

a series of publications on the impact of  
corporate-led globalization on biodiversity

biodiversity, inc



**Friends of  
the Earth**  
International

# fertile resistance in agrobiodiversity

local communities defending  
agrobiodiversity against gmOs and  
agrobusiness | august 2002







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# local struggles & corporate agriculture's threats to food sovereignty & biodiversity | part one

by alberto villarreal, *redes/friends of the earth uruguay*

community action versus government greenwash

imposing the green revolution agricultural model

Local resistance takes many forms. Some have acted directly to destroy GM field trials. This happened in India, Indonesia and Brazil by peasant members of Via Campesina. Local authorities have banned GMOs, as in the Rio Grande do Sul state of southern Brazil. Civil society coalitions have fought for legislation establishing "GMO free" territories, as in the case of Nicaragua, or pursue court actions against legislation that allows the introduction of GMOs, as in the case of Indonesia. Proactive local entities have moved to protect, conserve and reproduce traditional local seed varieties, as in the international "Growing Biodiversity" project sponsored by GRAIN. The latter strategy is also advocated in the cases of Bolivia, Canada, Ecuador, Indonesia, Nicaragua and Uruguay.

The seven case studies featured in this publication clearly reflect many of the growing tensions and conflicts between these public interest actors and the multilateral institutions and giant biotech and food processing TNCs aiming to impose the Green Revolution agricultural development model and its new genetech revolution. National governments like the US government openly embrace the interests of those companies and champion them in the multilateral institutions, or finally give in to their unacceptable pressures, thus giving away their peoples sovereignty.

Local communities, indigenous peoples and NGOs are not signatories to any legally binding instruments to protect agrobiodiversity. However, time has proven that it is such civil-society organizations who have seriously undertaken the task to fulfill the stated goals of the Convention on Biodiversity (CBD) and Chapters 14 and 15 of Agenda 21. They are the ones that are struggling to preserve traditional practices for biodiversity conservation and its sustainable use that are deeply integrated into the cultures of indigenous and farming communities. They are actively resisting trade liberalization in food and agriculture and the corporate driven invasion of GMOs into our fields and food systems, which seriously threaten peoples food sovereignty, security and safety. In contrast, governments are actively or passively letting the corporate-driven World Trade Organization (WTO) establish rules favourable to the increasing control of the world food system by a handful transnational corporations (TNCs). These rules result in the destruction of rural communities and the worldwide imposition of agricultural production systems that are based on high farmer dependency on the inputs and the technological packages sold by those companies, including GM seeds that threaten to destroy biological and cultural diversity. Similarly, many governments have demonstrated their lack of commitment to the goals of the CBD and Agenda 21 through their absent political will to ratify the Cartagena Protocol on Biosafety or engage in any precautionary legislation, thus revealing their support for the CBD and Agenda 21 to be sheer "greenwash".

The responsibility for the ongoing failure to ratify the Biosafety Protocol lies with national governments. But the full picture behind the mounting erosion of biodiversity for subsistence, the lack of progress on biosafety enforcement and the uncontrolled spread of GMOs must include the decisive role of U.S. authorities and the powerful biotechnology industry lobby, alongside with the precursory role of the World Bank (and regional multilateral banks) and the IMF in the imposition of the Green Revolution model for agricultural development and the trade liberalization policies that the WTO and a complex puzzle of regional and bilateral free trade and investment agreements now pretend to seal definitively. These forces are ramming the international distribution of export crop monocultures and GMOs through by using WTO rules and enforcement mechanisms, World Bank Rural Development policies, IMF conditionalities and WB/IMF joint policies that pretend to tackle the debt crisis and reduce poverty and hunger in the world.



## wto influence

WTO rules suggest that measures to secure precautionary control over the spread of GMOs are "trade-distorting" measures. The same judgment is dispensed to any (southern) government attempts to protect indigenous, peasant and small family farming systems. These systems are best suited to ensure peoples food sovereignty, security and safety, insofar they can potentially provide healthy, safe and high quality food products that are accessible to everyone while protecting and enhancing biodiversity at the same time. The WTO's strong influence over other multilateral institutions such as the Food and Agriculture Organization (FAO), coupled with the power exerted by the U.S. and its bilateral trade and investment agreements, has repeatedly crushed the efforts of countries to implement controls on GMOs and protection measures for national smallholder food production for domestic consumption.

## direct pressure of U.S.

The cases of Sri Lanka, Indonesia and Bolivia presented in this publication testify to the direct pressure of U.S. authorities and/or biotech giants such as Monsanto. All the cases of local resistance presented here also unveil the dynamics of a complex situation. They illustrate the key position of GMOs in a corporate-led process of economic globalization that coupled with the Green Revolution agricultural development model are attending to mounting biodiversity loss.

## biotechnology dynamics

Unlimited growth is an inherent feature of this overall dynamic, and genetic engineering and other modern biotechnologies provide capital growth opportunities too enticing for corporations to let pass. Biotechnology is a rapidly concentrating and very dynamic industrial sector in which approximately ten giant conglomerates - - including Monsanto, Aventis, Syngenta and Dupont -- dominate and aim to fully control worldwide production and distribution of food and pharmaceuticals. Together with access to water, these essentials of human life were until very recently (one might say until the advent of the WTO) controlled by local communities, not corporate interests.

The world economy has moved into a self-perpetuating dynamic that feeds the growth imperative of ever-fewer, ever-larger corporations that control and concentrate ever-larger shares of capital and markets. The WTO has become a privileged instrument to legitimize and further such corporate interests. Multilateral trade agreements, enforced through WTO rules, are reshaping the world economic order and the global distribution of labour to better serve their profit interests and their inherent need to grow ... or die.

# local struggles & corporate agriculture's threats to food sovereignty & biodiversity | part one

by alberto villarreal, redes/friends of the earth uruguay

## ethical concerns and biodiversity destruction

The true nature of all these powerful machinations is not yet well known. But what is increasingly clear is the mounting scientific research and public concern for the threats posed by GMO introduction in agriculture, and their release into the environment. They range from ethical concerns to potentially devastating impacts on biodiversity, especially agricultural biodiversity, which is already seriously threatened by patented high yielding varieties of the Green Revolution and its whole technological package, of which GM crops are a true heir.

## environmental threats and dependency

Well-documented environmental threats include genetic erosion, environmental pollution through increasing chemical use, GMO contamination of non-GE crops, GMO-caused harm to beneficial organisms, species loss through monoculture expansion, and increased water use by growing varieties that are not locally adapted. Potential health threats include antibiotic resistance, allergic reactions, and increased malnutrition due to changing dietary patterns. Farmers face increased dependency on corporations that sell patented GM seed and further displacement from their lands and greater concentration of land ownership. Other socio-economic threats include decreased food sovereignty and security through over-reliance on only a few patented high yielding and GMO varieties, erosion of the culture and livelihoods of biodiversity nurturers that disappear as traditional seed varieties are lost, and biopiracy associated with biological prospecting for genetic engineering.

## local resistance and positive action

In the face of these threats, growing numbers of local movements are resisting this corporate imposition on our fields and lives. Local resistance takes many forms. Some have acted directly to destroy GM field trials. This happened in India, Indonesia and Brazil by peasant members of Via Campesina. Local authorities have banned GMOs, as in the Rio Grande do Sul state of southern Brazil. Civil society coalitions have fought for legislation establishing "GMO free" territories, as in the case of Nicaragua, or pursue court actions against legislation that allows the introduction of GMOs, as in the case of Indonesia. Proactive local entities have moved to protect, conserve and reproduce traditional local seed varieties, as in the international "Growing Biodiversity" project sponsored by GRAIN. The latter strategy is also advocated in the cases of Bolivia, Canada, Ecuador, Indonesia, Nicaragua and Uruguay.

The seven case studies featured in this publication clearly reflect many of the growing tensions and conflicts between these public interest actors and the multilateral institutions and giant biotech and food processing TNCs aiming to impose the Green Revolution agricultural development model and its new genetech revolution. National governments like the US government openly embrace the interests of those companies and champion them in the multilateral institutions, or finally give in to their unacceptable pressures, thus giving away their peoples sovereignty.

u.s. dominance and unilateralism

For good reason, the first case featured is of biosafety supporters who resisted U.S. dominance and unilateralism. The U.S. is one of the few nations that refused to sign the CBD. As a CBD-outsider the U.S. has led the so-called "Miami Group", an umbrella group fiercely opposed to the Biosafety Protocol. Bullying and threats through unilateral trade sanctions under the WTO now compound this U.S. arrogance. Its targets are countries that adopted strict GMO and food safety regulations, including Sri Lanka, Bolivia and Croatia and Asian nations that plan to introduce new GMO labeling laws, including China, Korea and Thailand.

Despite mounting public support, these case studies show how governments finally capitulated to unacceptable U.S. threats of economic sanctions rather than respecting the sovereign will of their own population and international public opinion. It also shows the extent to which the U.S. government fears and attempts to negate the participatory, democratic decision-making of other countries, choosing instead to force its own authoritarian rule through economic threats.

inhumane food aid in Nicaragua

The Nicaraguan case highlights the cynicism of the U.S. government in its attempts to force GMOs onto southern countries through food aid. This has also proven to be the case in Colombia, Ecuador and Bolivia. Hunger, disasters and emergency situations in the Third World are regarded as business opportunities by the US government and the food industry. Food aid provides them an unregulated market on which to reap huge profits. Cloaked in a humanitarian robe, food aid should rather be named "food intervention", given that it favours the dumping of agricultural and food surpluses from the North mainly into southern markets, at the expense of and disrupting enormously domestic food production capacities in those countries under emergency situations, thus life-threatening their peoples food sovereignty. Food aid has in fact a record of systematic destruction of the traditional food production systems in those African countries that have suffered most hunger. The Nicaraguan case will surely clear any doubts one might have with regards to the "humanitarian" ethics that moves the US government and the biotech giants.

the power of verification

Finally, the case of Nicaragua offers a good example of a unique tool in the hands of civil society organizations campaigning on GMOs, that is, the possibility to verify GMO content with the very same methods used by regulatory authorities in the US. Access to those verification tools might turn the debate (and regulatory process) on GMOs definitively in favour of its critics, when uncertainties about the risks will be magnified once there is proof that GMOs are out of control.



*Percy Schmeiser demonstrates against corporate control of seeds. [iza kruszewska, anped]*

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protecting centers of origin in bolivia

The Bolivian case study, as the Nicaraguan, is noteworthy because it describes a major theme of campaigns against the introduction of GE varieties at the centre of origin of the corresponding crops, in this case the potato and corn. GM contamination has recently been found in traditional corn varieties in Mexico, and in the very germplasm of CIMMYT's genebanks (CIMMYT is the Spanish acronym for the International Corn and Wheat Improvement Centre). As the Nicaraguan case reveals, chances are high that corn has been genetically contaminated also in Nicaragua -one of the Mesoamerican centers of origin for corn- thus threatening the genetic diversity and variability of local and traditional seed varieties nurtured and developed by peasant and indigenous communities in that country. These discoveries confirm fears that have mobilized Bolivian indigenous people, farmers, and civil society organizations to oppose the Proinpa Foundation's plans to test GM potatoes.

the threats of privatizing research

The Bolivian case, as the Indonesian, also highlights the involvement of university research units in GMO development, in both cases with Bt potatoes. These studies are often directly financed by the gene-giants. This has provoked growing public concern about the privatization of research in public institutions, and the orientation of research for profit motive rather than for the common good. For example, England's Leeds University provided the GM material to be tested in Bolivia, and the Michigan State University is one of the three institutions that provide the Bt potatoes being now field tested in Indonesia.

giving in to tnc's

The Bolivian case study also reveals an important democratic deficit in the implementation of national biosafety strategies developed at the wake of the Biosafety Protocol negotiations. Control and decision-making on biosafety issues, including introduction of GM material, often occurs in national biosafety commissions not open to civil society participation. Yet these regulatory bodies hear industry lobby groups and the research institutions of big agri-business. This serves to prevent any effective compliance with the Biosafety Protocol's minimum stated goals, including controls on transboundary movement of GM material.

Democracy and stakeholder participation in policy and decision-making is a recurrent theme throughout the case studies. As shall be seen, local and national authorities often are initially responsive to the demands of civil society organizations, at least when they refer to safety issues related to GMOs, but most often they finally give in to bilateral pressures from governments like the US administration, from multilateral institutions such as the WTO, and/or from TNCs such as Monsanto. However, there are also cases like the Uruguayan and the Indonesian, where national authorities are all the way from the beginning completely blind and deaf to the demands of their population, without the need of external pressures. Casually, the governments in both of those countries have not yet dealt properly and come to terms with a recent past of fierce dictatorial military rule.

## imposing neo-liberalism

In fact, the neo-liberal policies of unrestricted opening of domestic markets to international competition which provide the true background for the progressive loss of locally adapted varieties of white beans in Uruguay, were initially adopted unilaterally by the military regime that ruled that country between 1973 and 1985 -even before the Uruguay Round of GATT negotiations established the Agreement on Agriculture (AoA) now in force under the WTO. Both in this case as in the case of the privatization of water for irrigation in Ecuador, pressures were felt more directly from the World Bank and the IMF. These institutions imposed privatizations and the Green Revolution model for agricultural development as conditionalities to their loans and financial stabilization aid programs, based on a doctrine of (southern) market opening and a clear primacy for export monocultures grounded on the theory of supposed comparative advantages.

