Soya Solidarity or food apartheid?

The business of hunger in Argentina – by Benjamin Backwell (political expert, journalist) and Pablo Stefanoni (economist, journalist) for 'Le Monde Diplomatique – No. 44 – Feb 2003'

Abstract

Over the years the 'first world' has profited from Argentina's high quality food production. Record harvests cannot counteract an agricultural model that has helped to undermine food security. Despite official warnings and under the auspices of the fight against hunger the Argentinean Association of Direct Seed Planting Producers started 'Soya Solidarity', a campaign aimed at turning the excluded into consumers of the main product of this 'new agriculture'.

Although the production of soya has been growing since the 1980s, its association with direct planting and the use of genetically modified Roudup Ready (RR) seeds – resistant to glyphosate herbicide – has been a turning point. Since then, a huge increase in its production has positioned soya above wheat as the most widely planted national crop. The simplification of weeding through the use of just one herbicide was the launch pad for the successful introduction of this variety developed by the American firm Monsanto, which holds patented rights over the RR seeds and their origin.

"The technological package is such that direct planting and RR soya go hand in hand" explains Migual Teubal, researcher at the Centre of Advanced Studies at the University of Buenos Aires (UBA). "With the introduction of direct planting and RR soya the producers can achieve two harvests a year – for example, wheat and then soya – which, according to available data, demands increasing dosages of glyphosate to get rid of the weeds."

"Many people continue to describe Argentina as the *granary of the world*, but they're wrong" warns Jorge Rulli, one of the main members of the Rural Resistance Group (GRR). "The current farming model, based on the production of GM soya is turning us into a *soya republic*. Monoculture is destroying food security and rural life, putting us on the verge of famine."

The statistics appear to confirm his appraisal. The planting area dedicated to the production of soya increased from almost 5 million hectares at the beginning of the 1990s, to 11.6 m in 2001/2. In the same period, the physical production of the oil product went from 10 million tones to a record 30 millionⁱ, transforming Argentina into the second largest producer of GM soya in the world (after the US), and the largest exporter of soya oil and flour. According to official estimates, its growth has come to represent 42% of land and 44% of the total volume of grain produced nationallyⁱⁱ.

Expectations still run high when it comes to the 'flood of soya': farming economy experts have hazarded that the growth could go beyond the 12.7m hectares initially predicted by the 2002/3 campaign, taking the final volume of the harvest to a historical peak of around 35 million tonesⁱⁱⁱ.

Soya production has grown across the length and breadth of the country, at the expense of traditional farming produce. Santa Fe, Cordoba and Buenos Aires are the most prominent regions on the new soya map. But other areas, such as Bandera de Santiago del Estero with its 200,000 hectares of agricultural land have managed to position themselves on the national map. Today Santiago del Estero comes fourth in the provincial production of soya (land in the province sown with oil products rose from 94,500 hectares in 1995/6 – before the adoption of RR soya – to 323,000 hectares in 2000/1).^{iv} These changes have not passed unnoticed by the real-estate sector: a hectare, which before the devaluation was worth between \$600 to \$800, is today worth about \$1000.^v

In the province of Catamarca there are two soya harvests a year. "We follow the combine-harvester to sow the second lot of soya" explains Felipe Torres Posse, the chief of production at Ingenco SA, affirming that the economic returns to this system, which means the two annual soya harvests can be extended to the whole north east region.^{vi}

Walter Pengue, expert in Genetic Vegetal Improvement at UBA warns that "other crops and systems of production are being replaced. This wouldn't be a problem if it could be reversed the following year, but entire mountains, fruit groves and dairy farms are being overrun by soya planting, eliminating product diversity."

