About Food & Water Watch

Food & Water Watch works to ensure the food, water and fish we consume is safe, accessible and sustainable. So we can all enjoy and trust in what we eat and drink, we help people take charge of where their food comes from, keep clean, affordable, public tap water flowing freely to our homes, protect the environmental quality of oceans, force government to do its job protecting citizens, and educate about the importance of keeping shared resources under public control.

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BIOTECH AMBASSADORS

How the U.S. State Department Promotes the Seed Industry's Global Agenda

Executive Summary 2

Introduction 3

State Department Strategy, Message, Tactics and Goals 3

State Department Biotech Charm Offensive 4

Taking the Biotech Spin Cycle on the Road 7

The Four Goals of Biotech Diplomacy 8

Corporate Diplomacy and Monsanto's Goodwill Ambassadors 8

Patently Offensive: State Department Intervenes in Commercial Disputes for Monsanto 9

Pressuring Foreign Governments to Reduce Oversight of Biotech Crops 10

U.S. Embassies Aggressively Opposed GE Labeling Efforts 11

Pushing Biotech on the Developing World 12

U.S.-Biotech Industry Campaign to Commercialize GE Crops in Kenya 13

U.S. Government Pushes Ghana Biotech Law Over Finish Line 14

Nigeria Advances U.S.-Drafted GE Legislation 14

Combining Diplomatic Carrots With WTO Sticks 14

Conclusion and Recommendations 15

Methodology 16

Endnotes 17

Executive Summary

Agricultural development is essential for the developing world to foster sustainable economies, enhance food security to combat global hunger and increase resiliency to climate change. Addressing these challenges will require diverse strategies that emphasize sustainable, productive approaches that are directed by countries in the developing world.

But in the past decade, the United States has aggressively pursued foreign policies in food and agriculture that benefit the largest seed companies. The U.S. State Department has launched a concerted strategy to promote agricultural biotechnology, often over the opposition of the public and governments, to the near exclusion of other more sustainable, more appropriate agricultural policy alternatives.

In 2009, the prestigious International Assessment of Agricultural Knowledge, Science and Technology for Development concluded that the high costs for seeds and chemicals, uncertain yields and the potential to undermine local food security make biotechnology a poor choice for the developing world.[1]

The U.S. State Department has lobbied foreign governments to adopt pro-agricultural biotechnology policies and laws, operated a rigorous public relations campaign to improve the image of biotechnology and challenged commonsense biotechnology safeguards and rules — even including opposing laws requiring the labeling of genetically engineered (GE) foods.

Food & Water Watch closely examined five years of State Department diplomatic cables from 2005 to 2009 to provide the first comprehensive analysis of the strategy, tactics and U.S. foreign policy objectives to foist pro-agricultural biotechnology policies worldwide. Food & Water Watch's illuminating findings include:

- **The U.S. State Department's multifaceted efforts to promote the biotechnology industry overseas:** The State Department targeted foreign reporters, hosted and coordinated pro-biotech conferences and public events and brought foreign opinion-makers to the United States on high-profile junkets to improve the image of agricultural biotechnology overseas and overcome widespread public opposition to GE crops and foods.
- **The State Department's coordinated campaign to promote biotech business interests:** The State Department promoted not only pro-biotechnology policies but also the products of biotech companies. The strategy cables explicitly "protect the interests" of biotech exporters, "facilitate trade in agribiotech products" and encourage the cultivation of GE crops in more countries, especially in the developing world.[2]

- **The State Department's determined advocacy to press the developing world to adopt biotech crops:** The diplomatic cables document a coordinated effort to lobby countries in the developing world to pass legislation and implement regulations favored by the biotech seed industry. This study examines the State Department lobbying campaigns in Kenya, Ghana and Nigeria to pass pro-biotech laws.
- **The State Department's efforts to force other nations to accept biotech crop and food imports:** The State Department works with the U.S. Trade Representative to promote the export of biotech crops and to force nations that do not want these imports to accept U.S. biotech foods and crops.