## impacts of the agricultural market liberalization in uruguay

The white bean case from Uruguay is paradigmatic, insofar it tragically illustrates the lies and failings of that doctrine and the serious damage resulting from the agricultural market liberalization now sanctioned by the WTO AoA agreement -even for one of the (previous) net food exporting countries as Uruguay. On one hand, it testifies to the fact that the implementation of neo-liberal policies to pry open domestic markets and reduce or eliminate import tariffs as required by the AoA agreement in the WTO, may and does transform countries in the South that used to be to a large extent self sufficient in their food supply -or even net food exporting countries such as Uruguay--into importers of food agricultural products that were formerly well adapted to the environmental and social conditions of the country. As a result of those policies, Uruguay now imports 85% of the beans it consumes, as well as a high percentage of the fruits, vegetables and farm products it once produced. Even today, in the midst of an unprecedented economic crisis under which imports and exports have plummeted by an average of 20 to 30%, imports of products from the plant kingdom have increased by 33% in the last six months, following the debacle of the Argentinean economy.

## invading domestic markets

On the other hand, the subsequent invasion of the domestic market with low price agricultural products (in this case, subsidized beans from the US and cheaper lower quality beans from Peru and Myanmar) push down the domestic prices of national produce, resulting in farmers abandoning the cultivation of beans due to the lack of profitability of that crop, or even to bankruptcy and forceful emigration when the same situation generalizes to many of the crops farmers used to cultivate. In the end, in the case of white beans in Uruguay, it is not only a sustainable farming system that goes lost - a system, which was highly independent from external chemical inputs, required low capital investment and used seed varieties that were well adapted to the local agricultural ecosystems. But the small family farmers that could preserve crop biodiversity and protect natural resources through their low impact agricultural practices are lost too. Additionally, the very logic of such policies and processes leads to land concentration in ever fewer hands, and specialization in a shrinking amount of seed varieties and crops for export that require inputs produced by big TNCs. It becomes evident that all throughout the agricultural production and consumption chain it is invariably big transnational corporations that most benefit from such 'free market' policies -be it as importers of food produce that used to be locally grown, as seed and chemical input suppliers for the Green Revolution industrial farmers that usually replace evicted small family farmers, as exporters of the incoming cash or commodity crops, or as importers or buyers of cheap agricultural inputs for food, feed and industrial processing industries (as in the case of Bt cotton in Indonesia for the huge textile industry).

# local struggles & corporate agriculture's threats to food sovereignty & biodiversity | part one

by alberto villarreal, *redes/friends of the earth uruguay*

## subsidy hypocrisy

Finally, the Uruguayan case study surfaces a fact that further belies sacred truths in the market liberalization credo; Southern farmers are denied protection and subsidies because such measures are "trade distorting", they are told. Nonetheless, not only are they asked to tolerate the enormous agricultural subsidies in the North (an 80% of which accrue to big industrial farmers and agribusiness), but also they now even have to withstand that there are some agricultural activities that are highly subsidized also in the South, especially tree plantations. Such is the case in Uruguay, where the biggest tree plantations are owned (in Uruguay) by big TNCs (Weyerhaeuser, Shell and the Spanish Ence), which are in fact the biggest landowners in the country. When felt even in national policy-making, this hypocrisy about subsidies has been an enormous eye opener for farmers who thus far had been buying to a large extent the neo-liberal credo.

## the threats of gat's

The case of privatization of water for irrigation in Ecuador, brings to bear some of the serious threats posed by the GATS negotiations in the WTO aimed at service markets liberalization (and privatization), where water is reckoned as a high value market worldwide, already valued at more than U\$S 2 billion annually. Other services targeted in those negotiations that entail high risks for biodiversity include energy, tourism and so called environmental services. But the case also puts in the forefront the potentially stark conflicts that will evolve if further liberalization and privatization of public services make progress in the WTO. The popular uprisings that stopped privatization of water and energy services in Cochabamba (Bolivia) in 2000 and Ayacucho (Peru) in 2002 respectively, testify to that course of conflict evolution. For those popular uprisings, as for the Ecuadorian peasants that will be displaced of their land as a direct consequence of irrigation water privatization, water (and energy) is a right, not a service subject to market forces and profitability. Water liberalization and privatization will deprive indigenous communities and peasant farmers from their traditional rights to water, while irrigation will only be economically accessible for major national investors and transnational agribusiness.

## flooding fertility in ecuador

Besides the indirect impacts resulting from the establishment of big agribusiness Green Revolution production systems in the region, the dam that will be constructed to provide irrigation will have enormous impacts by itself on biodiversity. It will flood a valley of 2,400 hectares that is known to be one of the greenest and most fertile in the otherwise dry region surrounding the city of Guayaquil. Additionally, excessive irrigation can potentially lead to desertification processes and loss of biodiversity in the region.

Another important aspect to highlight from the Ecuadorian case is the problem of land tenure and the land rights of the traditional caretakers of biodiversity, who often stand at disadvantage in case of litigation with corporations, given that many of them do not have property titles over their land. Therefore, they have no legal way to make their rights respected or claim redress from government or corporations.

### genetic myths in indonesia

The case of Bt cotton in Indonesia belies some of the myths that the biotech industry has used to promote the benefits of genetical engineering in agriculture. On one hand, it gives evidence to the fact that biotech R&D in agriculture not only deals with food crops, but also with other crops for industrial uses, such as cotton. In fact, contrary to its supporters' claims that depict it as the solution to world hunger, R&D in agricultural biotechnology focuses mainly in ornamentals, animal feed crops and other industrial and non-food crops such as tobacco and cotton which will be of no help in feeding the world.

On the other hand, it belies the pretended productivity and economic and environmental convenience of GE crops. The Indonesian case exposes the fact that Bt cottonseed might not necessarily be the best choice for Indonesian cotton farmers, given that it does not deal with one of the main cotton pests found in the region where the field trials are being conducted. It will therefore still require large amounts of pesticides. This had already become evident during the field trials, where the GM cotton succumbed to drought and insect attack. In addition, GM cottonseed is over five times as expensive as other locally bred seeds that achieve the same yield of 2-3 tons promised by Monsanto for its Bt cotton. Even though the true yield of Bt cotton in the field trials is a matter of controversy, all sides agree it was lower than expected. Even the government revealed that more than 70 percent of all the Bt crop locations didn't produce the promised expected yields, while some Bt cotton growers revealed they just got around 500 kilograms per hectare instead of the 3 tons announced by Monsanto.

### canadian farmer's rights and genetic contamination

The well-known case of Canadian farmer Percy Schmeiser's legal struggle with Monsanto epitomizes the threats of patented GM crops to farmers. The WTO's intellectual property laws, and the contracts imposed on farmers by gene-giants like Monsanto, now threaten the fundamental right of farmers worldwide to save, use and exchange their own seed.

This case confirms the risks of genetic contamination of conventional crops with undesired traits from GM crops. It also highlights the mounting opposition between organic farmers' efforts to orient agriculture toward environmental sustainability, and the conflicting goals of gene-giants. This is as much a political struggle as it is a struggle in the fields, where genetic contamination is making organic and sustainable agriculture impossible to practice. That Schmeiser is anything but the radical anti-globalizer that Monsanto often chooses to depict its critics reveals something about the nature and scope of the growing conflict.

### challenging grow or die development

To accomplish enduring biodiversity conservation and biosafety at the local, national and global level will require much more than the local resistance depicted in this publication. It will also require much more than ratification of a watered-down Biosafety Protocol. Rather, it will require fundamentally challenging and changing the current model of economic development based on profit-making and grow-or-die imperatives. It will require dismantling or radically reforming the WTO and its AoA agreement, as well as its other agreements that shape to a great extent the orientation of world agriculture, such as the TRIPs agreement on patents and intellectual property rights, the TBT agreement on technical barriers to trade (that deals with labelling) and the SPS agreement on sanitary and phytosanitary standards (and the application of the precautionary principle).

# local struggles & corporate agriculture's threats to food sovereignty & biodiversity | part one

by alberto villarreal, redes/friends of the earth uruguay

## ecological debt

It will require acknowledgement of the ecological debt the North owes the South, and the annulation of the illegitimate Third World financial debts that push them to reorient their economies and agriculture to exports in order to get the foreign currency to pay those debts. It will require radical changes in current terms of trade that play at the disadvantage of raw material exporting countries in the South, both from a financial and an ecological point of view. It will require dismantling or radically reforming World Bank Rural Development policies, and the joint IMF/WB poverty reduction policies, both of which prop up the Green Revolution agricultural development model that has already proved to be disastrous for biodiversity and its caretakers. In short, it will demand the appropriate political, economical and institutional conditions to make biosafety and biodiversity conservation a living reality cared for by local communities, economic actors and governments alike.



## the right to choose

However, these cases do reveal the true scope and high stakes at play in this struggle. They show how farmers and citizens are fighting, as Schmeiser points out, corporate attempts at total control of our food and health systems through GMOs and patents on life.

They are rising up all over the world "to protect their rights to choose the technology they use, the crops they grow and the seeds they save," to feed and heal themselves and their communities.

why are global trade agreements of such concern to local struggles?

GMOs are not yet under negotiation under the WTO, but several WTO agreements will clearly change this at the behest of the gene-giant lobby. This includes TRIPS (Trade-Related Intellectual Property Rights) that govern patents and other "sui generis" forms of intellectual protection for microorganisms, and GMOs. The TBT (Technical Barriers to Trade) agreement will examine compulsory labelling of GM (genetically modified) products. It also includes SPS (Sanitary and Phytosanitary) Measures, where application of the precautionary principle is under heavy fire of corporate interests.

Similarly, the AoA (Agreement on Agriculture) indirectly paves the way for widespread (compulsory) introduction of GM crops to farming communities, world markets and our food system. It actively promotes and supports the large scale, high input, export oriented monoculture farming industry typified by the "Green Revolution" and spearheaded by the very same agri-business industries (Syngenta, Pharmacia, Aventis, BASF, Dupont, Bayer and Dow) also found in the core group of GMO pushers. The "Gene Revolution" in agriculture is the new production of the same actors who brought us the Green Revolution.

The AoA (Agreement on Agriculture), TBT (Technical Barriers to Trade) and SPS (Sanitary and Phytosanitary Standards) agreements in the WTO are a key tool in the hands of big biotech and food processing TNCs to impose their products on Third World markets at prices below their cost of production, thus destroying the smallholder and family farming which provide the basis for peoples food sovereignty, transforming food into a mere commodity on which to extract corporate profits.

Careful attention must also be given to the WTO's often-successful attempts to influence decisions of other multilateral bodies and agreements in favour of such corporations. This includes influence over the FAO and the CBD, in which critical references to GMOs legitimize their overall acceptance as the way forward for "sustainable" agriculture, and against hunger. That the Biosafety Protocol has been substantially watered down clearly reveals the muscle of the gene-tech industry lobbies, especially those of the U.S.

# resisting unilateralism: biosafety proponents versus the u.s. | part two

by *juan lopez, friends of the earth europe*

## u.s. policy on biosafety: a case of unilateralism

The United States and biotech corporations are stepping up pressure to expand the penetration of genetically modified organisms (GMOs) into markets worldwide regardless of potential impacts on health or biodiversity. Increasingly, the threat of World Trade Organization (WTO) action is used to weaken GMO moratoria and labeling requirements. Fortunately, resistance to these threats is also growing.

In recent months, the Washington administration has stepped up pressure on any country seeking to adopt strict GMO legislation, deeming such measures as barriers to trade. Leaked documents obtained by Friends of the Earth International from the U.S. and Argentinean governments reveal the degree of pressure that the U.S. and biotech companies exert on countries, like Croatia and Bolivia, which wanted to adopt strict GMO regulations. Similarly, enormous pressure is now being applied on Asian countries, including China, Korea and Thailand, which plan to introduce new GMO labeling laws. Last year, U.S. threats of WTO action against Sri Lanka led it to abandon a proposed GMO ban to have been implemented in September 2001. At present the European Union (EU) faces similar pressure.

U.S. biosafety policy is characterized by unilateralism and flagrant disregard for other countries' legitimate interests and concerns. The U.S. is among the few nations that declined to sign the Convention on Biological Diversity (CBD). It also opposed the Biosafety Protocol, which was negotiated under CBD auspices and adopted in January 2000.

Developing countries have strongly expressed the need for a Biosafety Protocol. These nations epitomize the incapacity to deal with the hazards posed by GMOs to biological diversity and human health. Most such countries held that the paucity of regulatory frameworks for biosafety posed unacceptable risks, and rendered GMO field releases for testing or cultivation untenable. These concerns were laid out in the Protocol years ago, and unfortunately they have proven prophetic of field contamination around the planet - GM (genetically modified) maize unapproved for human consumption discovered in U.S. food products, GM canola (rapeseed) contamination in Canada, GM maize contamination of indigenous varieties at their centre of origin in Mexico, and illegal GM cotton in Greece and India.

The Protocol recognizes that GMOs are different from non-GMOs and therefore require special treatment. The Protocol establishes limits to international transboundary movements of GMOs and enhances the precautionary principle in the field of biosafety.