The expansion of farming boundaries is a serious threat to reserves of biodiversity, like the Yungos forest in Northern Argentina whose surface is increasingly occupied by the green uniformity of soya. According to the Director of the Foundation of Forest Life, Javier Corcuera, "the area has already lost - for ever – more than 130,000 hectares of mountain forest to the advance of monocultures such as sugar cane, banana and soya". He warns that "if this trend continues, the province of Salta will see more floods and fewer natural resources for its people in the near future."^{vii}

Farming without farmers

Thus, while hunger reaches record levels in Argentina, huge expanses of cultivatable land are turning into 'ghost hectares', dedicated to the production of *commodities* for export - oil and food for profit - incapable of guaranteeing food security for the nation. In this way, the logic of monoculture, typical in the most vulnerable countries in the world, is gradually introduced through a farming model that is more and more dependent on the technology of multinationals. It is met with a lack of public reaction in a country with a strong urban culture, traditionally distanced from the problematic nature of rural life, food and agriculture (a clear contrast to European societies, which successfully lobby their governments to ensure labelling of products containing transgenic components, which they call 'Frankenstein food'.)

Despite numerous warnings about the potential risks to human health of genetic modification, the introduction of RR soya was authorised without public debate, by an administrative resolution of the Ministry of Agriculture – under the mandate of Felipe Solá – and without the participation of the National Congress. "The is no law, and they didn't commission any studies from official bodies. They made decisions on the basis of studies done by companies with a vested interest", says Pengue.

In less than two decades soya has become a 'strategic product' in Argentina, transforming the country into a 'strategic location' for Monsanto. Its colonizing efforts paid off: more than 95% of local soya production is transgenic, produced with RR seeds, and the company's turnover in the country rose from \$326 million in 1998 to \$584 million in 2001. In anticipation of the financial crisis and devaluation, Monsanto opened up a new plant in Zarate, Buenos Aires for the production of glyphosate, the main component of the Roundup herbicide which until then had to be imported from the US.

"The principle advantage of RR seeds for producers is the reduction in costs. The technology is mainly labour-saving, not necessarily bringing greater yields per hectare", explains Teubal. Producers no longer need to take on the task of weeding and direct planting is easier, which means the number of workers needed is reduced^{viii}. Even though there haven't been any studies done to measure the impact of the new technology on the displacement of rural workers, it has been estimated that "the use of RR soya 'saves' between 28% and 37% of planting labour (depending on the area and the methods of production), regardless of the harvesting process."^{ix} Thus, we are heading towards a kind of 'farming without farmers', which heightens the dependency of producers – 'users' of the technology packages - and increasingly restricts their autonomy to decide what and how to produce. At the same time, the economies of scale derived from the mechanisation of agriculture and the methods of direct planting have led to a strong concentration farms, leaving many small holders out in the cold. According to estimates of a private enquiry covering nearly the whole of the Pampa, the number of farms fell by 31% between 1992 and 1997^x.

On the outskirts of the big cities "the know-how which the displaced rural workers had in the countryside will prove useless, lowering their self esteem and feeding conflict. Thus, the people become like 'invalids', dependent on assistance programmes and political patronage." Rulli points out.

These regressive changes in rural life, along with the politics of adjustment and social exclusion, are destroying the country's food security, blocking the masses from access to food, reducing the diversity of production and driving an ever-increasing wedge between producers and consumers.

"At the level of the agriculture and farming system – the production and distribution of food – the concentration of capital in recent decades is comparable to the concentration of income and riches which happened in the rest of the economy" says Teubal; and he warns of the risks associated with the current trend: "In many ways Argentina was not a typical agricultural exporter, because we consumed the same products that we exported, and that was the source of our food security. However, the introduction of GM soya has massively increased our vulnerability."

"Staples of the Argentinean diet, such as beans, lentils, kidney beans or sweet corn are beginning to disappear, because we're becoming mono-producers and everything is being taken over by soya." warns Pengue. He also highlights the attempts to legitimise the current changes through a forceful media campaign extolling the "nutritional benefits" of soya.

Dependency and Uniformity

The other side of the coin of this transition towards a kind of 'soya republic' is the attempt to include the displaced and excluded in the model as consumers of the product of this 'new agriculture', claiming that it is part of the fight against hunger.

