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The dirty politics of the global grain trade – GM maize farmers face ruin in SA

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The African Centre for Biosafety (ACB) is a non-profit organisation, based in Johannesburg, South Africa. It provides authoritative, credible, relevant and current information, research and policy analysis on genetic engineering, biosafety, biopiracy, agrofuels and the Green Revolution push in Africa.

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List of acronyms

ACB	African Centre for Biosafety
ADM	Archer Daniels Midland
BCH	Biosafety Clearing House
BFAP	Bureau for Food and Agricultural Policy
BSP	Biosafety Protocol / Cartagena Protocol on Biosafety
CBD	UN Convention on Biodiversity
DAFF	Department of Agriculture, Forestry and Fisheries
EC	Executive Council: Genetically Modified Organism Act
FAO	Food and Agricultural Organisation of the United Nations
FFP	Food, Feed and Processing
GMO	Genetically Modified Organism
IDZ	Industrial Development Zone
ISAAA	International Service for the Acquisition of Agri-biotech Applications
NAFTA	North American Free Trade Association
SANSOR	South African National Seed Organisation
SADC	Southern African Development Community
UNEP-GEF	United Nations Environment Programme Global Environmental Facility
WFP	World Food Programme of the United Nations

Introduction

South Africa's maize farmers recorded a bumper harvest in 2010, yet now they face ruin. The price of maize has fallen precipitously in the last 12 months owing to a crisis of over-production of both GM and non-GM maize. A mass exodus from the maize sector is anticipated, with as many as 30% of farmers facing potential liquidation.

During July 2010, the Executive Council: GMO Act (EC) granted export permits allowing 625,000 tons of GM maize to be exported to various countries in Africa and Asia. Of this, 600,000 tons were bound for Taiwan and South Korea.[1] A further 35,000 MT of GM soybeans were also exported to various countries. Thus, for 2010, South Africa exported over 1 million tons of GMOs, of which GM maize accounted for a staggering 956,000 MT.[2]

The record GM exports from South Africa is attributed to a bumper harvest, officially the highest since 1982.[3] Far from contributing to greater food security in the country, the almost dogmatic focus on production has led to a precipitous fall in local maize prices. Consequently, the Solidarity Research Institute group in South Africa has warned that an oncoming financial crisis in the South African agricultural sector could drive 30% of maize farmers away from the sector.[4] For each additional unit of value added to total GDP, agriculture creates twice as much employment as the rest of the economy. The knock on affects of the crisis on rural South African communities could be catastrophic.[5]

Political economy of maize in South Africa

Since 1994, South Africa's agricultural policy has adapted to accommodate the liberalisation measures of the Bretton Woods institutions. These measures included the removal of direct government controls over imports and exports, lowering of tariffs, dismantling national marketing boards and increasing the role of the private sector in agricultural finance. Tariff structures that emerged after 1994 have generally afforded greater protection to value-added products rather than commodities, resulting in South African farmers having to sell their produce into increasingly oligopolistic markets and buy their inputs from oligopolistic suppliers. The effect on South African farmers has been a marked reduction in their terms of trade.[6] For example, between June 2008 and June 2009 the average price received by local farmers for agricultural produce rose by 6.2%, while the prices paid by farmers for inputs rose by an average of 23.2%.[7] The impact of Eskom's recent electricity tariff hikes is expected to aggravate these problems further, as electricity's share of the production cost of maize is expected to rise from 9% in 2009 to 20% by 2015.[8]

The 13.3 million tons of maize that South Africa has produced in the 2009/10 marketing year is the second largest on record. Despite declining maize prices during 2009, the total maize area planted has increased by 300,000 ha in 2010, to a total area of 2.72 million ha. Analysts have attributed this to a combination of a strong cash flow position of farmers due to the commodity boom of the preceding two years; a decline in the price of fertilizers towards the end of 2009;[9] excellent growing conditions; new crop technology and an improvement in cultivation practices.[10] By the time the first reports of the impending surpluses were emerging in April 2010, the spot price of

white and yellow maize on the Johannesburg Stock Exchange had fallen by approximately 27% and 46% respectively since December 2009.[11]