Nonetheless the U.S. and biotechnology multinationals have deemed biosafety measures, including many designed to conserve biodiversity, as trade restrictive and therefore unacceptable and "protectionist". The U.S. is modern biotechnology's biggest promoter and has a huge economic interest in the sector. As such the U.S. deems GMOs to be good and safe, and uncertainties and potentially harmful impacts as insufficient justification to restrict trade.

However, other countries have seriously considered the risks GMOs pose to the environment and health. This is the true of the EU, Sri Lanka and Croatia, cases which will be discussed below. Bolivia, another important such case, will be described in detail in the next chapter.

## europaan unie steunt vast

In June 1999, the EU adopted a de facto moratorium on new marketing authorizations of GMOs; since 1998 no new GMOs have been approved in the EU. In keeping with the prevention and precautionary principle five member states — Denmark, Greece, France, Italy and Luxemburg — resolved to suspend new GMO authorizations for cultivation and marketing, pending an improved regulatory framework on GMO releases which establishes labeling and traceability.

The U.S. fundamentally opposes the moratorium. Alan Larson, U.S. Undersecretary of State for Economic and Agricultural Affairs said in December 2001 that he was “not prepared to accept the premise that there will be no progress on approvals for another two years.” Speculation grows that the U.S. will launch a trade dispute against the EU in the future.

The U.S. is currently trying to undermine proposed EU legislation on labeling and traceability, as U.S. comments to the WTO reveal. The U.S. is questioning the democratically-established EU decision-making process charged with authorizing GMOs. The U.S. comments identify as the “core problem facing the European Union in biotechnology” the fact that EU Member States have the final say in the authorization procedure. They believe the recent proposals fail to address this “problem” and complain that “decisions will still be made through political process” and therefore “individual Member States will continue to be able to hold the approval process hostage to political concerns”.

Despite this pressure the EU appears to be standing firm, determined to implement the legal GMO framework that the U.S. is trying so strenuously to undermine.

## sri lanka

Early in 2001, the Sri Lanka government drafted a Food Act that would ban GMOs. The Act aimed to protect the Sri Lankan people from potential and unstudied impacts of GMOs.

The U.S. immediately mounted opposition to the proposed ban. The agricultural counselor from the U.S. Embassy in India threatened to challenge the ban under the WTO, a move which would have cost Sri Lanka \$190 million in penalties if it did not lift the ban.

Sri Lankan NGOs mounted a campaign to urge their government to withstand this threat. More than 200 consumer, farm and environmental groups worldwide added their voices to protest the Bush administration’s challenge to Sri Lanka’s food safety laws. Unfortunately, due to U.S. and Australian pressure, the Food Act intended to enter into force in September 2001 was deferred indefinitely.

*“Sri Lanka is vulnerable because it does not have biosafety legislation, and pressure and threats from importers that they will stop buying its tea are disastrous”*

Hermantha Withanage  
Environmental Foundation Ltd./ FoE Sri Lanka

## croatië beschermt zijn rechten

In 2001, Croatia prepared a draft law to adopt a moratorium on GMOs. In June of that year, four Croatian ministries agreed on the text of a draft law to ban GMOs and products thereof until a more specific regulatory framework is in place. The ban was proposed because of the possible negative impacts GMO introduction could have on environment and health in Croatia.

Since September 2001, Croatia has experienced increasing U.S. pressure to drop the draft law. In a memo dated November 28 and addressed to the Ministry of Environment from the U.S. Embassy in Zagreb, the U.S. tried to put trade before environmental protection stating, “if such a ban is implemented, the U.S. Government must consider its rights under WTO.” On 10 December 2001, environmental groups denounced this U.S. maneuver during a Roundtable on Biosafety organized by the Croatian Environment Ministry in Zagreb.

The above-mentioned U.S. embassy memo also asserts that biotech food products “have been demonstrated to be as safe as conventional food products in the U.S. and elsewhere.” However, in response to this memo U.S. groups asserted in a letter to the Croatian Minister of Environment that the U.S. regulatory framework and monitoring policies are inadequate to conclude that GMOs are safe at this time.

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*“It is outrageous that the U.S. interferes in our policy-making by imposing their trade priorities over our environment and health protection efforts. Countries in the EU have adopted a moratorium on GMOs. I do not see why Croatia should be prevented from implementing similar measures”.*

Damjan Bogdanovic  
Green Action/Friends of the Earth Croatia

# resisting unilateralism: biosafety proponents versus the u.s. | part two

by juan lopez, friends of the earth europe

wto as a tool to force gmos

Resolute in the face of U.S. lobbying, Croatian Environment Minister Bozo Kovacevic stated that Croatia will draft legislation to ban production and limit imports of food containing GMOs. According to Kovacevic, “the U.S. government is lobbying for the interests of U.S. companies, and that is their right. Our duty is to protect our interests and follow the legislation of the European Union.”

In March 2002, U.S. President George Bush publicly announced his intentions to impose protective tariffs of up to 30 percent on imported steel from certain countries. The U.S. justified these measures as a way to protect its national steel industry as it reorganized and improved competitiveness on the international level.



This glaring contradiction between U.S. policy on biosafety and steel show that the U.S. is unwilling to respect the same “free trade” dogma it is pushing so forcefully at the global level. The U.S. deems biosafety legislation adopted by other countries as unjustified trade protectionism, while protectionist measures in favour of U.S. steel are considered justified. These U.S. policy contradictions are a clear reflection of unilateralism: trade protectionism is bad, except when needed to protect U.S. interests.

The above cases expose the WTO as an instrument used by the U.S. government and biotech corporations to force acceptance of GMOs around the world. They reveal U.S. opposition to GMO legislation as unilateralist attempts to protect its own interests, at the cost of the legitimate concerns other nations have for environment and health protection. This WTO-aided interference imposes US trade priorities over the environmental and health priorities of other nations, and it is indefensible.

*References: For more information on documents mentioned in this case study, see [www.foei.org](http://www.foei.org)*

# resistance to gmo's in food aid: the case of ge

## food aid and crops in nicaragua | part three

by julio sánchez, centro humboldt-friends of the earth nicaragua

nicaragua: an impoverished country

Nicaragua is an impoverished country, placed at a disadvantage within the new world order, which is characterized by globalization and the imposition of rules dictated by multilateral bodies and the World Trade Organization, the main guarantor of transnational capital. Our country is currently going through a severe crisis in peasant and indigenous agriculture, as a result of the economic measures imposed by international financial bodies, climate disasters, lack of financial and technical assistance to small and medium sized farmers, the loss of biodiversity (local varieties) and the erosion of our cultural identity.

transgenic uncertainty and the precautionary principle

All human beings have a right to healthy and nutritious food. Furthermore, countries and their peoples have the right to maintain their food sovereignty. This is to say, that they should be able to decide how to feed themselves, within their cultural patterns, and exercising control over the whole production process.

The impacts of transgenic or genetically modified organisms (GMOs) on the environment and on health are part of a broad debate in which the scientific community is not yet in agreement about their safety. However, numerous studies exist that show the potential risks of GMOs on the environment and on health as well as the negative socio-economic impacts .

The fact that the scientific debate is still open on the danger of serious and irreversible damage caused by transgenic organisms does not justify the fact that the Nicaraguan government has allowed the free entry of these organisms. Furthermore, the government's lack of action in taking effective measures --applying the precautionary principle-- to avoid negative impacts on the environment, on health or at the socio-economic level cannot be justified. In addition, Nicaragua has no legislative framework to regulate the introduction of transgenic organisms into the environment or into the human food chain, and does not possess the technical, financial, political, or infrastructural capacity in the area of biosafety to respond to the potential consequences involved in accepting this technology. The debate on GMOs and the fact that their possible adverse effects may be irreversible has alarmed various civil society sectors in Nicaragua. These groups are concerned about food sovereignty, the protection and conservation of natural resources and the country's economic development, and feel that the presence of GMOs is unacceptable and must be condemned.

the importance of agricultural biodiversity in nicaragua and the need to protect native seeds

Nicaraguan agriculture is threatened by the introduction of genetically engineered (GE) products, particularly maize. Peasant communities in the country have traditionally tended to and improved seeds, and the techniques used are in danger of disappearing. The introduction of GMOs and the possible genetic contamination of Nicaraguan crops represents clear risks for farmers and the national agricultural production model. The loss of native or traditional varieties may be accelerated, as a few transgenic varieties could replace the varieties selected by the farmers themselves. Thus, Nicaragua, as a centre of origin for maize, could lose all of its native varieties with catastrophic effects for farmers and the country's food sovereignty, leading it to an agricultural situation dominated by mono-cultivation and a monopoly on production systems by transnational companies. The negative impacts of these production systems are well known by the Nicaraguan people: the cases of coffee and cotton are two examples.

In October 2001, the scientific journal "Nature" revealed the existence of contaminated germplasm in Mexico, another centre of origin for maize, due to the presence of transgenic crops introduced by transnational biotech companies. This contamination occurred despite a moratorium on the introduction of GMOs in the country. Nicaragua is another centre of origin for maize, and the Mexican discoveries thus highlight the risks facing maize in its Central American centre of origin.

# resistance to gmo's in food aid: the case of ge food aid and crops in nicaragua | part three

by julio sánchez, centro humboldt-friends of the earth nicaragua

the need to identify the presence of gmos in nicaragua

Faced with the potential risks posed by GMOs, the first step was to find out if there were in fact any GMOs in Nicaragua. During the nineties, before the presence of GMOs was even confirmed, Centro Humboldt/ Friends of the Earth Nicaragua together with other sectors, including consumers, farmers, human rights organizations, indigenous movements, among others, created discussion fora on this issue

The next step was the implementation of monitoring activities in order to identify the presence of GMOs, in coordination with local governments and farmers groups who shared our concerns.

This was accompanied by political actions, including a request submitted to the government for an official position against GMOs. The administration responded with a communication in which it asked the Ministers to study the concerns that were put forth and include them in the national action plans.

monitoring activities

Monitoring focused on two areas: the cereals provided by the World Food Programme (WFP) for food aid, destined for programmes for pregnant women, pre-school age children and Food for Work, distributed in the municipalities of El Sauce and Achuapa, in the Department of Leon, and the municipalities of Mozonte and Apali in the Department of Nuevo Segovia.

The second focus was on experimental promoted by the USAID-PROMESA Seed Improvement Programme, and supplied with maize seeds by Monstanto, Cargill and Dekalbrien to the communities of San Bartolo in the Quilalí province and El Arenal in the province of Nueva Segovia.

After gathering samples in Nicaragua, Centro Humboldt/Friends of the Earth Nicaragua carried out an analysis in order to detect "lateral discharge" on the food aid samples as well as from experimental crops. In the United States, the Federal Grain Inspection Service - FGIS - uses the method of a strip in order to detect lateral discharge to analyse maize, as official criteria recognised by the U S Grain Standards Act - USGSA, showing results highly likely to identify the presence of GMO events.

Following the preliminary analysis, samples were sent to the Genetic ID laboratory in the US state of Iowa, internationally recognized as an authority on genetic analysis.

suspicious are confirmed: there are gmos in nicaragua

The Genetic ID laboratory analysis of the samples of food aid cereals tested positive, clearly indicating the contamination of food aid with GE maize. Similarly, Roundup Ready was also traced, a GMO not authorized in the European Union.

The experimental crop samples also indicated possible GMO content although this was at the outer limit of detection. Following these results, the presence of GMOs in Nicaragua was an established fact.

The analysis revealed that 67% of the food aid samples tested clearly positive and 33% of the experimental crop samples were possibly contaminated. The latter result does not rule out the possibility that another country that is a centre of origin for maize might be genetically contaminated. FoE and other organizations believe that this situation demands urgent government action including exhaustive monitoring by independent laboratories in order to find out whether there are genetically contaminated maize seeds in the fields.



resistance against gmos: the establishment of an alliance for a gmo-free nicaragua

Information received from international sources on the possibility of the entrance of GMOs into Nicaragua through food aid and through seeds aroused the concern of various sectors of Nicaraguan civil society. Starting in 2000, information activities on the subject have been increased, with several seminars involving peasant communities in Nicaragua being held, and the mass media has become involved in the problem.

In the light of these alarming events, the organizations that for many years had taken up the subject at different fora established an alliance gathering seven Nicaraguan civil society organizations including human rights groups, health organizations, environmentalists, consumers and food workers. This coalition was named "Alliance for a GMO-free Nicaragua."

On May 24, 2002, after having analyzed the results of the analysis, the presence of GMOs was publicly denounced at an international press conference with the participation of international organizations such as Friends of the Earth International, Consumers International and Greenpeace Mexico, who explained their experience with GMOs in other parts of the world. The Alliance next lodged a complaint with the Human Rights Attorney General, the Environmental Attorney General and the Nicaraguan National Assembly, and met with the Presidents of the Health, Agrarian Reform and Human Rights Commissions and with representatives of the Environmental, Women and Children's Commissions, who promised to take action on the matter.

In light of the facts, the Human Rights Attorney General reiterated its support in defence of the rights of Nicaraguans that would be affected by the consumption of these controversial products.

The Environmental Attorney General accepted the complaint lodged by the organizations, and requested the relevant ministries to launch an investigation. If the presence of GMOs is ultimately verified, they will assess the facts in view of the possible elimination of the products containing GMOs.