The State Department's efforts impose the policy objectives of the largest biotech seed companies on often skeptical or resistant governments and public, and exemplifies thinly veiled corporate diplomacy. Food & Water Watch provides a detailed insight into the motivations, tactics and goals of the State Department and its closely coordinated advocacy efforts with the biotech industry that undermine other nations' right to determine their own food and agricultural policies and objectives.

Introduction

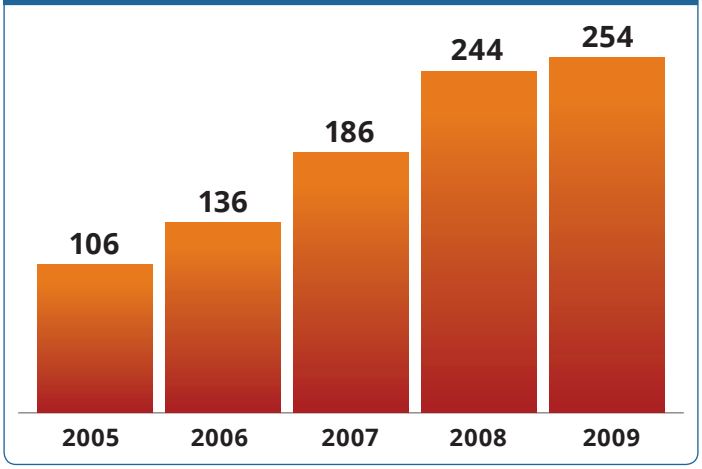
In the last decade, the United States has pursued foreign policy objectives on food and agriculture that benefit a few big seed companies. This commonly takes the form of the U.S. State Department exercising its diplomatic prestige and bully pulpit to pressure foreign governments to adopt policies favored by the agricultural biotechnology companies.

Food & Water Watch's comprehensive analysis of State Department diplomatic cables reveals a concerted strategy to promote agricultural biotechnology overseas, compel countries to import biotech crops and foods that they do not want, and lobby foreign governments — especially in the developing world — to adopt policies to pave the way to cultivate biotech crops.

The State Department views its heavy-handed promotion of biotech agriculture as "science diplomacy,"[3] but it is closer to corporate diplomacy on behalf of the biotechnology industry. Food & Water Watch's close examination of the cables demonstrates a concerted public relations strategy by the State Department to improve the image of biotech crops overseas, coordinate with biotech seed companies and press foreign governments to adopt pro-biotech policies.

In the United States, agricultural biotechnology dominates corn, soybean and cotton production,[4] but most countries have not adopted genetically engineered crops. Biotech or GE crops, also known as genetically modified organisms (GMOs), are created by transferring genetic material from one organism into another to create specific traits, such as resistance to treatment with herbicides or to make a plant produce its own pesticide to repel insects.[5] Biotech companies sell the seeds and often the agrichemicals that are used with herbicide-resistant crops. By 2009, nearly all (93 percent) of U.S. soybeans and four-fifths (80 percent) of U.S. corn cultivated were grown from GE seeds covered by Monsanto patents.[6]

Figure 1.
Number of Biotech Diplomacy Cables



SOURCE: FOOD & WATER WATCH ANALYSIS OF WIKILEAKS CABLEGATE DATABASE.

Although the U.S. commodity crop market is nearly saturated with biotech seeds, most of the world remains biotech-free. Even 17 years after biotech crops were first introduced in the United States in 1996, only five countries cultivated 89.4 percent of biotech crops in 2012 (the United States, Brazil, Argentina, Canada and India).[7] The seed companies need the power of the U.S. State Department to force more countries, more farmers and more consumers to accept, cultivate and eat their products.

The State Department has been more than willing to accommodate the biotech seed companies. Food & Water Watch found 926 U.S. State Department cables from 113 countries between 2005 and 2009 that discussed agricultural biotechnology and genetically engineered crops. (See Figure 1.) The cables were culled from the quarter-million cables released by the Wikileaks open-records organization in 2010. Although Wikileaks gained notoriety for releasing cables about national security, this analysis does not include any cables classified as "secret" or higher.

