which was not based on protein or DNA tests. The Community had organic labelling and a GMO free label did not offer any advantage. There was already food labelling based on documentary traceability rather than scientific tests. This included origin labelling as well as the new beef labelling where labels must now say where the animal was born, raised and slaughtered. Many members of European Parliaments (MEPs) said Parliament needed to take a precautionary approach.

It was demanded that food from animals fed on GM feed should be labelled. It was argued that just because something might be open to fraud did not mean it should not be done. If one legislates all the time to stop crooks and fraudsters, one ends up paralysing oneself. There was no difference between country of origin labelling for fruit and vegetables and the GM labelling proposed by the Commission. There was concern from other MEPs that labelling GM food more widely, to include chickens fed on GM feed for example, would result in 60 to 80 per cent of all food being labelled as GMO within five years.

Several MEPs agreed that it was "quite unacceptable" that food could be contaminated up to one per cent with a GMO banned in the EU. For the

Commission it was pointed out that the threshold would not apply to ban to GMOs but to GMOs which were approved elsewhere, had a positive risk assessment; but had not been formally approved in the EU due to the moratorium on new approvals.

Food from animals fed with genetically modified (GM) feed should be labelled and the threshold for adventitious contamination should be reduced from one to 0.5 per cent, according to MEP Karin Scheele, who presented her report to the European Union's Environment Committee this month. She also proposed to ban adventitious contamination from GM crops approved in other countries, but it was not formally approved in the EU. The report on the proposal for a Regulation on GM food and feed calls for a precautionary approach. The rapporteur said that food derived from animals fed "at any stage" with GM feed should be labelled.

The report deletes the controversial Article 5 in the Commission proposal which would have allowed adventitious contamination up to one per cent from GM crops not yet approved in the EU, provided the Scientific Committee on Food and European Food Safety Authority concluded they did not present a risk to health. Scheele argued that allowing a threshold for non-authorised GMOs would undermine the EU's legislation on bio safety. Scheele also wants the competent authorities to examine the documents in the case of products produced from GMO but containing no GM material. She called for "far more information regarding applications to be made public", saying that only confidential information should be kept back and that the public should be given reasonable access to the rest of the application. Scheele also wants the European Food Safety Authority (EFSA) to make its opinion public "immediately" and to give an assessment report and grounds for their opinion. The level of 0.5 per cent would be an aggregate value for contamination and should be based on the raw ingredients.

**Source:** RIS, based on *AgraFood Biotech* No. 80, May 7, 2002.

## **Intensive Trade War Feared on GM food**

The public resistance to genetically modified food in the UK continues despite the increasing threat of a trade war between the EU and the US over the issue of labelling. The vast majority of people believe that labelling of GM food is essential and parents remain adamant that they would prefer not to feed it to their children. An opinion poll, carried out by Mori for Greenpeace, shows continued suspicion of GM food and crops despite claims from the biotech industry that both are gaining increased public acceptability.

The result shows that Tony Blair and the EU would get extensive public backing if the EU refused to bow to US demands that labelling of GM food be abolished. The US has already unofficially complained to the World Trade Organization (WTO) that labelling GM food unfairly discriminates against it. The next step, a formal complaint, might trigger a trade war. The poll, conducted early this year, showed that, given the choice, 51 per cent would avoid eating GM food, 40 per cent do not mind and 3 per cent would prefer to eat it. Only 18 per cent thought the benefits of GM outweighed the risk and 39 per cent the opposite, with 24 per cent thinking the benefits and risks were about the same.

But when it came to labelling, 76 per cent backed the EU position that consumers should be told products contained GM ingredients and only 6 per cent supported the US position that labelling should not be compulsory, with 20 per cent having no preference either way. Asked about pressure from the US to get the EU to license GM foods more quickly, 50 per cent supported the more cautious approach in Europe and only 13 per cent said that US impatience was justified, with 28 per cent having no preference.

The US food and drugs administration's view is that GM food is "substantially equivalent" to normal food and thus consumers should not be given the choice because it is not a health and safety issue. The EU has been told by the US that the high cost of labelling products is seen as a restraint of trade under WTO rules and the latter is considering

making a formal complaint unless the EU gives way. Peter Kurz, minister-counsellor for the US embassy in London, told a House of Lords select committee that the US would make it clear to the WTO that the EU proposals are “not workable and could unduly impair trade”. The EU environment commissioner, Margot Wallstrom, takes the opposite view and believes that labelling is essential for building public confidence in food products.

Greenpeace believes that the EU and the US are on a collision course over GM food. The scene is set for the defining conflict of the GM debate. The UK government, and the prime minister in particular, are caught in an awkward dilemma: they are desperate to avoid offending the US because of the special relationship, yet cannot reject demands for labelling without incurring electoral consequences. The Mori poll was conducted with 1,004 adults, aged 15 and over, interviewed face to face in their homes from April 18-22 at 193 sample points in the UK.