Even at an above average maize yield, it is estimated that most maize farmers will need to earn R1,800 per ton to make a profit. The current price is hovering around the R900 mark.[12] In recognition of the imminent crisis of over-production and falling maize prices, the South African Minister of Agriculture, Tina-Joematt Pettersson, announced in May 2010 her intention to challenge World Trade Organisation (WTO) limits on farm subsidies. Under the so called 'amber box support' (which refers to direct price support) South Africa is permitted to allocate up to R2 billion a year to its farmers. In spite of the immense hardships in the sector (including the loss of some 100,000 jobs), South Africa has not dipped into this potential reserve for 10 years.[13] Currently the only financial support afforded the sector is a rebate on fuel, introduced in 2000,[14] and tax concessions on capital goods replacement. The Department of Trade and Industry (DTI) has initiated plans to develop a small scale maize milling industry in South Africa, which is intended to create value added opportunities in the sector and increase competition.[15] However, the scheme is not expected to roll out (in the form of mill franchises) until the middle of next year,[16] just as the domestic maize industry is expected to enter its most tumultuous period.

According to Jozeph du Plessis, a maize farmer and chairperson of the Schweizer-Reneke District Agricultural Union in North West Province, the present situation has been exacerbated by three years of surplus production, without the required exports to diminish the maize carry-over to the next marketing year. According to industry, the biggest hindrance to exports is the dilapidated state of South Africa's infrastructure, which has seen South Africa's annual rail and harbour system's maize handling capacity drop from 3.5 million to 1.5 million tons in the last 15 years. Although South Africa has managed to find export markets in East Asia's lucrative maize import market during 2010, in order for South African to compete with the region's more traditional trade partners, the local maize price will have to fall by a further R200 per ton.[17]

A recent report released by the Bureau for Food and Agricultural policy (BFAP), a joint programme run by the Universities of Pretoria, Stellenbosch, and the Western Cape, estimates that South Africa's maize exports for 2010 will be in the region of 1.8 million tons. Several of South Africa's traditional regional export destinations in Southern Africa have also reported bumper harvests. For example, Zambia, who has imposed bans on GM imports, has in fact produced a 1 million ton surplus.[18] The fact that the majority of South Africa's maize is now GM is seen as an additional problem for exporters, with the BFAP citing the lack of a harmonised biosafety position on GMOs in the Southern African Development Community (SADC), as one of the major potential threats to South Africa's position as a 'reliable regional supplier' of maize.[19]

While the South African government has myopically benefited from the low maize prices (for example as a anti-inflationary measure), potentially this could lead to drastic food price increases in the future, as production capacity will decline in the future concomitant to a decreasing number of maize farmers.[20]

South African GM commodity exports, July 2010

Exporter	Organism	Destination	Quantity (Metric Tons)
Afgri Trading	Soybean GTS 40-3-2	Malaysia	200
Afgri Trading	Maize NK603, MON810, BT11, MON810 x NK603	Swaziland	1000
Perth Farm	Maize NK603, MON810, BT11, MON810 x NK603	Swaziland	1000
Senwes	Maize NK603, MON810, BT11, MON810 x NK603	Somalia	20,635
Louis Dreyfus	Maize NK603, MON810, BT11, MON810 x NK603	Taiwan	150,000
Louis Dreyfus	Maize NK603, MON810, BT11, MON810 x NK603	Taiwan	150,000
Louis Dreyfus	Maize NK603, MON810, BT11, MON810 x NK603	Korea	150,000
Louis Dreyfus	Maize NK603, MON810, BT11, MON810 x NK603	Korea	150,000
Afgri Trading	Soybean GTS 40-3-2	Malaysia	35,000
Afgri Trading	Maize NK603, MON810, BT11, MON810 x NK603	Swaziland	1000

Source: Department of Agriculture, forestry and fisheries.