The dispatches provide a glimpse into the motivation, method and goals of biotech diplomacy. The Wikileaks cables were only a sample of all U.S. diplomatic communications traffic, representing about 10 percent of all State Department cables between 2006 and 2009 (a subset of the period that Food & Water Watch examined that had the most released cables).[8] The number of biotech cables appears to have increased steadily and grew faster than the overall number of Wikileaks cables. (See methodology, page 16.)

State Department Strategy, Message, Tactics and Goals

Between 2007 and 2009, the State Department sent annual cables to "encourage the use of agricultural biotechnology," directing every diplomatic post worldwide to "pursue an active biotech agenda" that promotes agricultural biotechnology, encourages the export of biotech crops and foods and advocates for pro-biotech policies and laws.[9] One strategy memo even included an "advocacy toolkit" for diplomatic posts.[10] Embassies could leverage their pro-biotech efforts by coordinating with the U.S. Agency for International Development (USAID, an independent agency under the State Department's authority[11]), the U.S. Department of Agriculture (USDA) and other

federal agencies.[12] The cables are nearly identical from the Bush to the Obama administrations: promoting biotech agriculture is a non-partisan, pro-corporate foreign policy with long-term State Department support.

State Department Biotech Charm Offensive

The State Department's uncritical endorsement of biotech agriculture is more effective than the industry's own extensive public relations efforts. The diplomatic communications campaign aimed to "promote understanding and acceptance of the technology" and "develop support for U.S. government trade and development policy positions on biotech" in light of the negative perception of GE crops worldwide.[13] In 2008, Secretary of State Condoleezza Rice admitted, "I know that GMOs are not popular around the world."[14]

The majority of European consumers opposed GE crops, according to a 2010 survey.[15] There was widespread "consumer resistance" in Germany and "absolutely no demand from consumers or producers" for biotech crops in Austria.[16] Despite the embassy's efforts to "eventually wear down Hungary's resistance," the public has shown "no sign of changing their minds about the ban on biotech corn."[17] The State Department recognized the global weight of the EU opinion and tried to "limit the influence of EU negative views on biotechnology."[18]

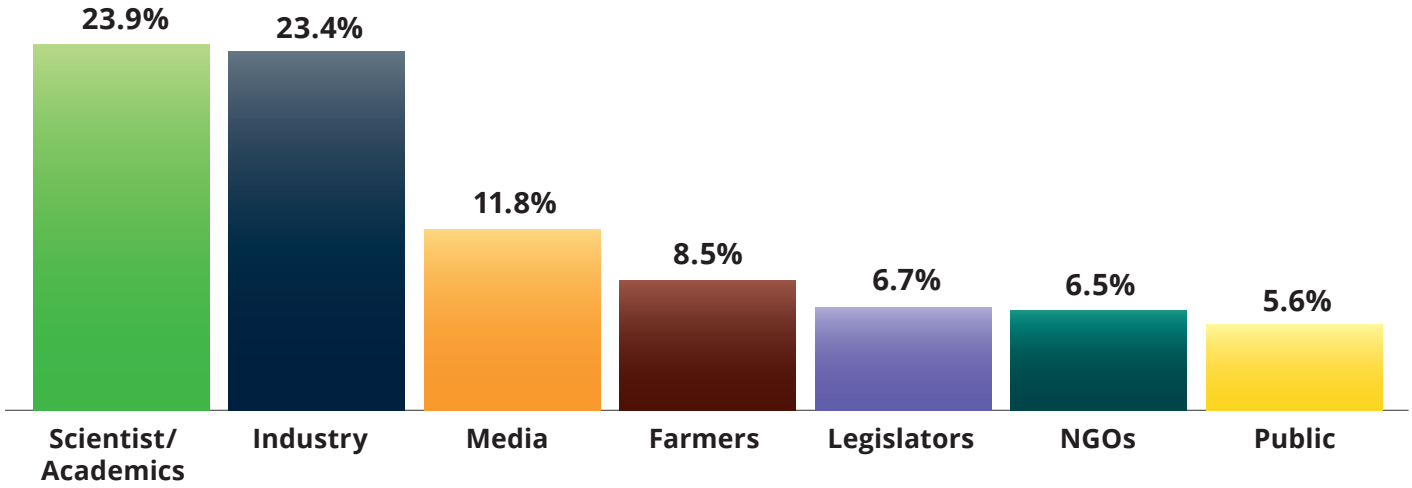
There was similar opposition in the developing world. Most countries in Africa remained fiercely opposed to cultivating biotech crops.[19] In 2012, Via Campesina, representing 200 million small farmers worldwide, called for a ban on cultivating biotech crops.[20] In 2012, more than 400 African organizations demanded that the African Union adopt a ban on cultivation and importation of biotech crops.[21]