The Argentinean Association of Direct Planting Producers (AAPRESID) – a group made up of the big soya producers – have launched the 'Soya Solidarity' campaign, which consists of a 1% donation of their harvests aimed at 'ending Argentinean hunger'. Contrary to the opinion of many specialists, AAPRESID claims that soya is a high quality food which "can practically replace meat in our diet".^{xi}

The campaign is backed by the media, which publicise 'Soya Solidarity' as "a brilliant idea which could change history".^{xii} The *Clarin Rural* columnist Héctor Hugo, one of the backers of the initiative, says that soya "is a complete food, which just needs to find its way into our culture". He also maintains that the government could save money by replacing current social aid programmes with a "zero cost" sharing scheme consisting of a network providing soya based foods. "Why spend 350 million pesos if a sharing scheme enables us to save it?" he asks^{xiii}.

'Sharing Soya's' cargo reaches every corner of the country, helped by donations of petrol from Chevron-Texaco. In a few months they have managed to introduce the consumption of soya – a food almost unknown to the national diet - to hundreds of soup kitchens, public schools, hospitals and old peoples' homes, using an army of people enlisted to "teach" how to cook with soya and "spread the concept of its nutritional value"^{xiv}.

In accordance with the information presented by the campaign's co-ordinator, Ezequil Schnyder, some 700,000 people through out the country "benefit" directly from the programme. "If we include those who are worker-managers, and who receive the donations of beans directly, it could be said that nearly a million people are involved in the Plan, directly or indirectly."

One of the strategies of the campaign's promoters is to donate machines which produce soya milk to schools or kitchens which can't get enough cow's milk to respond to the growing number of children facing vitamin deficiencies. They have even announced the donation of a 'solidarity plant' to the *Hogar Madre Tres Veces Admirable* in the city of La Plata – managed by father Carlos Cajade – to produce milk, hamburgers and soya sweets for distribution to soup kitchens in the region, as well as feeding the young people in the home who work on the plant. The objective is to produce 30,000 rations of food per day, using just 1000 kilos of vegetables.^{xv}

In this way, those driving the initiative are exploiting the complete ignorance of the urban Argentinean population in matters of agriculture and their superficial association of soya with 'natural produce'. The situation is such that some neighbourhood associations have ended up accepting soya in their charitable provisions as a substitute for meat, milk and cheese; food which is beyond the financial reach of much of the population.

The results of the campaign have yet to be established, but certain risks have been identified. Sergio Britos, researcher at the Centre for the Study of Child Nutrition (CESNI) warns that "cow's milk is an irreplaceable part of a child's diet. Replacing it with so-called soya 'milk' causes calcium deficiency, and our limited capacity to absorb the iron present in soya raises the likelihood of anaemia."

In addition, the GM soya consumed in Argentina contains high levels of toxic residue. As in other countries, state controls were relaxed in line with the needs of the transnational backers of the 'new farming model'. Until the advent of transgenic crops, the maximum residue of glyphosate permitted in crops or derived products was 0.1 ppm, but during the 1990s, alongside the implementation of RR soya, the maximum was set at 20 ppm, an increase of 200 times the original limit. Jorge Kaczewer argues that these remnants of glyphosate and their metabolites in transgenic soya are also present in the food made from the vegetable, and since the analysis of glyphosate residue are complex and costly, they are not done regularly by the US government (the first producer of RR soya) and have never been done in Argentina.^{xvi}

In July 2002, the Forum for a National Plan for Food and Nutrition, organised by the National Congress of Coordination of Social Policy, headed by Hilda González de Duhalde, produced a document called "Criteria for the incorporation of soya"^{xvii}. The document stated categorically that "soya juice should not be termed 'milk' as it cannot be said to substitute it in any way". It argues that soya should not be presented as a 'food panacea', that it should only be consumed in moderation as part of a diverse and balanced diet, and that "nutritional considerations mean that it is unadvisable for the under-fives and especially those under 2 years of age." These conclusions were ratified in the course of the Day of Technical Discussion "Soya and Food', called by the same state body in December 2002. In addition, the preliminary document, "Considerations on soya in food" highlights the need to introduce clear statements on to the labels of some soya products: "NOT SUITABLE FOR CHILDREN UNDER FIVE" on cans of soya beans and soya drinks, and "THIS PRODUCT DOES NOT REPLACE MILK" on soya juice. These are observations which have not been taken into account by the promoters of the 'Soya Solidarity' campaign, whose target group are precisely the most vulnerable parts of the population: children and pregnant women who go to soup kitchens. The same warning is given in the report 'Myths and truths about soya"^{xviii}, produced by the Argentinean Association of Dietists and Nutritionists (AADYND). This report states that while cow's milk contains between 100 and 140 mg of calcium per 100ml, soya juice only contains between 2 snd 13 mg. The report goes on: "the way in which nature presents calcium in cow's milk is more accessible for our bodies, while calcium of vegetable origin is or poor use". The high concentration present in soya interferes with its absorption, as occurs with iron and zinc, two minerals of utmost importance: the first as a safeguard against anaemia and the second because of its role in the immune system.