More new GM markets

As previously reported by the African Centre for Biosafety[21], this year has marked a dramatic shift in the trade patterns of GMOs in South Africa, with commodity exports of GMOs going to several other African countries for the first time. The approvals that were granted to export GMOs to Somalia, Malaysia, Korea and Taiwan in July 2010 are also a first. In the case of Malaysia, it is the first time South Africa has exported GM soya in bulk commodity form (up until 2008 South Africa had imported thousands of tons of GM soy annually from Argentina for use as animal feed[22]).

Somalia, which has been without an effective government for nearly 20 years, has been described by one expert at the UN as 'the worst humanitarian crisis in the world today'.[23] Earlier this year the World Food Programme (WFP) was forced to respond to allegations made by the UN

monitoring group for Somalia that up to half of all food aid in country was being diverted away from its intended recipients to a complex web of patronages. The report concluded that 'the provision of food aid has thus become a militarised business' in the country.[24] Given that Somalia is virtually a war economy, and in 2008 (the latest year for which figures are available) grain imports accounted for 10% of the countries entire import bill,[25] the opportunities for illicit wealth accumulation in the grain and food aid trade are all too apparent.

Somalia has not been a regular destination for maize from South Africa, with only the 2008/09 marketing years and the current marketing year seeing significant deliveries. Between the 7th of May and the 13th of August this year just over 27,000 tons maize has left South Africa for Somalia.[26] A permit granted to Senwes (a large South African grain trader) by the GMO authorities in July 2010 accounts for three quarters of this amount. Neither statistics from Grain SA or the Department of Agriculture, Forestry and Fisheries (DAFF) differentiate between food aid and commercial transactions, though the GMO Registrar was able to confirm that the GM shipment to Somalia was for food aid.[27] No records were available to confirm that the GM maize was milled before export to Somalia.

The other new destinations for South African GMOs are all in Asia, namely Malaysia, Taiwan and 'Korea'.[28] In the last four marketing years, South Korea and Taiwan imported over 50 million tons of maize. For geopolitical reasons, both countries have maintained strong ties with the United States since the 1950s and both are important markets for US agricultural products, including GMOs. For example, in 2007/08 the United States supplied nearly 90% of South Korea's maize imports, nearly 90% (over 7 million tons) of which were GM.[29] Taiwan is the US's sixth largest agricultural export market (fourth for maize), importing nearly $2 billion worth of GM products in 2008. Of this, GM maize exports to Taiwan were worth approximately $807 million.[30] Historically the majority of South African maize exports (non-GM) have gone to other African nations

The market for GM soy in Malaysia is nowhere near as big, though not entirely insignificant. In 2008/09 Malaysia imported about 1.5 million MT of soybean oil, meal, and oil cake.[31] The global market is currently dominated by the world's three largest soy producing nations, the United States, Argentina and Brazil. Considering that virtually all soybean production in these countries is GM, it is safe to assume in turn that the majority of Malaysia's soy imports are GM. The office of the United States trade representative estimates that the annual value of US GM soybean exports to Malaysia is in the region of $100 million.[32]

	Somalia				**Swaziland**			
Marketing year	White	Yellow	GMO	**GMO as % of total**	White	Yellow	GMO	**GM as % of total**
2003/04	-	-	-	-	29,596	26,690	-	-
2004/05	-	-	-	-	17,968	28,434	-	-
2005/06	3,158	-	-	-	26,184	35,111	-	-
2006/07	-	-	-	-	17,883	51,673	-	-
2007/08	-	-	-	-	39,490	43,724	-	-
2008/09	42,958	-	-	-	15,744	39,168	-	-
2009/10	-	-	-	-	24,413	51,615	6,000	7.9%
2010/2011*	27,346	-	20,635	75.5%	2,523	10,695	8,000	60.5%

source: South Africa Grain Information Service (www.sagis.org.za)