Some embassies downplayed their advocacy efforts. In South Africa, the embassy could not publicly lobby for pro-biotech legislation because "any hint of U.S. involvement fuels the outcry against the initiative."[22] In Uruguay, the embassy has been "extremely cautious to keep [its] fingerprints off conferences" promoting biotechnology.[23] In Peru and Romania, the U.S. government helped create new pro-biotech nongovernmental organizations to advocate for biotech crops and policies.[24]

Although the goal of biotech diplomacy is ostensibly to improve the opinion of genetically engineered crops, the State Department preached primarily to the converted. Most embassy contacts were with local officials, but the second most frequent audience for diplomatic outreach was pro-biotech industry representatives and scientists. Food & Water Watch found that embassy outreach efforts targeted biotech industry and scientists about three times more frequently than farmers and legislators and four times more often than nongovernmental organizations or the public. (See Figure 2.)

The State Department promotes a pro-biotech message that reads right out of the biotech industry playbook. The biotech industry promises that GE crops will increase farm productivity, combat global hunger and strengthen economic development opportunities, all with a lighter environmental footprint. In reality, the shift to biotech crops in the United States has delivered increased agrichemical use and more expensive seeds. Although many scientists, development experts, consumers, environmentalists, citizens and governments dispute the benefits of this controversial technology, the State Department merely spouts industry talking points. (See Table 1.)

Figure 2. Target Audience for Biotech Diplomacy Outreach



SOURCE: FOOD & WATER WATCH ANALYSIS OF WIKILEAKS CABLEGATE DATABASE.