One of the strongest critical reactions was from the US government, through its embassy. The US accepted that 40% of food aid was transgenic, but in an attempt to minimize the problem, maintained that Nicaragua had no alternative other than to accept it. However, the Nicaraguan government had no knowledge of the fact that gmos were being introduced through food aid.

A very important step in the process has been the dissemination of the Nicaraguan complaint at the World Food Summit and at the parallel NGO Forum, projecting the global scale of the problem of GMO contamination.

Resistance continues and the Alliance is strongly supporting a moratorium on any transgenic organisms in Nicaragua by virtue of the precautionary principle.



# resistance to gmo's in food aid: the case of ge food aid and crops in nicaragua | part three

by julio sánchez, centro humboldt-friends of the earth nicaragua

let us care for and improve our  
native seeds

seeds and biodiversity Tending to biodiversity is tending to life, from the smallest living beings that are invisible to the naked eye, called microbes or micro-organisms, to the largest ones, including plants, wild and domestic animals, and human beings. Sustaining biodiversity also includes maintaining our knowledge about organic agriculture, healthy food and natural medicine.

Caring for and using our native seeds is an important way to tend to our biodiversity and our lives.

crop diversification Crop diversification means sowing different kinds of plants, cultivating them on our plots and throughout communities.

Crop diversification is a primary way to benefit from plant biodiversity, simultaneously improving our food security and the lives of farmers. .

Just like many peasants from different communities, Justina Sanchez and Juan Centeno from the El Coyolito (San Lucas) community benefit from crop diversification and soil and water conservation, sowing many different species on their plot including maize, beans, gandul, caupi, jocote, oranges, lemons, papayas and many other crops.

diversification of varieties The diversification of varieties is a second step in benefiting from plant biodiversity.

Each cultivated species has many different varieties. Varieties are diversified when farmers sow two or more varieties of each crop, thus guaranteeing a harvest even if one crop fails due to pests or drought.

Farmers sowing a single variety of maize risk loosing their food when the harvest fails.

In the community of El Aguacate (Santa María), Juan Pablo Maradiaga's family is ensured food throughout the year because they cultivate diverse varieties of maize. This family sows five different varieties of maize, so that if one variety fails, the other four guarantee their harvest and their food.

native varieties Native varieties have been inherited from our parents and grandparents and are the fruit of the seed selection made by peasants during each harvest.

Native varieties of basic grains, vegetables, fruit trees and other crops are the basis for farmers to produce and improve their seeds. If we lose these native varieties, we will lose the opportunity to improve our children's future.

We need to conserve, tend and benefit from our native seeds that our ancestors have adapted to the conditions of each community. Farmers have the responsibility of organizing themselves in order to conserve different native varieties.

For example, in the community of Cuje (Totogalpa) many native varieties of maize are still grown, including 14 different native varieties of maize large yellow, chinandega, chontaleño, jicareño, maquina, white otillo, cockspur, white pujagua, rocamel, red, Salvadorian, Venezuela, yellow fox and white fox. The blue and white Cuban varieties have been lost. This community provides a good example of the diversification of native varieties of maize, and serves as a reserve for Nicaraguan agricultural biodiversity.

*Taken from a leaflet of the Campesino a Campesino Programme - Terra Nuova Madriz and Nueva Segovia, Nicaragua. 2001. Cuidemos y mejoremos nuestras semillas criollas*



# resistance to gmos in centres of origin: the case of the bolivian potato | part four

by maria luisa ramos, fobomade

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*"It is outrageous that a small country like ours is forced to accept genetically modified foods, despite public opposition".*

*From a Bolivian Forum on Environment and Development (FOBOMADE) statement*

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the crucial role of the potato  
in bolivia

In Bolivia, which is the potato's centre of origin, genetic diversity of the crop is so high that within one ayllu (a locally familiar farming unit) up to 70 varieties can be found, from sour to semi-sour to sweet. Recent studies have demonstrated that 235 species of wild or cultivated potatoes exist.

Farmers in the High Andean Region guarantee their food requirements through diversified agriculture with the aid of high biodiversity. The potato is one of the most important staples of the country and assures food sovereignty for Bolivian farming families and for the nation.

Because the preservation of native potato varieties is crucial for farmers in that region, several local community initiatives have been launched to revitalize and improve local seed potatoes. One such initiative taken by Agruco (Agroecology of the University of Cochabamba) consists of maintaining in one ayllu an in situ seedbank with more than 45 native potato varieties. The seedbank functions as a source for varieties not actively cultivated, or for seeds if planting stock quality diminishes. In this way potato biodiversity is preserved and revitalized.

gm potato introduction: the risks  
to bolivia

In April 2000, the Bolivian biosafety committee approved a request for field trials of a GM potato resistant to nematodes. The field trial was to be conducted by the Proinpa Foundation, with plant material originating from Leeds University, England.

In Bolivia genetic contamination through lateral transfer of GM potato genes poses a high risk to traditional varieties. Serious impacts on biodiversity and cultural diversity are possible, including genetic erosion, disappearance of some varieties by genetic derivation, and the disappearance of traditional cultural practices connected to the potato.

Genetic contamination could occur through natural methods of cross-pollination, and through existing cultural practices such as seed exchange between farmers, a practice important to maintaining and increasing the great genetic variability of this crop.

The introduced GM characteristic, which confers resistance to nematodes, could affect other ground dwelling micro-invertebrates not targeted for elimination. Many of these micro-invertebrates play a pivotal role in the food chain, serving as food for larger organisms including frogs and birds. They also contribute to the nutrient cycle that determines the soil health. The disappearance of these micro-invertebrates could generate a cascading ecological impact, affecting the whole trophic chain

There also exists the risk that nematodes resistant to the toxin introduced in the potato will appear, turning these nematodes into "super plagues" impossible to control.

Studies done in England at the time of the planned release were not finalized. Nonetheless, the Proinpa Foundation wanted to initiate these GM potato trials,

even though members of Leeds University have recognized that the risks to biodiversity are greater in Bolivia.

people's resistance to the gm  
potato

When the request to conduct GM potato field trials became known, farmers from different Andean areas rejected the field trials in a letter addressed to the Bolivian Vice-minister of Natural Resources and Environment.

Bolivia's foremost development non-governmental organization (NGO) network, together with the Association of Agroecology Producers and the environmental NGO FOBOMADE sent similar statements of rejection. Unfortunately, the national biosafety committee ignored civil society organizations' wishes on this critical biosafety issue. Considering the widespread rejection of the trials, and the especially high risks of GM crops to countries with high biodiversity like Bolivia, members of FOBOMADE felt compelled to interrupt a closed door meeting of the biosafety committee to present their concerns in person.

The plan for the GM potato's introduction to its Bolivian centre of origin caused a strong national reaction not foreseen by the project promoters. Andean farmers strongly opposed the project and threatened to destroy the field trials. Meanwhile, statements against the GM potato's introduction came from around the world. Immediately after the biosafety committee approved the field trials, the Proinpa Foundation came under heavy criticism at public meetings in La Paz, Cochabamba and Sucre.

The international opposition surprised Proinpa. When the GM potato project was presented at a May 2000 conference on biotechnology impacts organized by Friends of the Earth and OXFAM in Brussels it was severely

# resistance to gmos in centres of origin: the case of the bolivian potato | part four

by maria luisa ramos, fobomade

criticized by many participants, mainly from developing nations.

On 3 June 2000, the Association of Agroecology Producers of Bolivia (AOPEB) organized a seminar with the participation of Pat Mooney of the Rural Advancement Foundation International (RAFI). Here again representatives of Proinpa met with overwhelming rejection of GMOs.

precautionary principle and alternatives to the gm potato

The Convention on Biological Diversity (CBD) has recognized that the precautionary principle should be used in connection with biotechnology. In the Biosafety Protocol (adopted January 2000) the precautionary principle is recognized as a key element for achieving biosafety. For Bolivia this means that the critical resource of potato biodiversity should not be risked for a technology that presents more doubts than certainties.

In connection with the Bolivian potato case, FOBOMADE delivered a statement both nationally and internationally calling for a moratorium on GM crop releases into the environment, especially in countries that have traditional varieties or close relatives of the GM crop.

The statement also stated that Bolivia's problems should be tackled through methods founded on the nation's genetic richness, not through methods such as genetic engineering that threaten this wealth of biodiversity. The use of genetic engineering cannot be justified in Bolivia when the full potential of traditional potato varieties remains incompletely studied. Furthermore, the study of Bolivian native varieties through traditional hybridization methods is an endeavor that can easily be carried out by the nation's own farmers.

project withdrawn

On 5 June 2000 the Proinpa Foundation withdrew its project to perform GM potato field trials due to the "debate that GM potatoes were generating in the country" and with "the aim to create a better moment for doing so."

resistance continues

In September 2000, the Bolivian Unique Sindical Confederation of Farmworkers put the subject of GM food on its agenda, and persuaded the government to sign a decree which states that, "All field releases for the production of GM food are stopped during the revision period established, until the final report in which recommendations and complements will be done to the regulations on access to genetic resources and biosafety" (Decree 25929).

Then in January 2001 the agriculture minister adopted Ministerial Resolution 2001, which makes the decision, "To ban, for a period of one year, the import of products, subproducts and foodstuffs of agricultural origin derived from genetically modified crops." The resolution was made to protect the population's health in a provisional and preventive manner.

In new negotiations with the government on 23 August 2001, the Bolivian Unique Sindical Confederation of Farmworkers persuaded the national government to extend the above resolution after December 2001 and upgrade it to a Supreme Decree.

corporate influence reverses democratically adopted decree

However, ambitions for field releases of potatoes and other crops have persisted. A permanent lobby from transnational corporations is putting

pressure on the Bolivian government and its institutions to open the gate to modern biotechnologies. Led by the Argentinean soya sector, the lobby strongly attacked the Bolivian decree that banned GMOs.

In a leaked Bolivian memo it is asserted that "the [Argentinean] soya corporate sector is behind it, because they export five thousand millions of dollars of genetically modified soy to Europe and North America." In the same memo, Bolivian authorities said that "the present situation is very sensitive, because the Bolivian Mission considers, that from the point of view of WTO rules, the reasons given by the Argentinean Mission are very valid and our country does not have any solid justification to back the measure adopted."

Thus, despite widespread opposition from farmers, environmental and sustainable development leaders, the corporate lobby succeeded in October 2001 in getting the ban on GM product imports lifted until new regulations are made.

The revocation of the above resolution reveals the Bolivian government's weakness in the face of Argentinean and agribiotech company pressure. It is an outrage that a small nation like Bolivia should be forced to accept GM foods against public sentiment.

Farmer and environmental NGOs in Bolivia have vowed to continue urging their country to regulate GMOs in the face of pressure from abroad. And ever since products in food aid to Bolivia were found by FOBOMADE to contain GM ingredients, concern is even higher. The Association of Agroecology Producers of Bolivia urges that controls be placed on food and seeds imports from countries like Argentina, Canada and the U.S., and that strong sanctions be imposed on any corporation or organization that markets GM products in Bolivia.

# resisting cheap imports and ‘market liberalization’: the case of lima bean growers in uruguay | part five

by redes/friends of the earth, josé p. sánchez, milton silveira, carmen améndola

## 1. summary of the case study

Since the eighties, Lima bean cultivation - one of the winter food staples for Uruguayan families - has decreased due to the drop in prices caused by imports. Today there is only a small group of family farmers who have maintained this crop. Over the past years, imports - under the umbrella of neo-liberal trade policies - have invaded the entire local food market, promoting a breakdown in small family production, including a group of very small-scale farmers who, with family labour, cultivate Lima beans in their "basket" of crops.

The community of Santa Rosa is resisting the import of Lima beans into the country. They are struggling to maintain the crop by supplying the national market and conserving its varieties adapted to local conditions after over a century of cultivation in the country.

## 2. the stakeholders and the zone: the small family farmers of santa rosa, canelones

The Lima bean (*Phaseolus lunatus*) is grown by small-scale family farmers around the village of Santa Rosa in the province of Canelones in southern Uruguay. The bean is grown here due to the area's proximity to the city of Montevideo, the country's urban and commercial centre, where half of the total population is concentrated.

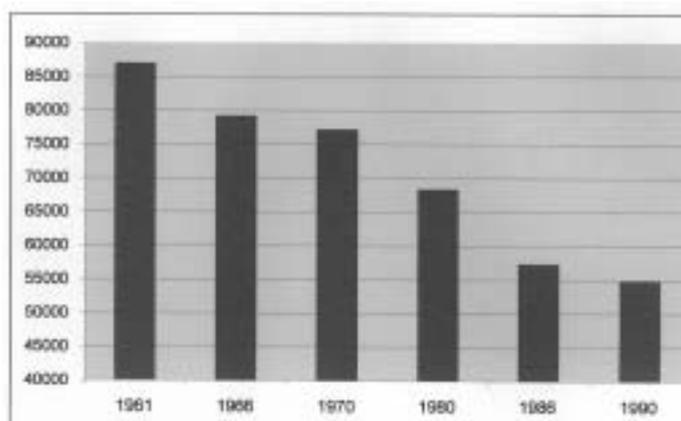
In general terms, and in order to characterize horticultural production in Uruguay, it should be noted that 99% of the total number of bean growers in the country are family farmers. In turn, horticultural production does not control even 1% of the land available for agriculture in the country.