The real beneficiaries of GM maize mountains

The International Service for the Acquisition of Agri-biotech Applications (ISAAA) estimates that the global market for GM maize seed in 2009 was $5.3 billion, of a total global GM seed market valued at $10.5 billion. However, even this pales into insignificance when compared to the riches of the global trade in GM commodities. In 2008, the global value of 'harvested products' (the GM grain and other harvested products) was over $130 billion.[33]

As with the agro-chemical-seed industry, the global trade in agricultural commodities such as maize and soybeans is dominated by a handful of players. In 2009, the top three companies earned combined profits of nearly $5.4 billion. No figures were available for Louis Dreyfus commodities, another giant of the global grain trade, but its sales for 2008 were estimated to be in excess of $20 billion.[34] Not only are profit margins in the grain trade extremely high, they have also been increasing consistently, except for a slight dip for the latest figures, for the last 5 years. The multinational grain trader, Bunge's, profits nearly doubled between 2005 and 2008 to over $1 billion;[35] Cargill's grew from $1.5 billion in 2006 to a high of $3.3 billion in 2009 (and still managing a very healthy $2.6 billion profit the in 2010,[36] in the midst of the biggest global economic contraction in nearly 80 years). Archer Daniels Midland did even better, with its 2010 profits of $1.9 billion its second highest in the last 5 years and almost 33% higher than in 2006.[37] It can hardly be coincidental that the weakest area of the Cartagena Protocol on Biosafety concerns the trade in bulk shipments of GMOs.

The East Asian region is a particularly lucrative market for the international trade in maize. In 2009/10 South Korea imported 8.2 million tons of maize, while Taiwan imported 4.6 million tons. Japan, the world's largest importer of maize, has imported over 16 million tons of maize annually for the last 4 marketing years. Together the three countries accounted for almost one third of all global imports of maize in the last agricultural marketing year.[38] Further, the US Grains Council has recently stated that by 2015 China, previously a net exporter of maize, may import as much as 15 million tons.[39] Such a vast potential market is clearly seen as large prize, though any continuation of South African maize exports to the region would likely bring it into direct competition with the world's largest maize exporter, the United States.

In spite of the formulation of the North American Free Trade Association in 1994, between 1995 and 2009, maize farmers in the United States received nearly $74 billion in federal subsidies. Of this, the top 10% of producers received 72%.[40] For Mexico, the centre of origin of maize, this massive fiscal onslaught has had a devastating impact on the lives of both rural producers and urban consumers of maize. Since barriers to US maize were removed in 1995, up to 500,000 farmers a year have been forced off the land, with little more than the prospect of menial wages in sweatshop labour waiting for them.[41] The expected benefits to urban food purchasers have not materialized either because although maize prices in Mexico have fallen, (97% of the Mexican industrial corn flour market is controlled by just 2 processors), tortilla prices (Mexico's staple) doubled during the 1990s.[42] In the United States this deluge of farmer support has flooded the US market with cheap High-Fructose-Corn-Syrup (HFCS) that, by some estimates has saved US soft drink makers $243 million a year, and has contributed some way to the obesity epidemic that is crippling the US health care sector.[43]

At the heart of the global trade in agricultural commodities lies the 'futures' contract, which emerged in the United States in the mid 19th century, a mechanism that allowed farmers to agree on a guaranteed price for their produce (a corollary effect of this system would be the

conditionality that farmers produced more standardised and 'unblemished' produce). Following the Wall Street crash, the Roosevelt administration introduced several regulations to limit excess financial speculation into US food markets. These regulations survived until the 1990s, but were eventually severely watered down in the face of intense corporate lobbying. The re-opening of agricultural commodity markets to capital from the non-agricultural sector, through instruments such as index commodity funds[44] (which increased in value from $46 billion in 2002 to $250 billion in 2008) served to de-couple commodity prices from their fundamental values of supply and demand.[45] At the height of the crisis, the New York Times reported that Wall Street funds controlled one fifth of all contracts for corn (maize) futures on the Chicago exchange[46]. Back in the real world, the tragic results of the price spikes added another 115 million people to the world's hungry, so that by mid way through 2009 the Food and Agriculture Organisation (FAO) of the UN estimated that over 1 billion people were chronically malnourished.[47]