Table 1. Debunking the State Department and Biotech Industry Myths

MYTH: GE reduces agrochemical applications	
State Department	**Diplomatic strategy memo:** "Adoption of biotech crops has significantly reduced insecticide use."[25]
Biotech Industry	Biotechnology Industry Organization (BIO): "Biotechnology-derived crops have contributed to a substantial reduction in pesticide volumes used in production agriculture and have provided economic and social benefits to growers in both developed and developing countries by reducing time and production costs, and increasing yields."[26]
Debunking State Department-Industry Propaganda	**Biotech crops do not reduce agrochemical use:** Most GE crops are designed to be tolerant of specially tailored herbicides (mostly glyphosate, known as Roundup).[27] Farmers can spray the herbicide on their fields, killing the weeds without harming GE crops. A 2012 study found that even after accounting for reduced insecticide use on insect-resistant crops, total agrochemical use increased by more than 400 million pounds from 1996 to 2011, a 7 percent increase, due to increased herbicide applications.[28] Glyphosate can pose risks to animals and the environment. A 2010 Chemical Research in Toxicology study found that glyphosate-based herbicides caused highly abnormal deformities and neurological problems in vertebrates.[29] Another study found that glyphosate caused DNA damage to human cells even at lower exposure levels than recommended by the herbicide's manufacturer.[30] **Resistant weeds increase herbicide use:** Ubiquitous Roundup application has spawned glyphosate-resistant weeds, which drives farmers to apply more toxic herbicides and to reduce conservation tilling designed to combat soil erosion, according to a 2010 National Research Council report.[31] At least 20 weed species worldwide are resistant to glyphosate.[32] Even biotech company Syngenta predicts that glyphosate-resistant weeds will infest one-fourth of U.S. cropland by 2013.[33] Agricultural experts warn that these superweeds can lower farm yields, increase pollution and raise costs for farmers.[34] Farmers may resort to other herbicides to combat superweeds, including 2,4-D (an Agent Orange component) and atrazine, which have associated health risks including endocrine disruption and developmental abnormalities.[35]
MYTH: GE crops reduce erosion	
State Department	**Diplomatic strategy memo:** "Adoption of biotech crops has […] allowed many farmers to adopt no-till farming practices."[36] **Fedoroff:** "Herbicide tolerant crops contribute significantly to soil conservation because more farmers farm without ever plowing their land, this is called no-till farming."[37]
Biotech Industry	**BIO:** "No-till agriculture, in limited use prior to 1996, has been widely adopted due to the superior weed control from biotech crops that are able to tolerate herbicides with low environmental impacts. This has led to improved soil health and water retention, [and] reduced runoff."[38]
Debunking State Department-Industry Propaganda	**South American GE soy and corn plantations have contributed to deforestation:** The added land pressure for soybean planting contributed significantly to deforestation in Latin America. In the Brazilian state of Mato Grosso, which has the fastest growth in soybean production and deforestation, over half a million hectares of forest were converted to cropland between 2001 and 2004.[39] The large swaths of forests that were cleared for soybeans left the remaining forest more fragmented, which further undermined diverse ecosystems and forest health.[40] **U.S. biotech crop farmers are abandoning no-till and low-till practices:** The rise in herbicide-tolerant weeds has forced more farmers to return to deep plowing and to reduce conservation tilling to combat weeds, according to a 2010 National Research Council report.[41]
MYTH: GE crops are more productive	
State Department	**Diplomatic strategy memo:** "Biotechnology is being used to increase crop yields."[42] **Fedoroff:** "The simple reasons that farmers migrate to GM crops is that their yields increase 5–25 percent and their costs decrease, in some cases by as much as 50 percent."[43]
Biotech Industry	**CropLife America:** "With the use of agricultural herbicides, crop yields are increased by 20 percent or more."[44] **CropLife America:** "Thanks to modern agriculture, farmers have doubled the production of world food supplies since 1960, tripled the output of foods such as cooking oils and meats, and increased per capita food supplies in the developing world by 25 percent."[45]
Debunking State Department-Industry Propaganda	**Studies indicate no yield advantage:** Biotech companies have focused on developing crops that are designed to work with the herbicides they sell, not on developing high-yield seeds. A 2009 Union of Concerned Scientists survey found that herbicide-tolerant corn and soybeans had no yield increase over non-GE crops, and that there was only a slight advantage for insect-resistant corn.[46] A 2001 University of Nebraska study found that conventional soybeans had 5 to 10 percent higher yields than herbicide-tolerant soybeans.[47] Biotech crop yields have fallen as herbicide-resistant weeds have become more common. Research shows that higher densities of glyphosate-resistant weeds reduce crop yields.[48] Purdue University scientists found that Roundup-resistant ragweed can cause 100 percent corn-crop losses.[49]