**Source:** RIS, based on the *Guardian*, May 7, 2002.

## **GM Eggplants**

Researchers at the Research Institute for Vegetable Crops and the University of Verona have produced a genetically modified (GM) seedless aubergine (eggplant). The new plants overexpress the plant hormone indole acetic acid (IAA). The plants are also 30-35 per cent more productive than conventional varieties in both greenhouse and field trials. Previous studies have shown that the application of IAA to flower buds can stimulate the development of fruit in the absence of fertilisation. This technique produces seedless fruit, but it is expensive because of the cost of the IAA and the labour required to treat the flower buds.

The researchers transformed a conventional aubergine variety with a flower-bud tissue specific transgene sequence comprising an enzyme involved in the biosynthesis of IAA, that was only active in the flower

buds. It is critical that IAA production was confined to the flower buds as this hormone is involved in a range of different processes in other parts of the plant such as the response of the plant to light and gravity. The researchers carried out three trials, two of which were conducted in greenhouse and one in an open field site in central Italy. They compared yield weights of conventional and GM aubergines, and found that yield was increased in GM varieties in all three trials. From an economic standpoint the GM aubergines have three major advantages over conventional varieties. Firstly, they produce more fruit with an overall increase in productivity of at least 30-35 per cent. Secondly, the cultivation costs of producing seedless fruit was reduced and finally the GM aubergines could produce fruit in conditions normally considered too cool for conventional fruit production.

*Source:* RIS based on *Agrafood Biotech* No. 80, May 7, 2002.

## **France Sets Out New Farming Standard**

The question of labelling has been the subject of much discussion, and a separate decree has been published, which must now be submitted to the European Commission for approval.

In the meantime, the French antifraud office (DGCCRF) will not be able to prohibit the use of the term “agriculture raisonnée” on labels. However, a spokesman said that a verification system had been put in place to prevent misleading claims and to ensure that there is no confusion with official quality marks. Some farmers’ groups, such as the Coordination rurale and the agricultural development group Inpact, are opposed to “agriculture raisonnée”, Les Marchés says. They describe it as a “dressing up of intensive agriculture,” financed by the agrochemical industry. Inpact says it will maintain high yield levels, which are bound to require more water, fertiliser, pesticides, fuel, etc. It also attacked the inclusion of monoculture and intensive livestock systems in the scheme. “Consumers are being misled,” the group claimed. On the whole, however, the scheme has the approval of

farmers, food processors and consumers. It was particularly welcomed by the Permanent Assembly of Chambers of Agriculture (APCA), which has promised to participate in its implementation.

**Source:** RIS, based on Agra Europe, May 10, 2002.

## **Biotechnology in Brazil**

Brazil's stubborn resistance to GM crops took the biotechnology companies by surprise. As part of its global strategy, Monsanto had purchased seed companies in Brazil. The Brazilian government had expressed its support for GM crops and was helping to fund the company's \$180 million glyphosate production facility in the north-east of the country. In early 2000, Monsanto began stock-piling GM seeds to sell to farmers in the following planting season, after the anticipated authorisation. However, Greenpeace and the Brazilian Institute for Consumer Defence (IDEC) jointly appealed to the courts that the government had no authority to authorise Monsanto to produce GM seeds when the country's environmental legislation demanded that studies must first be carried out into the long-term health and environmental impacts of transgenic crops. In a historic ruling in May 2000, a Brazilian judge gave verdict in favour of the plaintiffs. Monsanto immediately appealed, but is still waiting for a final decision, which is being expected shortly.

Until recently, the anti-GM lobby had little support from Brazil's powerful farming community. Enticed by reports of high GM yields and low production costs, farmers in the south of Brazil began to purchase GM seeds smuggled over from Argentina. According to some reports, up to half of the soya planted in Brazil's most southerly state, Rio Grande do Sul, may be transgenic. Over the last year, however, GM soya has apparently become less popular. Non-GM soya planting areas have expanded northwards throughout Brazil, taking over first the plains of Mato Grosso and now moving into the Amazon basin. These farmers have been very successful with their non-GM exports, with some soya beans now going directly to Europe through the new port of Itacoatiara on the Amazon



river. Over the last two years, Brazil's share of the world soya market has risen from 24 per cent to 30 per cent, while the US slice has declined from 57 per cent to 46 per cent. A farming association recently said that it would be "very foolish" for Brazil to authorise GM crops, for "we would risk throwing away a market we have worked very hard to win".

However, Brazil's agriculture minister, Mr. Pratini de Moraes, is a firm advocate of GM crops. On two occasions he tried unsuccessfully to authorise some GM varieties. On a trip to the US he said that Brazil was planning to invest heavily in GM crops and does not want to bear the risk of being left behind in the technological race. Over the last few months, the battle over GM has become more heated. Early this year, Mr. Anthony Harrington, former US ambassador to Brazil and now a lobbyist for Monsanto, held a private meeting with President Fernando Henrique Cardoso, now in his eighth and final year in office.

The environmentalists believe that if they can manage to postpone a final decision for a few more months, the balance of forces could change. Reports from Argentina say that GM soya is not living up to expectations; yields have been disappointing and the use of pesticides has soared, because of the emergence of disease.

**Source:** RIS, based on *AgraFood Biotech*, No. 80, May 7, 2002.