GM Soy

This year has seen South Africa export bulk commodities of GM soy for the first time. In addition to a previous shipment of 35,000 tons to Mozambique in April, a further 35,000 tons were exported to Malaysia in July.[48] The total soybean crop for 2010 estimated at 587,950 tons, a 13.9% increase on the previous year, represents the first occasion in South Africa's agricultural history that more soybeans have been produced than sunflower. Despite the South African soy industry being historically dominated by imports, due to a lack of domestic processing facilities, South Africa is now a net exporter of raw soybeans. Total soybean exports for 2009 were 161,620 tons, which are expected to rise to 180,000 tons for the current marketing year.[49] The South African soy processing industry is, however, still dominated by imports (which constitute more than 3 times the volume of domestic production). In 2007/08 the value soy production in South Africa was, R1.13 billion, less than 1% of total agricultural output.[50]

The proportion of GM soya seed being sold domestically has also risen rapidly in recent years so that by 2008, 88% of soy seed sales were GM.[51] In previous years, with the exception of the occasional bulk shipment for animal feed, South Africa's GM soy trade with the rest of the world was fairly insignificant. The US, Argentina and Brazil dominate the international trade in GM soya. South Africa's overall soy bean plantings increased by 40,000 ha to 270,000 (88% of which was GM) in during 2009/10, though this is still miniscule when compared to the 69 million ha planted globally in 2009.[52]

What is significant is that during July this year biotech giant Pioneer Hi-Bred imported nearly 30 tons of GM soya seed into South Africa, over a 100-fold increase for the total of the three preceding years. There are a number of possibilities for this dramatic increase: Firstly, in December 2007 the South African government finalised its biofuels industrial strategy, which included the construction of a massive R1.5 billion soybean processing plant at the Coega Industrial Development Zone (IDZ) in the Eastern Cape. The plant, which was scheduled to be completed by the end of 2009, has the capacity to process 1.3 million tons of soy a year.[53] However, financial constraints have delayed the opening of the facility, which would have been the largest soy processing plant in Africa, and it is unclear when construction will continue.[54] Secondly, it could be in line with medium term predictions made by the Department of Agriculture, Forestry and Fisheries that the demand for soybeans is set to increase towards 2014 in response to increasing demand from the livestock industry and the falling price of maize.[55] Finally, the decision to

import such a large quantity of seed could be a short term response to the huge maize surpluses produced this year, surpluses that have had many analysts predicting a 20% decrease in maize plantings and a 15% increase in soybean for the next agricultural marketing year.[56]

In July 2008, the International Trade Administration Commission (ITAC) in South Africa granted a full rebate (of 8%) on the import duty of soybeans to be used in the production of biodiesel, in response to an application made by SASOL and the Central Energy Fund. [57] The rebate is valid until the 30th of June 2011. The South African Animal Feed Manufactures Association has also applied for a rebate, arguing that the rebate would result in the creation of a monopoly for the crushing of soybeans for bio-diesel. The decision is still pending. Grain SA has opposed the application, arguing that the lowering of the tariff will damage domestic soybean production.[58] Experts in the field have questioned why more is not being done to stimulate a domestic crushing industry.[59] With projected increases in soybean plantings (including GM) and production, South Africa risks further pyrrhic yield gains that will be dependent on international commodity markets.