Table 1. Debunking the State Department and Biotech Industry Myths *(continued)*

MYTH: GE crops and foods are safe	
State Department	**Fedoroff:** "In fact, because of the extensive prior testing, I submit to you that GM crops are the safest we've ever introduced into the food chain."[50]
Biotech Industry	**BIO:** "Biotechnology-derived crops are among the most thoroughly tested plants in history, and are closely overseen by federal agencies to ensure that they do not cause harm to consumers, to agriculture or to the environment."[51]
Debunking State Department-Industry Propaganda	**The United States has very weak oversight of the safety of biotech foods:** In most cases, the biotech industry self-regulates when it comes to the safety of genetically engineered foods. In 1992, the U.S. Food and Drug Administration (FDA) issued guidance allowing biotech companies to self-certify that new GE foods are safe and compliant with federal food safety laws.[52] The FDA trusts biotech companies to certify that their new GE foods and traits are the same as foods currently on the market. The FDA evaluates company-submitted data and does not do safety testing of its own.[53]
MYTH: GE crops promote sustainable development	
State Department	**Secretary of State Hillary Clinton:** "[W]e want to shift our focus to agricultural sustainability, focusing on the small producers, helping them understand the value of GMOs — genetically modified organisms."[54]
Biotech Industry	**BIO:** "To exclude any possible means to improve sustainable agricultural productivity would be to allow the already the [sic] desperate plight of the world's poor and undernourished to deteriorate still further."[55]
Debunking State Department-Industry Propaganda	**High-priced seeds and herbicides are ill suited to farmers in the developing world:** The prestigious 2009 International Assessment of Agricultural Knowledge, Science and Technology for Development concluded that the high costs for seeds and chemicals, uncertain yields and the potential to undermine local food security make biotechnology a poor choice for the developing world.[56] (See "Pushing Biotech on the Developing World ," page 12.)
MYTH: GE crops survive drought and climate change	
State Department	**State Department strategy memo:** "Agricultural biotechnology has great potential to help address the challenges of food insecurity and mitigate climate change."[57] **Secretary of State Hillary Clinton:** "We believe that biotechnology has a critical role to play in increasing agricultural productivity, particularly in light of climate change."[58]
Biotech Industry	**BIO:** "Major biotechnology providers are working on developing drought-tolerant corn and cotton; such traits will be of particular benefit in developing countries where crops are often not irrigated."[59]
Debunking State Department-Industry Propaganda	**Biotech has yet to deliver drought-tolerant seeds; conventional breeding is successfully delivering climate resilience:** Biotech firms have long promised high-yield and drought-resistant GE seeds, but by mid-2012 only one variety of drought-tolerant corn was approved for U.S. planting.[60] Crop research has yet to achieve the complex interactions between genes that are necessary for plants to endure environmental stressors such as drought.[61] Monsanto's approved drought-tolerant corn has overestimated yield benefits, and there is insufficient evidence that it will outperform already available conventionally bred alternatives.[62] Traditional methods of breeding for stress tolerance produce crops that are more resilient to disruption and climate change than GE crops because these crops complement and thrive in nutrient-rich and biodiverse soil.[63] Even if research succeeded in developing drought-tolerant crops, biotechnology companies would control any viable seeds, potentially putting new seeds out of reach for poor farmers.

Food & Water Watch found that one-quarter of the cables (24.1 percent) emphasized the purported benefits of GE crops — their allegedly higher yields, productivity and economic benefits for the developing world. A third of the cables (32.6 percent) addressed environmental issues, primarily repeating the industry contention that GE crops reduce pesticide use and soil erosion as well as the promised drought-resistance and climate resiliency of future crops.

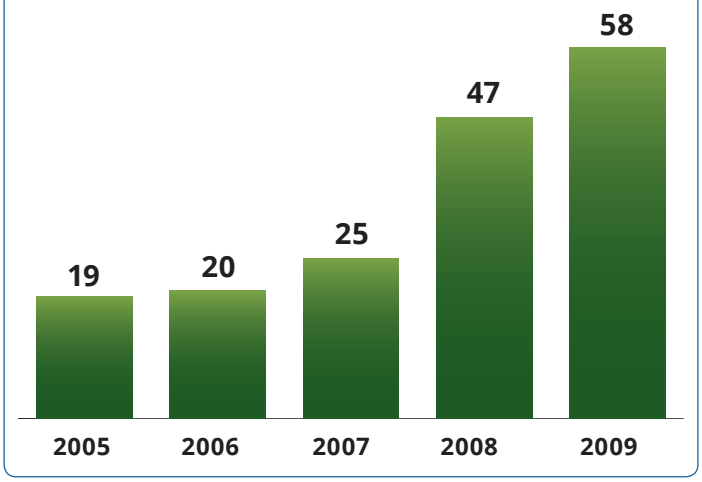
The State Department used the 2008 global hunger crisis as a new, urgent justification to promote biotech crops.[64] The State Department encouraged embassies to "publicize that agricultural biotechnology can help address the food crisis."[65] In 2009, the State Department initiatives were complemented by a new USAID "Feed the Future" initiative that included a partnership with biotech seed and agribusiness companies such as Monsanto, DuPont, Cargill and Syngenta and major foundations to reduce world hunger.[66] When the immediacy of the food crisis abated, biotech cultivation stalled in Africa and Asia.[67]

Taking the Biotech Spin Cycle on the Road

The State Department delivered the pro-biotech message at conferences and workshops, communicated with reporters and sent local officials on junkets to the United States.