"The problem with the soya bean is that practically non of its micro-nutrients can be absorbed by the body. So, what does soya provide? Carbohydrates, like any other bean and more proteins, which for the greatest benefit need to be combined with other cereals – rice, polenta – providing the amino acids which soya does not contain", says Britos. He also points out that the problems with child malnutrition in Argentina are principally associated with a deficit of micro-nutrients (vitamins, iron, zinc, copper, calcium etc) more than with a lack of proteins.

Despite these warnings, the authorities – national and provincial – look the other way while 'Soya Solidarity' imposes new eating habits in the interest of large overseas seed firms and native landowners. "The way decisions are made and who makes them needs to be documented, because in ten years time, when the impact is analysed, we need to know who is responsible" asserts Pengue, bringing into sharp relief an important aspect of the current crisis: the impunity with which the ruling classes make decisions affecting millions of Argentinean citizens.

The imposition of soya upon the most vulnerable segments of the population is creating a kind of 'food apartheid'. While the comfortable classes can continue enjoying a diverse diet, excluded masses have to settle for 'food for the poor', consuming the surpluses which the large agro-industry producers can't sell on the international market. "The point is that these changes in the food model are part of a business, they have nothing to do with the needs of the people. GM seeds don't solve the problem of hunger, just at the Green Revolution didn't solve it", remarks Teubal.

For other analysts, the effects of the soya economy are even more alarming. In Rullas' judgement "It's a unique case in the world. They are transforming us into addicts, dependent on soya. I believe that in this way Argentina is taking an early step towards ALCA (the Area of free Trade in the Americas), in the sense that we have been assigned a particular country role in the international division of labour brought by globalisation - the role of soya producers".

In the meantime, these 'solidarity' initiatives, sustained by the idea that the 'poor will always have', threaten to destroy the nutritional diversity which has characterised Argentina through out history, sharing the surpluses amongst the poor and subordinating them under the auspices of "teaching them how to eat".

The autonomy of millions of people hangs in the balance in the face of this uniformity of food practices, operating under the hegemony of oligopolies of GM seed and food producers. Also at risk is our capacity for free and critical thought, vital to transforming this reality into a situation that benefits the national majority.

ⁱ Secretaria de Agricultura, Ganaderia, Pesca y Alimentaci9on (SAGPyA)

ⁱⁱ see ref

ⁱⁱⁱ see ref

^{iv} see ref

^v see ref

vi see ref

^{vii} see ref

^{viii} In addition, glisofate and RR seeds in Argentina are of course cheaper than in the US or Europe, and Monsanto are more flexible with regard to their rights over the origin of RR seeds. This 'privileged' position is part of their aggressive commercial strategy aimed at winning the Argentinean market, using

it as a base from which to gain access to other countries in the region, such as Brasil and Bolivia, in the near future.

^{ix} See ref

^x ibid

^{xi} see ref ^{xii} see ref ^{xiii} see ref ^{xiv} Angelita Bianculli, of the Esquina de la Flores Civic Association is an active participant in the campaign. Between February and August 2002 she organised around 250 courses in Buenos Aires city and other locations in the interior, www.sojasolidaria.org.ar ^{xv} see ref ^{xvi} see ref ^{xvii} see ref ^{xviii} see ref