To complement this information, it should also be noted that the role of family agriculture has changed over the course of the country's history, following the capitalist accumulation process. During the first fifty years of the twentieth century, the role of agriculture was to produce cheap food for the internal market. Eventually, parallel to the urbanization and industrialization processes, imports substituted national agriculture. Small family farmers, despite always having produced food for their own consumption, have historically been well integrated in the local and national markets.

When economic policy changed over the past decades and the model of external accumulation was promoted through neo-liberal policies, the role of small farmers changed, as production for the domestic market became marginalized in favour of food imports and large-scale industrial production for export.

This led to a harsh process of abandonment and decay in family farms. Plot size decreased, most particularly affecting plots under 50 hectares, and those plots of land exceeding 1000 hectares were concentrated in the hands of companies (see chart 1). This placed the country's independence and food security in jeopardy, and furthermore led to the loss of cultivated biodiversity. This situation is not confined to Lima bean production, but is also true for several crops that the State believes cannot be produced competitively: peanuts, lentils, garlic, sugar cane, and other vegetables and fruits. The only crop that has received state subsidies is tree plantations, mainly plantations of eucalyptus owned by large foreign companies, including the Shell corporation.

chart 1: evolution of the number of agricultural establishments in uruguay



Source: Gómez, 1998 (on the basis of the MGAP General Agricultural Census).

# resisting cheap imports and 'market liberalization': the case of lima bean growers in uruguay | part five

by *redes/friends of the earth, josé p. sánchez, milton silveira, carmen améndola*

## 3. the role of lima bean cultivation in family production units

The families producing Lima beans in Canelones have been settled there since the end of the nineteenth century, and the crop has been handed down from generation to generation ever since, as part of family traditions. This has shaped the cultural identity and a socio-economic livelihood of a rural community that has become a key agent in biodiversity conservation, through the cultivation of local varieties of Lima bean seeds.



National information on how Lima beans are grown is scant and outdated. Although there was some interest on the part of the Faculty of Agronomy and the National Institute of Agricultural Research between 1986 and 1989, when the severe reduction in the area sown from one year to the next was observed, this led to nothing.

Current earnings are greatly reduced, due to the drop in prices. As Rafael Caprio, an agronomist and consultant, stated: "a kilo of Lima beans was equivalent to a kilo of meat and to one dollar. To have an idea, cheap meat now costs 30 pesos, the dollar 17 and a kilo of Lima beans costs 12 pesos on the market."

In spite of this fact and the consequences it generates, the family farmers continue to plant this crop because it is well adapted to their poor soils and production methods, requires very little capital investment, and provides by-products for animal fodder. Up to now, the Lima bean has been an essential crop in the sustainability of their productive system.

The soils upon which this crop has been cultivated have been subject to intensive agriculture, with very little rotation, partly due to traditional practices and partly due to the small size of the property. Therefore, after almost 100 years of cultivation, the arable layer of these lands is about 20 cm. It is precisely on these 20 cm that the Lima bean concentrates 80% of its roots, making it an ideal species for cultivation on these soils.

In addition, the Lima bean is a crop that requires very little capital investment. With sound preventive measures, mainly with regard to the selection and storage of seeds, the only necessary "capital" is an animal, generally an ox, tools and, of course, human labour.

The by-products obtained are generally very useful to the system. Spotted grain that cannot be sold is used as pig fodder, and the bales obtained upon uprooting the plants during the harvests are used to feed oxen and horses. According to Eucliver Cancela, a family farmer, "spotted grain was given to the pigs, and the stalks (...) were used as forage, it was good forage."

Furthermore, it is not necessary to purchase or invest in seeds, as part of the seed harvest is hand selected and saved for use the following year. The entire national production is based on the use of local seed populations, adapted to the environment, and collected from each plot following several generations of selection. Everyone participated in this process, says Abilio Guasini when interviewed, as "the family classified it and set it aside, this was the task in the winter: you pulled it up in the morning, and in the afternoon, sometimes until midnight. And this always took between two and three months."

Although bean seeds from other countries (Argentina, Brazil, Mexico) have been assessed for the appropriateness of their use in Uruguay, their phytosanitary behaviour and outputs were very similar to those obtained from local varieties upon applying the same technologies.

Therefore, when supported by the use of local varieties and with labour as main resource, the Lima bean is well adapted to the way these small family farmers grow their crops. The drastic reduction in the area under cultivation is a consequence of all the above-mentioned factors, but mainly due to the low price of this product due to the increasing volume of imports (see table 1).

table 1: evolution of the area planted and number of establishments growing lima beans in uruguay over the past 20 years

	1980	1990	2000
number of establishments	3,789	1,006	305
area planted (hectares)	3,137	1,352	454
average area (hectares)	0.83	1.34	1.49

source: mgap general agricultural census (1980, 1990 and 2000)



#### 4. the socio-economic process over the past 30 years and its impact on family farming

Over the past thirty years, there has been an unprecedented socio-economic transformation on a worldwide level, under what is known as "globalization."

Globalization involves the expansion of capitalist "market" relations, that is to say, the increasing commodification of many spheres of economic, social and cultural activity. It also concerns the integration processes of different parts of the world economy into a "world market" comprising production and consumption, labour and financial markets, and the increasingly transnational organization of world production.

That is to say, that the process of establishing and consolidating globalization responds to a new stage in the evolution of the world capitalist system, with transnational companies as the basic agent.

Many of the phenomena that have become more acute during the past decades in Latin America and, in particular, in Uruguay, reflect the increasing predominance of big business interests in shaping agricultural production. This is encouraged through two processes that are intimately intertwined: the implementation of neo-liberal policies and the "modernization" of agriculture through the "Green Revolution."

Neo-liberal agricultural policies basically imply deregulation and the elimination of domestic protections, and the impact it has in different sub-sectors varies. The application of these policies (mainly those of market opening, tax adjustments and exchange-rate anchoring) result in two correlated processes: the increasing concentration of land tenure (strengthening a model of livestock production based on extensive grazing) and the migration of small-scale producers from rural to urban centres. In

turn, the "Green Revolution," disseminated and promoted by the major centres of world power, accentuates these consequences, in such a way that those who manage to incorporate the recommended "technological package" are big landowners with access to investment capital. These processes greatly impact family farming.

Furthermore, looking to the future, the scenario is not very encouraging. The regional integration process (the Common Market of the South - MERCOSUR) has maintained this trend by upholding indiscriminate trade openness policies. These policies may be further strengthened in the event that the Free Trade of the Americas Agreement (FTAA) goes ahead.

In this context, the situation of the family farming sector is characterized by a drop in domestic demand due to the decline in net income through worsening salaries, and to the liberalization policies promoted by the State, which facilitates food imports thus giving a major market share to big food importing companies.

In the case of Lima beans, the main importing companies in Uruguay are: SILCOM S.A., SOLDO HNOS. S.A. and NIDERA URUGUAYA S.A., the latter owned by transnational capital interests. These companies control almost 70% of the national Lima bean market, and work exclusively with produce from the United States, Peru and the former Burma.

Even more significant is the progressive reduction of the MERCOSUR Common Foreign Tariff, currently fixed at 13%, which will put domestic production at a disadvantage once cheaper beans that are cultivated under other circumstances are allowed to flood national markets. According to the information provided by NIDERA, the biggest of the importing companies, while a little over ten years

# resisting cheap imports and 'market liberalization': the case of lima bean growers in uruguay | part five

by redes/friends of the earth, josé p. sánchez, milton silveira, carmen améndola

## 5. Mobilization and resistance

ago only national Lima beans were sold in the domestic market, out of the current demand for 210 tons, 180 of these are imported beans and only 30 are nationally produced.

One of the factors behind this trend is that the company owners, now importers (who obtain major economic benefits) consider local production to be "old fashioned and of an inferior quality." According to the CEO of NIDERA: (national production) at this stage is impossible, it would be going backwards (...) in other places they have large areas of fields and a threshing machine and here it is done by hand (...) they need a machine to do it properly."

The impact of these policies on Lima bean growers has been a drastic decline in the number of family farmers and the area under cultivation, as can be seen in table 1.

The reason behind this are the policies being implemented over the past years, which exclude or displace those who used to grow Lima beans and those who are still doing so from the source of their livelihood. As one of the family farmers, Eucliver Cancela, said: "So it is not because you are old and you have retired and your children have gone to Montevideo. What has happened is that you can no longer live off the land, that is the great problem."

Thus, the family farmers growing Lima beans in Uruguay are in an extremely vulnerable situation today as a consequence of the agricultural policies being implemented. And, in turn, society as a whole is facing the risk of the continued erosion of its biodiversity.

Faced with this crisis and the breakdown of production, family farmers have not impassively awaited the final blow. On the contrary, they have sought to defend their right to continue working on and living from the land. This fact is of particular relevance when dealing with a sector that traditionally has had scant capacity for mobilization.

At the outset, the farmers' first reaction to the crisis was to develop resistance strategies that would enable them to maintain the Lima bean as a crop that is well integrated into their productive strategy. In this respect, while the price of beans fell, the family farmers started diversifying, incorporating new crops, or simply increasing the area already being planted with crops like sweet potatoes, onions, carrots, garlic and maize. In the words of one farmer, Martin Cancela: "We are not going to change it for any other item, we will simply plant more of the other. More carrots and onions, more garlic and some sweet potatoes too."

Despite these resistance strategies, cultivation of this bean crop was abandoned, and in some cases whole families had little choice but to leave their land behind and move into the city in a painful cultural uprooting process. This results not only in rural depopulation, but also in a net loss of the seeds, the well-adapted crop varieties and the social knowledge generated through generations of experience .

Following several years of local resistance, farmers began to mobilize more widely with small-scale family farmers in other parts of the country. Since April 1999, farmers have carried out road blockades, marches, demonstrations and direct pressure on political powers on a national level. Recently, a very important and unprecedented mobilization of small and medium-sized farmers and their organizations took place, in collaboration with the workers' single union, PIT-CNT.

In 2000, following some meetings among bean growers in the district, a letter was sent to the Minister of Agriculture, Animal Husbandry and Fisheries and to the Horticultural Federation requesting the suspension of Lima bean imports at least for that year. At the same time, and in the framework of general mobilizations taking place in the agriculture and livestock sector, the family farmers merged their specific demands and established alliances with other rural sectors in order to defend food production. Together they participated in strikes and pickets on national highways.

In spite of this struggle, the government has turned a deaf ear on these demands due to its commitment to an agricultural development model based on large agro-business. The Lima bean growers are not optimistic in the short-term, as: "the crop is hardly cultivated any longer in this area; there were many bean producers in this area before, but nobody plants now. There are just a few, with two or three hectares each...", says Jose Gonzales, a Santa Rosa family farmer.

## 6. proposals by lima bean growers

In formulating their demands, farmers refer to what they consider to be the minimum necessary conditions to be able to continue growing Lima beans. These proposals are mainly based on controlling or eliminating imports, although some demands relating to the whole sector are made, specifically regarding exchange rate and tax policies.

There is consensus among the producers that imports from regions where production takes place under different conditions is the cause of the drop in prices. As one of the family farmers, Martin Cancela, stated: "I believe the entire problem to be imports, causing a glut on the market and then there is no one you can sell to (...); the price has changed because increasingly more is imported, more beans are brought in."

The bean growers maintain that if imports were controlled, the crop would once again be feasible, the number of growers would increase, the crop would be produced under organic agricultural conditions, the labour force would be family oriented, and the crops would again supply local and national markets. For this reason, the farmers' proposals are based on increasing tariffs and on the restriction of imports.

## 7. conclusions and recommended policies

Following global socio-economic changes and the national neo-liberal policies, the production of Lima beans in the market garden sector has suffered a drastic reduction. This reduction has been accompanied in many cases by the emigration of entire families to the poverty belts around the cities.

The consequence has been a radical change in the families' way of life, and their entrance into a highly vulnerable social situation. In addition, the cultivated biodiversity represented by the adapted local varieties of Lima beans has been lost as well as the associated knowledge developed over time in the family farming community.

Thus, a crop with multiple benefits, including soil improvement and the provision of by-products for animal fodder, and which does not require capital investment is being condemned to extinction. It seems clear that action should be taken to conserve this crop and these family farmers' culture and way of life.

Given that a sustainable agricultural production model is not currently in place nor in the agenda of mainstream policy makers, food security is in jeopardy. Food security implies maintaining and promoting a stable base of local food production. To achieve it, measures protecting and promoting the national supply of food, and shortening the distance between production and consumption instead of increasing liberalization of food markets, are necessary. In other words, the Lima bean growers' demands must be heeded.

The solution is also related to the design and implementation of agricultural production development models based on biodiversity, sustainably managed agro-ecosystems with high biological and genetic diversity, the use of by-products and conservation of natural resources taking social and cultural realities into account. In short, the promotion of local production of food crops adapted to the natural and socio-economic surroundings, and improving production systems as a means of improving people's quality of life in harmony with that of natural ecosystems is essential.

These alternative development models should incorporate four basic dimensions of sustainability: social, ecological, political and economic. The negative developments depicted in this case of Lima beans, as in the case of many other food crops, could be reversed if a sustainable development model were to be adopted timely. As one of the family farmers, Eucliver Cancela, said: "Here, 'tomorrow' things are too late, it has to be today."