Even more than maize, GM soya represents the zenith of the mono-cropping industrial agricultural paradigm. In the Southern Cone of Latin America, vast areas of some of the world's most productive agricultural land have been colonised by GM soy that is resistant to glyphosate based herbicides. In the last planting season in the region a toxic cocktail of over half a billion litres of glyphosate and other even more hazardous pesticides were required to maintain this system. With fresh reports of 'super-weeds', that have developed resistance to glyphostate, coming through on an almost weekly basis, to date the agro-chemical industry's response has been to merely increase dosage for the symptoms rather than tackle the root causes.[60]

South Africa's GM soya imports and exports (metric tons)

	Imports			Exports		
Year	Commodity	Planting	Contained	Commodity	Planting	Contained
2010	0	29.54	0	70 200	0	0
2009	0	0.51	0	0	4.8	0
2008	0	1.33	0.0032	0	0	0
2007	29 663	0.39	0	0	0	0.220
2006	50 500	1.37	0.00875	0	0	0
2005	12 100	0.031	0	0	0	0
2004	16 000	0	0	0	0.015	0

Source: GMO permit lists, Department of Agriculture, Forestry and Fisheries.

The Biosafety Protocol

The Cartagena Protocol on Biosafety (BSP) of the UN Convention on Biodiversity (CBD) is the first international law governing the safe handling, transportation and use of GMOs.[61] After over a decade of negotiations, the BSP finally came into force on the 11th of September 2003. As alluded to earlier, due to the emergence of powerful lobbying blocs during the negotiation of the BSP (led by the world's largest GMO and grain exporting countries, including the United States, Canada,

Australia and Argentina), the protocol was severely weakened regarding trade in GMOs intended for use as food, feed and Processing (FFP). Whereas the BSP requires parties wishing to export GMOs that will be released into the environment to inform the potential importer in advance[62], if a party to the BSP domestically clears a GMO for commercial release that is intended for FFP, it merely needs to post its decision onto the central Biosafety Clearing House (BCH) of the BSP within 15 days. Thus, the onus is on countries to continually check the BSP for news on potential GMOs that they could be importing in the future.[63] The recent confusion around South Africa's GM maize exports to Kenya clearly indicates that the present system is stacked heavily in favour of the GM commodity exporters.[64]

With the exception of Taiwan (which cannot sign the BSP as it is not recognised as a 'sovereign' nation[65]), all the countries that South Africa has most recently exported GMOs to have signed the BSP. However, Somalia did not accede to the Protocol until the 3rd of August this year, and it is not scheduled to come into force until the 24th of October, rendering the GM maize exports there in July beyond its purview.[66]

Biosafety legislation in countries of import

With the exception of Taiwan, all countries that South Africa exported GMOs to in July 2010 have signed the Cartagena Protocol on Biosafety. However, as Somalia only acceded to the Protocol on the 3rd of August it is not due to come into effect in the country until October. Regarding Somalia's biosafety laws, details are thin on the ground. The UN Environment Programme's Global Environmental Facility (UNEP-GEF), which develops biosafety frameworks for countries that lack the resources to do so themselves, has no records for Somalia.[67] It is extremely unlikely that the country will be in a position to develop its own biosafety laws anytime soon, so it remains to be seen how this process will unfold.

Malaysia has been a party to the BSP since December 2003. The Malaysian Biosafety Act (2007) came into effect on the 1st of December 2009. Unlike the BSP, the Malaysia Act also extends to the area of products derived from GMOs, including those for food, feed and processing (FFP).[68] No GMOs have yet been approved for environmental release in Malaysia, only 3 GM maize and 1 GM soya event, all for FFP.[69] With the implementation of the LMO Act on the 1st of January 2008, the BSP came into effect in South Korea on the same date. Despite public controversy over GMOs, the nation aspires to be a major global biotechnology player by 2016 and has adopted a more laissez faire approach to GMOs. Since July 2009, South Korea has authorised over 100 different GM varieties for food and feed. Despite not being a signatory to the BSP, Taiwan has a well established biosafety regime, which falls under the remit of the Ministry of Health. The relevant legislation, under the law governing food sanitation, came into effect on the 1st of January 2003.[70] Despite several GM varieties of rice, fruit and vegetable undergoing field trials, no GM products are commercially grown in Taiwan. Since May 2009, 21 GM maize events, six of which are stacked, were approved for import into Taiwan.[71]