Public relations and propaganda: The State Department urged embassies to generate positive media coverage to help influence public opinions.[68] More than one in 20 outreach efforts (5.9 percent) in 21 countries targeted reporters. In 2005, the consulate in Milan, Italy, organized a four-city pro-biotech tour garnering a four-page interview in *L'Espresso* magazine as well as newspaper and television coverage.[69] In 2006, a senior State Department biotech expert hosted a journalist roundtable in Egypt that generated newspaper and magazine stories and a TV interview that aired more than seven times.[70]

Figure 3.
Pro-Biotech Conferences, Presentations, Workshops and Seminars



SOURCE: FOOD & WATER WATCH ANALYSIS OF WIKILEAKS CABLEGATE DATABASE.

In other cases, embassies circumvented the media by releasing pro-biotech propaganda directly to the public. The State Department produced a pamphlet in Slovenian to explain the "myths and realities of biotech agriculture."[71] The embassy in Colombia proposed airing a series of canned radio spots featuring biotech experts that also could be used as industry magazine opinion pieces.[72] The Hong Kong consulate sent DVDs of a pro-biotech presentation to every high school.[73] The embassy in Zambia proposed airing pro-GE television documentaries during prime time.[74]

Biotech lecture circuit: The State Department encouraged embassies to deploy departmental experts to "participate as public speakers on agbiotech" and fund conferences, workshops and seminars to promote biotech acceptance.[75] State Department officials and invited experts participated in nearly 169 public events in 52 countries between 2005 and 2009. (See Figure 3.)

A quarter (26.2 percent) of the embassies' outreach efforts included these forums with "a particular emphasis on those individuals that may influence national biotech policy."[76] A 2008 cable from Mozambique noted that one "workshop provided an opening to further advance biotechnology" and target high-level decision makers charged with shaping biotech policies.[77] A proposed workshop in Yemen was expected to be "a catalyst to GMO legislation that considers the U.S. position."[78]

Some of the conferences have been swanky affairs. In 2005, the consulate in Milan brought a biotechnology scientist to participate in an opulent event on Venice's San Giorgio Maggiore Island featuring a "magical evening" performance by opera star Andrea Bocelli and an orchestra.[79] In 2009, USDA Secretary Tom Vilsack

SAN GIORGIO MAGGIORE ISLAND, VENICE / PHOTO © CC-BY-SA JAKUB HALUN; WIKIMEDIA COMMONS

headlined a business forum at the Philippines' luxury Shangri-La Hotel attended by Cargill, Kraft Foods and Land O'Lakes.[80] The embassy in Slovakia funded and co-hosted a biotech conference in the spa town of Piestany where the president of the U.S.-based National Corn Growers Association joined pro-biotech scientists.[81]

Junket science: The State Department encouraged embassies to bring visitors — especially reporters — to the United States, which has "proven to be effective ways of dispelling concerns about biotech [crops]."[82] The State Department organized or sponsored 28 junkets from 17 countries between 2005 and 2009. In 2008, when the U.S. embassy was trying to prevent Poland from adopting a ban on biotech livestock feed, the State Department brought a delegation of high-level Polish government agriculture officials to meet with the USDA in Washington, tour Michigan State University and visit the Chicago Board of Trade.[83] The USDA sponsored a trip for El Salvador's Minister of Agriculture and Livestock to visit Pioneer Hi-Bred's Iowa facilities and to meet with USDA Secretary Tom Vilsack that was expected to "pay rich dividends by helping [the Minister] clearly advocate policy positions in our mutual bilateral interests."[84]

The Four Goals of Biotech Diplomacy

The State Department strategy sought to foist pro-biotech policies on foreign governments. Imposing a biotech agricultural model on unreceptive farmers and consumers undermines other countries' food sovereignty and their right to determine their own food and agricultural policies.