# resisting water privatization & green revolution agriculture: the case of irrigation water services liberalization in ecuador | part six

by cecilia chérrez, acción ecológica

## 1. summary

The announced construction of the Villao Reservoir as part of the "Pedro Carbo Multi-Purpose Project" in the extreme southwest of the Guayas river basin has triggered off a wave of rejection and peasant mobilization. The works not only involve the displacement of over 700 families dwelling in the 17 settlements within the 2,400 hectares that will be covered by water, but also the dispossession of lands belonging to some 2,000 families. These families will be forced out because they can pay neither the cost of the obligatory benefit of being integrated into the irrigation channel system from the reservoir, nor the cost of water within the 13,500 hectares comprised in the area under irrigation. This area includes 11,000 hectares that will be serviced by reservoir water and 2,500 hectares by underground water.

The Commission for Studies on the Development of the Guayas River Basin (Comisión de Estudios para el Desarrollo de la Cuenca del Río Guayas - CEDEGE) - a decentralized body from the public sector - is contemplating the design of an "integrated development model," fundamentally based on intensive agriculture aimed almost exclusively at exports. Some of the foreseeable ecological impacts are related to soil and water contamination due to an alarming dependency on increased agro-chemical inputs, the sales of which are viewed within the project as a key factor in catalysing trade and industry in the region. The impacts on human health have not been taken into account.

## 2. scenario

- what is at stake?

There are at least three main aspects.

1. plans for a shift in land tenure: The land located in the Guayas river basin that still remains in the hands of peasants has long been coveted by powerful businessmen, particularly those from certain groups in Guayaquil City. Their method of appropriation has usually involved taking advantage of the cyclical economic difficulties of small farmers who are dependent upon high yielding and credit-linked mono-crops destined for the market, such as cotton and soybeans. These farms are ruined when prices plummet due to over-production, or when authorities decide to import the same products at lower prices, forcing the farmers to sell their harvests at prices below their production costs. Faced with this situation, many peasants have sold their farms at desperate, practically give-away prices. By opening up the possibility of irrigating the land, large agricultural companies aim to consolidate a major agro-export project, providing them with fat benefits. The project foresees the generation of a market in land through the restructuring and transfer of land, making it possible to freely market some 10,000 hectares out of the 13,500 covered by the project.

2. legalised privatization of irrigation water: this has been a recurring objective of various governments for over a decade. With the support of the World Bank and the Inter-American Development Bank (IDB), many bills on water law have been passed which aim --in a more or less covert manner -- to guarantee water only to high profit activities. However, with every such attempt the indigenous and peasant movement has organized

mobilizations and marches on Quito, putting an end to the aspirations of the power elites to violate their rights to water. But when the government sought to consolidate dollarization in 2000, it issued special laws, in consultation with the IMF, aggressively promoting the privatization and liberalization of the economy. One piece of legislation, for the Promotion of Investment and Citizen Participation, reformed 31 laws including the CEDEGE Act so that it would "obligatorily" hand over the works, whereby "the beneficiary landowners would pay for their value without exception, with a purchase order, issued by CEDEGE." The legislation also expressly states that "the cost of the works or projects implemented will be covered by apportionment among its beneficiaries."

The Pedro Carbo Project is the first to be executed following the above-mentioned legal changes, and will require each irrigation "beneficiary" to pay \$US 5,278 for the "technical improvement" of each hectare, and almost US\$1,000 per year for the water for each hectare. These impositions make it practically impossible for small and even medium-scale farmers to participate in the new agricultural model. The project mentions that, as from 2015, income should be US\$12,000 dollars per hectare, with production costs at US\$8,300, allowing for a net income of US\$3,700 per hectare. According to CEDEGE, "this is not high profitability for agriculture, due to the risks in the production process and in marketing."

3. further strengthening of export-oriented agriculture: This project will involve definitively abandoning the objective of supplying local and national markets, and transforming the peasants who have lost their lands into day labourers in the new productive units, which will be as immense and distant as all agri-businesses are.

- the main stakeholders

- The Commission for Studies for the Development of the Guayas River Basin, CEDEGE, a decentralized body from the public sector that manages the Tránsito Daule Peripa, the largest irrigation system in the country. The "Pedro Carbo Multi-Purpose Project" and the Villao Dam are part of this system of water irrigation channels, underground water wells, drainage systems, and roads.
- Lavalin International, a Canadian company that has been preparing the project jointly with CEDEGE since June 1989 at which time a Technical Assistance Agreement was agreed between the Ecuadorian government, represented by CEDEGE, and the Canadian government, represented by the Canadian Development Agency. This agreement was "for the development of a feasibility study on an irrigation project covering 13,500 hectares." At the beginning of 1988, these same two parties "selected the Pedro Carbo project as a priority and of major interest to Ecuador." The project was finalized at the end of 1990.
- The Front for the Defence of Pedro Carbo, involving peasant organizations, the Catholic Church, Peasant Insurance (a farmers' organization), environmentalists, youth associations, development organizations, farmer credit institutions, and the affected settlements.

- location of the project:

The Pedro Carbo project will be located at the extreme southwest of the Guayas river basin, 40 kilometres from Guayaquil City. This area has a rainy season lasting half of the year, at which time the rivers increase their flow and may flood. In some places, the rich sedimentation left by these floods was used for specific agricultural activities adapted to this situation. Over the past several years, however, the imposition of an exclusively market-oriented agriculture has forced the peasants to cultivate on the rationale of greater productivity, meaning that some plots are lost during the rainy season. The area to be flooded by the reservoir is a valley, locally recognized as one of the greenest and most fertile in the region, something which is reflected in the names the inhabitants have given to various small villages there: Bejuco de María, Estero de Piedra, San José, El Salto, Las Bijamas, Santa Rosa, Prócel de Villao, Prócel de la Fortuna, Prócel, El Aguacate, Boca de Guanábano, La Providencia, San Pedro de Villao, Villao, El Paraíso, Boca de Bálsamo. Many of the peasants living in the Cristo del Consuelo, Las Planchadas and Anonas settlements will also be affected as they have land within the 2,400 hectares to be flooded by the reservoir.

The area to come under irrigation is a few kilometres to the east of the reservoir. Although it is also dry, this area is also characterized by large concentrations of land in the hands of big landowners. Many grow mangos for the international market and use underground water irrigation. Only 32 landowners, with an average 233,21 hectares each, and 5% of the total number of plots, control 7,695 hectares. This corresponds to 57% of the land that will benefit from the project. Meanwhile, 76% of the total number of plots, many of them having no title deeds, control 2,160 hectares equivalent to no more than 16% of the total land area included in the project, "It is the new agro-industrial zone," stated a member of the Front for the Defence of Pedro Carbo, and by definition it will concentrate more land in fewer hands.

# resisting water privatization & green revolution agriculture: the case of irrigation water services liberalization in ecuador | part six

by cecilia chérrez, acción ecológica

## 3. biodiversity, the key to people's economy

Although most of the production in the area to be flooded is mono-cultivation of flint maize and a few other products, some peasant families reserve part of their plots for growing staple foods, such as beans, peanuts, sesame, and other types of maize, and for breeding small domestic animals or cattle. Some farmers take advantage of the rainy season, from January to May, to grow tomatoes, peppers, cassava and bananas on their plots.

The conservation of these practices is almost heroic when it is considered that for decades, peasants have been forced to substitute a diversity of products specific to their area for a few that have been aggressively and increasingly promoted by the State and international programmes. This includes the mass distribution of certified seeds, making the peasants increasingly dependent on chemical inputs.

Local rivers are almost completely devoid of fish due both to high levels of pollution from the farms and to the indiscriminate use of riverbeds, considered as nothing more than quarries, to provide stone as a foundation for roads.

Nonetheless, the lives and culture of these peasants are tied to the agricultural cycles and to an abundance and diversity that, although largely lost, could be a basis and a catalyst for ecological recovery and autonomy to confront market forces.

In Villao, Severo Santos and his wife have made concessions to the green revolution agricultural model. In exchange, they have lost the ecological diversity that kept them supplied and free of monetary needs. In addition to coffee and native cotton, they grew many other scarce or hard to find plants on their farm.

In people's memories, past diversity is mingled with what is still left and with what can be recovered, and they tell you "papaya, mango, coconuts, higuera, sesame, different kinds of maize, beans and peanuts, all grow here, and there is rice, there are trees providing fibres such as the pijio and the ceibo; there are medicinal plant trees such as the caña fistola (*Peltophorum dubium*); the piñuelo that is good for fencing and also bears fruit grows here as well; poplar trees grow by the rivers and provide food for animals, but you hardly ever see trees any more such as guaiacums, tillos, chestnuts, guachapelis, amarillos, palo de vaca, or bay leaf trees, nor will you see deer or peccary, or guanta, or partridges. But from time to time you hear the big bird pacharaco singing to the rain."

When they hear that many peasant organizations are seeking autonomy by recovering crop diversity and the natural landscape, they say that "to do that, you have to unite and think better about what you sow and what you eat."

- project impacts on peasant life

The impacts are severe: displacement of the peasant families settled in the area of the reservoir, and the appropriation of their lands during the first year of implementation of the irrigation project in 2003.

The project states that the inhabitants of the settlements located in the area where the reservoir is to be built "will be re-settled", which is the same as displaced. An additional problem is that a significant number of families do not hold land titles due to the high cost of the paperwork involved, and therefore will have no legal means to demand their rights or any compensation.

The thousands of families losing their plots in the 13,500 hectares area under irrigation will be dispossessed of their lands during the first year of project implementation. This is because the new CEDEGE Act, approved on September 14, 2001 by the president of the Republic, includes the following regulations:

- "the cost of the works or project will be apportioned among the landowners benefiting from the works" (art. 2),
- "CEDEGE will keep a land registry of the real estate beneficiaries (art. 4),
- "the beneficiary properties, whatever their legal status or registry situation, will be taken as mortgage for the credit deeds or purchase orders issued by CEDEGE (art. 5)
- "Credit orders (...) shall be paid monthly" (art. 7)
- "the treasurer of CEDEGE shall initiate coercive action against debtors (...) who have not paid this tariff within the deadlines established in the previous article" (art. 8)

#### 4. links to corporate globalization

With a strong dose of cynicism, article 1 of the same regulation states that "...the communities shall inform CEDEGE, within 30 days following the promulgation of this regulation, of the exact location of the plot maintained in community and of the names and ages of the community members. This information will be useful in the application of the Old People's Law.

CEDEGE has remained silent ever since local organizations publicly rejected the project at the end of 2001.

This project illustrates the need to link national agricultural production with the demands of global markets on a scale that can only be guaranteed by agri-business. Agri-business is based on the concentration of land in the hands of powerful investors and the use of green revolution technological packages -- including seeds, fertilizers, pesticides and machinery-- supplied by large transnational corporations.

It should be noted that in this case the irrigation infrastructure plays a key and decisive role. Although CEDEGE initiated the hydraulic plan 20 years ago on the basis of cooperation with ECLAC (UN Economic Commission for Latin America and the Caribbean), and this plan already included the dam on the Pedro Carbo river, the current project reflects new trends and economic policies. As stated before, since the 1990s, multilateral development banking has influenced the design of national water policies, and it is now evident that the irrigation system derived from the Trasvase Daule Peripa will be aimed at the most aggressive programmes. It will be difficult for medium and even large farms to fit into the new economic demands linked to irrigation, because farmers will be subject to rules of the global market beyond their control. Thus it is more likely that only a few of the largest national investors and transnational agri-food companies will be able to take part in this new scheme -- mainly the latter, as they control seeds and inputs, manage trade rules and, more recently, are seeking to control water, as Monsanto has announced.

Lavalin International, or SNC-Lavalin Inc., is the company that drafted the project and will be responsible for its operation, management and administration. It describes itself as one of the world's leading groups in the engineering and construction business, and has experience in the chemical and oil sectors. As usually happens in these cases, the company says it plans to develop environmental impact assessments, and it is therefore unlikely that the project documentation will include independent information on the impacts it may cause. In fact, there are many indications of this in the text: "the greatest positive impacts are socio-economic; while positive impacts are lower on the biological and physical environment, they are in all events higher than the negative impacts, thus justifying the fulfilment of the project."

# resisting water privatization & green revolution agriculture: the case of irrigation water services liberalization in ecuador | part six

by cecilia chérrez, acción ecológica

## 5. community responses

After various peasant organizations had obtained the project summary, with the assistance of a National Congress deputy, they analysed together with other social sectors, the different levels of impacts that they will suffer. The Front for the Defence of Pedro Carbo was almost immediately established, and activities started to be carried out.

One of these activities was a large public rally, which the director of CEDEGE was supposed to attend in order to report on the project.

Although the CEDEGE official never arrived, this assembly, which gathered nearly 3,000 peasants successfully pressured the Municipality of Pedro Carbo. Until that time, local authorities had rallied behind CEDEGE and taken on an ambiguous position vis-à-vis the organizations. On April 8, 2002 however, an ordinance stating the opposition of the Mayor and all the councillors to the construction of the reservoir was issued.

In February, various local leaders visited a reservoir built in the same province over a year earlier. This project had also involved "re-settlement", with levels of violence leading to some 35 deaths, conveniently presented by the mass media as events of public delinquency.

The Front for the Defence of Pedro Carbo meets every month to carefully track the process, and has established popular fora among those affected to discuss water-related problems.