GM EXPORT FIGURES-GAPS IN KNOWLEDGE

During the course of research for this paper a number of shortcomings became apparent in the way in which GM export figures are recorded and presented, bringing further doubts as to the vigilance of South Africa's, and indeed the global, biosafety framework. According to statistics on the GMO permit lists, updated monthly by the Department of Agriculture, Forestry and Fisheries, between January and July 2010 over 950,000 tons of GM maize was exported from South Africa. Information from Grain SA, an industry information and support organization, showed total exports (for conventional and GM maize) over the same period of 843,722 MT.[72] When contacted by the ACB about this discrepancy Grain SA had no knowledge of these proposed GM exports.[73] To compound the issue, the Registrar in charge of the GMO Act in South Africa claims not to have any access to the South African Grain Information Service (SAGIS) information, the source for grain trading statistics.[74] Attempts to contact the biosafety authorities in Taiwan to clarify the situation have so far proved fruitless.

It later came to light that an export or import permit only signifies an approval in principle, not a physical movement. Once a permit has been granted the company in question has 3 calendar months to execute the said import or export, and that the outcome of this must be reported back to the DAFF. Apparently the reporting back or lack thereof is still a significant problem for the DAFF. Wessel Lemmer, a senior economist at Grain SA, believes that the time delay between the publication of the permit list and the actual commodity movements could lead to price distortions in the maize market, as producers and traders anticipate large increases in demand or supply in the near future.[75] Does the biosafety system in South Africa contribute to speculation and subsequent increase in food prices?

As maize stored in silos in South Africa is not segregated between GM and non-GM,[76] and GMO labeling (which would require a comprehensive system of segregation and traceability[77]) has yet to be fully implemented, one has to ask the question whether anybody in South Africa actually has comprehensive information on the trade in GM maize. This hardly bodes well for a vigilant biosafety regime in the country.

Yet again we are forced to draw attention to submissions the ACB made to the compliance committee of the Cartagena Protocol on Biosafety (BSP) in August 2009, which broadly stated that South Africa was failing to comply with its obligations as a signatory to the BSP having: failed to post a single risk assessment onto the Biosafety Clearing House (BCH), an obligation under article 20.3; not posted notice of a transboundary movement of a maize shipment to Kenya that contained an unapproved GMO, as required under article 25.3; only posting 13 decisions regarding GMOs, despite approving over 1500 permit applications[78] (a figure that has since risen to nearly 2000). In July of this year the ACB wrote to the Minister of the DAFF for the third time, repeating these concerns.[79] At the time of writing we have yet to receive a formal acknowledgement of these inputs. Such is the emphasis (or lack thereof) that the DAFF appears to place on biosafety in South Africa.

Conclusion

Earlier this year the African for Biosafety reported on the surreptitious manner in which nearly 300,000 tons of GM maize was exported to Kenya, seemingly without the explicit acknowledgment of the Kenyan biosafety authorities. Perhaps the controversy this resulted in made further GMO exports to the country untenable, but it has also made public, that while South African maize farmers are sitting on one of the largest surpluses ever recorded, plentiful supplies in many other African nations have barred their traditional export markets. Lack of adequate biosafety capacity will, according to a recent by the Bureau for Food and Agricultural policy, also inhibit the further regional trade in GMOs. This will have serious implications for a country in which 58% of the maize seed sold last year was GM.[80]

The Solidarity Research Institute's warning of a looming farming crisis is in stark contrast to the triumphant proclamations made by industry bodies such as the ISAAA. Huge bulk shipments to the world's largest maize importing region may offer temporary respite for some commercial farmers, but is this a viable long term strategy? The scale of production and transportation that would be required to compete with the global maize giants would squeeze margins even tighter. This would, no doubt, benefit the global grain traders, but what of farmers and rural communities in South Africa? Putting itself at the mercy of international commodity markets is hardly conducive to the long term planning required in the South African agricultural sector, nor for providing food security for those who are most vulnerable.

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