Some local leaders have started to link this case with the rules imposed by free trade agreements, and will certainly take advantage of the mass social mobilizations taking place to block Free Trade of the Americas Agreement (FTAA) negotiations during the forthcoming Ministerial Conference to be held in Quito from October 31 to November 1. This will increase public awareness about what is happening in their region in the name of liberalization of the water market and securing the rights of investors over those who care for life and culture.



# resistance to gm seed imposition for the textile industry: the case of indonesian bt cotton | part seven

by walhi/friends of the earth indonesia

"There are two possibilities for my cotton harvest: I will keep it until it rots or I will burn it. Even though I might lose my production cost and effort, I would rather do that than sell it to Monsanto."

Baco, a farmer in Manyampa village, South Sulawesi

PT Monagro Kimia, an Indonesian subsidiary of the US-based agro-chemical giant Monsanto, started variety trials in 1996 to find cotton varieties to cultivate in Indonesia, in particular in South Sulawesi. In 1998, as part of the regulatory process for the commercialization of genetically-engineered crops, greenhouse and limited field trials were conducted. In 1999, Bt cotton was approved by the Indonesian government and declared as environmentally safe for Indonesia. However, PT Monagro Kimia had been distributing Bt cotton seeds since 1998.<sup>1</sup>

The company has been conducting genetically modified (GM) cotton field trials since 2000 -- claimed to be 'the first GMO field trials' in Indonesia. Estimates of the amount of land planted to Bt cotton in 2000 range from 500 to 1500 hectares.

On 15 March 2000, forty tons of GM cotton seeds arrived from South Africa at Hasanuddin airport in Makassar, South Sulawesi. The seeds, imported by PT Monagro Kimia, were trucked away under armed guard to be sold to farmers in seven districts in the province.

Local NGO activists opposing the imports tried to keep the trucks from leaving the airport. They said the seed should be quarantined for detailed examination before distribution and accused the company of attempting to disguise what they were doing by using trucks marked "rice delivery". The NGOs also protested against the use of the Indonesian military (in this case military police) to guard the trucks.<sup>2</sup>

In a letter to the Jakarta Post, Monsanto, the world's third biggest biotechnology company involved in genetically modified organisms (GMOs) and one of the three biggest seed and agro-chemical producers, said Indonesian quarantine officials had carried out a pre-clearance inspection in South Africa, and had complied with all procedures for import and quarantine. Monsanto staff told the newspaper that the imported seed was aimed at meeting the needs of the province's farmers. "There are at least 400,000 hectares of cotton plantations to be developed by the farmers here," said communications manager Tri Soekirman. The company was taking precautionary measures and "people should not worry about the negative impact of the crops." He said there had been no complaints from the US, South Africa, China or Argentina, where the GM cotton had already been grown, adding that Australia had been growing GM cotton for five years.

The seed in question, developed by Monsanto, is known as NuCTN 35B, Bt. DP 5690B or "Bollgard". "Bt" refers to the gene for an insect-killing toxin isolated from the soil bacteria *Bacillus thuringiensis* and inserted into the cotton seed. Indonesia is a major importer of cotton, a raw material for its huge textile industry.

a government decree

The GM seed was delivered five weeks after the Minister of Agriculture issued a decree (No. 107/2001) on 6 February 2001 permitting limited sales of the cotton seed variety Bt DP 5690B as "quality seed" under the trade name NuCOTN 35B (Bollgard), for cultivation in seven districts in South Sulawesi -- Takalar, Gowa, Bantaeng, Bulukumba, Bone, Soppeng and Wajo. No restrictions were set on the amount of land that could be cultivated with Bt. PT Monagro had already conducted field trials of GM cotton over a 500-hectare area in Bantaeng and Bulukumba districts. According to media and NGO reports, the harvested crop had already been sold on local and foreign markets. The sales were apparently conducted as if it were to be a perfectly standard crop. NGOs suggested that the Ministry of Agriculture was merely seeking to legitimize past violations by PT Monagro Kimia.<sup>3</sup>

The February decree was issued on the quiet, without public consultation. Even other ministries appear to have been kept in the dark. Environment Minister Sonny Keraf said the decree was "trade politics". An editorial in the Jakarta Post characterized it as a sad case of "business interests ... prevail[ing] over environmental concerns".

An earlier agreement to permit the sale of GM cotton had been cancelled by previous Economics Minister Rizal Ramli at the last minute in October 2000 after intense lobbying by NGOs and the intervention of Environment Minister Sonny Keraf. This time, the Department of Agriculture avoided opposition by not publicizing its intentions or informing anyone else in advance.

2 | "Kecaman terhadap pengiriman benih transgenik", NGO statement circulated via email by YLK Sulsei, 15 March 2001; Jakarta Post 17 March 2001.

3 | Ibid.

# resistance to gm seed imposition for the textile industry: the case of indonesian bt cotton | part seven

by walhi/friends of the earth indonesia

## ngos in court

In June, a coalition of Indonesian NGOs for Biosafety and Food Safety -- ICEL, Konphalindo, PAN, YKLI and YLK Sulawesi Selatan among them -- took legal action against the decree. They sought, through the State Administrative Court, an annulment of a February decree allowing the limited release and sale of GM seeds in Sulawesi.

The NGOs claimed that the decree had been issued hastily, without consideration of the consequences of using transgenic products and violated Indonesia's environmental law (23/1997) because no environmental impact assessment was conducted and because the public's right to information and to be involved in decision-making was not upheld. The decree allows for "limited" sales of the cotton, they pointed out, yet there is no restriction on the area that can be planted within the seven districts.

The NGOs are concerned that the decree will lead to one company holding the monopoly over seed and inputs such as fertilizer and pesticides. It could also undermine or destroy the achievements of existing people- and environment-centred farming systems such as integrated pest management and create a damaging technological dependency among farmers.

They also point out that Monsanto's GM cotton is not necessarily the best seed type for cotton farmers as it does not deal with one of the main cotton pests found in Sulawesi and will therefore still require large amounts of pesticides. This had already become evident during the field trials, when the GM cotton succumbed to drought and insect attack. The seeds are over five times as expensive as the Kanesia 7 cotton seed, developed by Indonesia's Bureau for the Study of Tobacco and Fibrous Plants (Balittas), which, under IPM, achieves the same yield of 2-3 tons. Many farmers in South Sulawesi want to buy Kanesia 7 cotton, but find that only Monsanto's Bt cotton is available. This, argue the NGOs, violates law No. 12/1992 on Plant Cultivation, which says farmers are free to choose which crops they want to grow.

On 27 September 2001, the NGO coalition lost its case. The government decided to extend the permit to PT Monagro Kimia to continue planting Bt cotton in South Sulawesi in 2002 when the current permit expires.<sup>4</sup> At the beginning of September, the Agriculture Minister declared that Bt cotton would be planted on a still larger scale, in East and Central Java<sup>5</sup>.

## farmers protest against gmo

In April 2001, hundreds of farmers and NGO activists joined a demonstration led by the Indonesian Federation of Peasants' Unions (FSPI) to protest against GM crops. The protest was held outside the Department of Agriculture, and then moved to PT Monagro's office. The farmers called for the licensing of GM cotton to be withdrawn and for a boycott of GM seeds and GM products. They also threatened to destroy any GM products already distributed in the country. The protesters likened the introduction of GM agriculture to the Green Revolution of the 1970s and said it was another form of colonialism, which created new dependencies between farmers and suppliers of agricultural inputs.<sup>6</sup>

As the Bt cotton has shown its vulnerability to drought and pest infestations, many farmers have complained about claims of its superiority. Some Bt cotton growers have revealed their yields to be only around 500 kilograms per hectare, far lower than Monsanto's repeated promises of three tons per hectare. Even the government has admitted that more than 70 percent of all Bt croppings have failed to produce the promised yields.<sup>7</sup> There are also other complaints. One woman claimed that she developed an itch lasting 10 days when cultivating Bt cotton. A Department of Agriculture official has meanwhile blamed a group protesting transgenics for introducing *Spodoptera litura* and *S. empoasca* pests into Bt cotton fields.

During violent civil disobedience, farmers have demanded that the South Sulawesi Governor explain why he allowed the province to become the trial ground for a controversial and failure-prone technology.<sup>8</sup> They have also demanded that no more Bollgard cotton or other transgenic crops be planted in South Sulawesi. In southeast South Sulawesi, in a traditional ritual carried out by

4 | "Indonesian Govt to Extend Permit for GMO Cotton Planting", Dow Jones Newswire, 18 September 2001.

5 | "Buoyed Monsanto Says Cotton Project to Continue", Jakarta Post, 21 September 2001.

6 | Kompas, 17 April 2001.

7 | Ibid.

8 | Ibid.

## indonesian policy on gm products

members of the community known as kajang, villagers kitted out in black headbands and swords have demonstrated angrily, saying "Go to Hell, Monsanto!" On Thursday, 13 September 2001, a banner reading "Damn you Monsanto" was hoisted with several scarecrows, which were then burnt in a cultivated Bt cotton area in Desa Bontobiraeng village, Kecamatan Kajang, Bulukumba.

Around two tons of rough cotton were also burned by approximately a hundred villagers. Subsequently, around 50 hectares of cultivated Bt cotton was put to the torch. Judy Rahrdjo, a vice chair of the South Sulawesi Indonesia Consumer organization reports that, in the coming days, more cultivated areas of Bt cotton will be burned.

Downplaying the controversy, PT Monagro Kimia dismissed the arson as the work of non-governmental groups acting on their irrational opposition to genetically modified products and maintain the trials are a success. Contradicting farmers' claims, the trials produced 1.5-3 tons per hectare, up to four times that of regular varieties. They say farmers may have failed to achieve the full four tons due to unsuitable topography, porous soils and loss of fertilizer through leaching. Whatever the actual yield, all sides agree it was lower than expected but Monsanto appears confident of continued government support citing a promise of Minister for Agriculture, Bungaran Saragih, to extend the current license for field trials.

In Indonesia, there is no national policy on GM products. The government has not assessed which GM products can be introduced into the Indonesian market. The ability to trace and control their distribution is also questionable. So far the public has no information where GM products go, who use them and what they are used for. At the moment, a Law on Biosafety is being prepared, but in secret, and civil society organizations have difficulties in following the process.

At the local level, the condition is even worse because of regional autonomy, which has been in place since 1 January 2001. In the regional autonomy regulations issued in May 2000 (No 25/2000), the only reference to genetic engineering is in the section on investment (para 7, Clause 2, Chapter II). This says that the central government retains the authority to issue and control investment permits for "strategic technology" companies whose "highly sophisticated" and "high-risk" applications include weapons, nuclear technology and genetic engineering. Assuming that GM seeds are included under "seeds and seedlings" or "agricultural commodity varieties", the central government is responsible for regulating their export and import and setting standards for their release and withdrawal (Chapter II, Clause 2, para 3, 1(b)). However, it remains to be seen how far district or provincial governments, who are implementing regional autonomy to suit local agendas, will adhere to these rules.

The Sulawesi Bt cotton case shows what advocates of the precautionary approach are up against. In 2001, the total area planted to Bt cotton was approximately 4400 hectares (involving approximately 6500 farmers).<sup>9</sup> In South Sulawesi, Bt cotton is being pushed by local government officials. The Bupatis (district heads) of both districts in which Bt cotton trials were conducted are keen to

develop the crop further, believing that high yields and extra profits will result. They, and government supporters of GM crops, argue that there is no scientific reason why they should not plant more.

As reported by NGOs, the Bupati of Bulukumba said he would "instruct" all his colleagues down to village head level on the benefits of Bt cotton for farmers. The head of the local plantations office said that the people of Bulukumba should be proud because they were a priority Bt cotton area and that extension workers should be reminded to recommend Bt cotton, not Kanesia 7.

Although the transgenic cotton controversy is still blazing, PT Monsanto has not hesitated to promote transgenic corn trials as well. This offer to set up such trials was personally given by Director of PT Monsanto Indonesia Kobus Burger and President Director PT Harvest Internasional Indonesia Harvey Goldstein while meeting South Sulawesi Governor HZB Palaguna in Makassar last March. Strictly speaking, however, this should not be called an offer, since Monsanto already conducted transgenic corn field trials secretly two years ago in Gowa and Takalar municipalities.

The arguments for transgenic corn are the same: it is "pest free and environmentally friendly", uses "less pesticide", gives an "abundant harvest", is "good for export" and, of course, "increases farmers' welfare". The Governor appears minded to accept the offer, saying "agricultural technology is unavoidable; besides, it is only for cattle and not for human consumption".

<sup>9</sup> | "Buoyed Monsanto says Cotton Project to Continue", Jakarta Post, 21 September, 2001.

# resistance to gm seed imposition for the textile industry: the case of indonesian bt cotton | part seven

by walhi/friends of the earth indonesia

This open-arm approach is a worrying signal that GM agriculture could take hold quickly in Indonesia if decision-making is left in the hands of Bupatis and local parliaments who may not know about the potential risks of GMOs or who are susceptible to the sales talk of multinational biotech companies. Bantaeng Bupati Azikin Solthan says he hopes that, under regional autonomy, decision-making over GM crops will rest with local governments. "If they really can increase the income of farmers and add to local government revenues, why not?" he said.<sup>10</sup>

In fact the door to GM crops has been wide open for some time, with field trials of GM crops starting in 1999 or earlier. Other crops under field trials include Bt corn (maize), Roundup Ready Corn, RR cotton, RR Soybean (all produced by Monsanto) and Bt potato (produced by three research institutes including Michigan State University). According to ISAAA, the industry-funded International Service for the Acquisition of Agro-biotech Applications, Bt corn, RR soybean, corn and cotton are in the process of being approved.<sup>11</sup>

Monsanto and others have been able to start trials and then sell the product in Indonesia with relative ease because the legislation on biosafety and food safety is weak. Under the government's biosafety guidelines there is no need to issue any notification of field tests or the release of genetically engineered organisms (GMOs). A 1999 joint ministerial decree on genetically-engineered products and food safety has been criticized for not including labeling and environmental impact assessment requirements. Former Environment Minister Sonny Keraf says his office is giving priority to issuing a strengthened decree (due April or May this year) but how far he will be able to tighten the rules is questionable. Academics attached to the Indonesian Institute of Sciences (LIPI) and other institutes have been arguing that Indonesia must enhance its biotech industry if it is to compete with other countries in agribusiness.

Indonesian NGOs working on biosafety and GMOs are pushing their government to take a more precautionary approach on GM crops. They say they are not against GM crops as such, but oppose their introduction without adequate government regulations. The NGOs have called for a moratorium on testing or planting GM crops until adequate regulations to safeguard the environment and farmers' interests are in place and until the Cartagena Protocol on Biosafety (signed February 1999) has been ratified by the Indonesian government. They also argue that the public should be involved in decision-making on the issue. At present, there is no transparency -- NGO requests to gain access to safety reports on cotton testing, for example, have been turned down.



# genetic contamination & farmers' rights: the case of percy schmeiser versus monsanto in canada | part eight

by juan lopez, friends of the earth europe

monsanto versus percy  
schmeiser

Percy Schmeiser has spent fifty years farming his land near Bruno, Saskatchewan. Now suddenly, Schmeiser is fighting what may be the strangest battle in the history of agriculture. Schmeiser learned a long time ago that the wind is often a farmer's worst enemy. Wind blows the seeds and pollen of weeds into farm fields, choking out crops.

But now the wind may have brought a new threat to Schmeiser's farm, forcing him to fight for control of the seeds planted in his field. Schmeiser has picked a fight with the biggest boy on the block; he's battling the world's largest agrochemical company, Monsanto.

CBC National, *Blowin' in the Wind*

At the end of March 2001 a Canadian judge ordered farmer Percy Schmeiser to pay Monsanto thousands of dollars because a GM canola variety from Monsanto was found to be growing on his field. That decision came even as Percy always stated he never voluntarily grew these seeds, but that pollen from modified plants cross pollinated with the crops on his property. Several lawsuits have been filed against farmers in North America, but this is the first such case to come to trial. Canada's federal Court of Appeal will hear his case May 15th and 16th, 2002.

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*"In my case, I never had anything to do with Monsanto..... I never signed a contract. If I would go to St. Louis and contaminate their plots — destroy what they have worked on for 40 years — I think I would be put in jail and the key thrown away,"*

Percy Schmeiser, 19 June 2000

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wider farm community fights  
back

Farmers' communities in Canada are fighting genetic contamination of their organic crops. On 20 January 2002, two organic farmers from Saskatchewan filed a class action lawsuit against Monsanto and Aventis on behalf of all certified organic farmers in Saskatchewan. The aim of the suit was to obtain compensation for damages caused by the introduction of GM canola from Monsanto and Aventis, as well as an injunction that prevents the introduction of Monsanto GM wheat in Saskatchewan.

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*"Since wheat is the cornerstone of prairie agriculture, and essential for organic crop rotations, losing wheat to genetic contamination would devastate organic farming in Saskatchewan.(...) We feel we have no choice left but to pursue legal action. This is a matter of survival for organic agriculture in Saskatchewan."*

Arnold Taylor  
President of the Saskatchewan Organic Directorate (SOD)

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The suit also aims to make Monsanto and Aventis liable for genetic contamination and many other grounds like trespass, negligence and environmental pollution.

# genetic contamination & farmers' rights: the case of percy schmeiser versus monsanto in canada | part eight

by juan lopez, friends of the earth europe

seed saving under threat:  
consequences for the south

The right of farmers to save, use and exchange their seeds and other planting materials is a cornerstone of agricultural practice. Traditionally farmers saved their best seeds from year to year. Now, however, contracts between seed companies and farmers for GM seeds stipulate that the seeds be used for only one season. Farmers are thus forced to buy the company's seed every year.

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*"I've been using my own seed for years, and now farmers like me are being told we can't do that anymore if our neighbours are growing (genetically modified) crops that blow in. Basically, the right to use our own seed has been taken away."*

*Percy Schmeiser, Canadian Farmer*

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The legal appeal by Canadian farmer Percy Schmeiser for the right to be able to save his seed underlines the increasing tension between farmers and large biotech companies, which threaten to forever alter traditional agricultural practices with the introduction of patented genes. For the first time in agricultural history, farmers risk losing their right to save seeds, which is essential to conserve and increase biodiversity.

If farmers lose the right to save seeds, they will also lose their autonomy and become increasingly dependent economically on big agribusiness. In Africa, more than 90 percent of people's food requirements are met by indigenous farming systems. Saving seeds is a custom of indigenous and local communities which guarantees access to vital foodstuffs at all times. Shifting control of these seeds into the hands of multinationals would undermine these communities' household food security. The worldwide impact on farming communities could be tremendous.

Across the South, where people are unlikely to be able to afford high tech seeds and associated chemical inputs year after year, GM seed introduction presents a clear threat to food security and food sovereignty for thousands of local and indigenous farming communities.



percy schmeiser testimony: his fight against monsanto

My name is Percy Schmeiser. I am a Canadian farmer. For the last 50 years my wife Louisa and I have farmed 1,441 acres in Bruno, Saskatchewan. We have built up a farm that works well. Rapeseed is an important crop for us and we used to sell it all over the world for cooking oil and cattle feed. Like most farmers in Western Canada, I collected and stored my own seed. After years of selection I had a variety that gave a good yield, was quite resistant to local diseases and was relatively weed free.

In 1997, I sprayed Roundup as usual on the weeds and stray rapeseed plants growing around my fields. I was surprised that so much rapeseed survived the application. Had I got the herbicide concentration wrong? I now realise this was the first sign that my fields had been contaminated by genetically modified (GM) rapeseed.

My neighbours and 40 percent of farmers in Western Canada plant GM rapeseed. Since 1993, Monsanto Canada has been licensed to use technology that will make plants resistant to its glyphosate herbicide, Roundup. Farmers can then use Roundup as a broad-spectrum herbicide without damaging their GM crop. In 1995, Canada approved the uncontained release of GM rapeseed and in 1996 local companies started selling GM varieties.

Although Monsanto owns the gene and the technical know-how, they have done little to contain their invention once it entered the environment. In 1998, Monsanto inspectors entered my land without permission and took rapeseed. They accused me of planting GM rapeseed without a license and prosecuted me. If Monsanto suspects farmers are growing GM rapeseed without a license, they take away rapeseed plants for inspection. If test

results are positive and the license fee of Canadian \$15 per acre and contract have not been met, legal proceeding for infringing Monsanto's patent follow.

In my case, GM plants had seeded themselves on my land and they pollinated my conventional rapeseed. The following planting season I tried to contain GM contamination by buying new seed but still 20 per cent of my harvest was contaminated.

In Canada there is no law against carrying rapeseed in open trucks or leaving cut rapeseed in the field. This makes it easy for the small seeds to spread. It is also impossible to contain pollen flows. The gene responsible for glyphosate resistance is a dominant gene and rapeseed an open-pollinated plant. When a GM plant crosses with conventional rapeseed, resistance will be carried into the following generation. In my fields the GM variety was thickest along the roadway. There was little in the field itself. When I received the court summons I wondered why anyone would think I had deliberately mixed GM rapeseed with my own seed.

The only advantage of growing GM rapeseed is its resistance to Roundup. If farmers spray Roundup on a mixed GM and non-GM crop they can expect big losses. In my defence I argue that possessing the seed does not violate Monsanto's patent. It becomes a violation when I spray my crop with Roundup and activate the innovation — the gene that confers glyphosate resistance.

When this gene incorporates itself into a seed or plant, what are Monsanto's rights? The seed and plants are the farmer's property. GM rapeseed has the ability to intrude where it was not planted. It has the unique ability to replicate itself. I believe Monsanto lost its right to exclusivity when it lost control of its invention. How can farmers avoid GM rapeseed getting into their crops and becoming a contaminating weed?

These questions are now being discussed by Canada's Federal Court.

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*Schmeiser is standing up to Monsanto in court. "I'm going to fight, and fight and fight. (...) Because I believe what is happening to farmers is wrong. And I'm fighting this not just for myself, but for my children and my grandchildren, and for my farmer's friends."*

*CBC National, Blowin' in the Wind*

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Today, we cannot sell our rapeseed abroad and other products are being affected too. Just recently the Netherlands rejected a consignment of Canadian honey because it was contaminated with GM material. Organic farmers in our district have a particular problem because they cannot meet the GM-free standard for organic certification.

Farmers dread the financial consequences of litigation. Today I face legal bills of Canadian \$160,000 plus Canadian \$40,000. Monsanto's legal bill is Canadian \$400,000. If I lose I will have to pay Monsanto's costs as well. But I have to fight. I know from the support I have received from all over the world that farmers need to protect their rights to choose the technology they use, the crops they grow, and the seeds they save. Particularly in developing countries farmers' livelihoods depend upon their right and ability to select and save appropriate seed and maintain an ecological balance on their farms.

I have filed a counter suit against Monsanto. I know many farmers are watching how my struggle proceeds. The federal Court of Appeal will be hearing my case May 15th and 16th 2002. You can follow my case on [www.percyschmeiser.com](http://www.percyschmeiser.com).

# recommendations | part nine

by alberto villarreal, redes/friends of the earth uruguay

Ensuring biosafety and halting biodiversity loss require urgent action to address the direct threats to biodiversity that GMOs and the agricultural development model of the Green Revolution pose and the threats that free trade agreements and institutions represent for the traditional and contemporary caretakers and stewards of biodiversity conservation -- indigenous peoples, small and medium low input farmers, and organic/ecological farmers.

Following is a selection of some of the most urgent measures that need to be taken to ensure that the economic and political agents that are driving forces for the imposition of GMOs and the Green Revolution agricultural development model and the patenting of life stop undermining our local and global biodiversity and biosafety. By pursuing these measures, decision makers will take a step toward protecting the ecosystems and peoples that sustain the planet's biodiversity and ecological stability, and toward establishing the political, economical and institutional conditions for enduring biosafety and biodiversity conservation.

- National governments and multilateral institutions must enshrine and respect peoples' food sovereignty, that is, the right of peoples, communities and countries to define their own strategies and policies for sustainable production, distribution and consumption of safe and affordable food for all the population.
- The right to sufficient amounts of safe water for everybody needs to be recognized and complied with in national and international legislation, where water services needs to be secured as a public good, not subject to profit and the laws of the market.

- The ecological debt owed by the North to the South needs to be acknowledged, and the financial debt of Third World countries must be immediately annulated.
- WTO instruments should not be allowed to supercede other multilateral environmental agreements (MEAs).
- Biosafety priorities to protect the environment and human health should not be made subordinate to trade priorities imposed through WTO legislation, therefore joint enforcement and compliance mechanisms should be established for MEAs.
- Governments should sign and ratify the Biosafety Protocol as soon as possible, in order to implement a minimal regulatory framework to protect biodiversity globalwide. Countries should also create national regulatory frameworks on GMOs and products thereof.
- Releases of GM crops should be banned in countries that are centers of origin and diversity, including GMOs for planting as well as GMOs for food, feed and processing
- Governments should have the right to use the precautionary principle and establish bans or moratoria on GMO introduction. Effective monitoring and enforcement capabilities should be in place.

- Adequate scientific capacity to ensure compliance with laws is needed in each country, with testing being one of the best tools to monitor compliance.
- A liability system in case contamination is not prevented should be established.
- The World Food Program must be subject to an international independent audit that examines the economical, social, technological, cultural and environmental feasibility of food aid.
- National governments should fully recognize Indigenous Peoples', local communities' and farmers rights -- including women's land rights-- in all biodiversity related negotiations, especially their right to save their own seed, and the right to denial of access, even when prior informed consent is sought.
- The farmers' right to save the seed should never be removed from farmers and local communities. Governments should support initiative of local and indigenous communities to save their traditional seeds, exchange them with others, cultivate them and improve them.
- No patents or other types of intellectual property rights should be granted on seeds or any other living material.
- International legislation and enforcement mechanisms should be established to effectively ban all kinds of biopiracy
- Governments should promote alternatives to GMOs and other forms of unsustainable agriculture, such as agro ecology and organic production. Governmental policies should give adequate support for organic/ecological agricultural practices and production, as the basis for national rural development and agricultural policies, and as a fully viable alternative to GM mono cropping.
- National governments should work to establish a globally binding regulatory framework to control corporate activities so that they do not impact negatively on biodiversity, the environment and the rights of the majority of the global population, including women, Indigenous Peoples and local farming communities who have been the stewards and curators of biodiversity conservation throughout history.



*This publication was made possible through the generous support of novib and hivos.*