Promote biotech business interests: The State Department not only promoted pro-biotechnology policies but also the products of biotech companies. The strategy cables explicitly "protect the interests" of biotech exporters, "facilitate trade in agribiotech products" and encourage the cultivation of GE crops in more countries, especially in the developing world.[85]

Lobby foreign governments to weaken biotech rules: The State Department urged embassies to advocate for pro-biotech laws and to "troubleshoot problematic legislation."[86] The 2009 strategy memo "urge[d] posts to pay particular attention to advancing this strategy with countries that ha[d] key biotech legislation pending."[87] More than two-thirds of the cables (69.9 percent) addressed the host countries' laws or regulations governing agricultural biotechnology.

Protect U.S. biotech exports: The State Department aimed to "ensure that global commerce in agbiotech products is not unfairly impeded" to protect and promote an estimated $25 billion in biotech crop exports.[88] In 2011, the Office of the U.S. Trade Representative (USTR) reported that biotech crops and foods "face a multitude of trade barriers" in the European Union (EU), China, Kazakhstan, Turkey, the Ukraine and 16 African nations.[89] Trade is a prominent topic in almost half (47.2 percent) of the cables.

Press developing world to adopt biotech crops: The State Department memos urged embassies to "encourag[e] the development and commercialization of ag-biotech products" in the developing world where many "have hesitated to join the biotech revolution."[90] The State Department encouraged embassies to "publicize the benefits of agbiotech as a development tool."[91] One-sixth of the cables (16.6 percent) suggested that biotech crops would improve food security, alleviate the food crisis and foster economic development. The message was combined with aggressive lobbying campaigns to pass laws to allow biotech crop production in the developing world, especially in Africa.

Corporate Diplomacy and Monsanto's Goodwill Ambassadors

The biotechnology industry is a core constituency for the State Department's biotech diplomatic outreach. The State Department confers with biotech interests, advocates on behalf of specific biotech seed companies and directs outreach efforts to energize the biotech and agribusiness industries. About one-fourth (23.4 percent) of the State Department outreach efforts targeted industry representatives and trade associations, including meetings, participating in State Department conferences and attending embassy receptions.

The seed companies, including Monsanto, DuPont Pioneer, Syngenta, Bayer CropScience and Dow Agrochemical, are more commonly mentioned in the biotech cables than food aid (6.9 percent of the cables and 4.4 percent, respectively). Some cables explicitly described the collaboration between the embassies and the seed companies. In 2006, the embassy in Romania planned to "work with the U.S. GM seed companies to ensure" that the season's agreed-upon cultivation of biotech soybeans could be planted.[92] The embassy in Ecuador planned "to reinforce industry lobbying" to oppose proposed regulations that could hinder biotech imports.[93]

The State Department worked especially hard to promote the interests of Monsanto, the world's biggest biotech seed company in 2011.[94] Monsanto appeared in 6.1 percent of the biotech cables analyzed between 2005 and 2009 from 21 countries. The State Department exercised its diplomatic persuasion to bolster Monsanto's image in host countries, facilitate field-testing or approval of Monsanto crops and intervene with governments to negotiate seed royalty settlements.

U.S. embassies have attempted to burnish Monsanto's image. The consulate in Munich, Germany, promised Monsanto that it would seek "even-handed" treatment of Monsanto's core business by Bavarian officials, where farmers' resistance to adopting biotech crops affected its brand.[95] The embassy in Slovakia sought to "dispel myths about GMOs and advocate on behalf of Monsanto."[96] In 2009, the embassy in Spain asked for "high level U.S. government intervention" at the "urgent requests" of Monsanto and a pro-biotech Spanish official in order to combat opposition to GE crops.[97]

Some embassies encouraged the approval of Monsanto crops with regulators. In 2006, the embassy in Egypt tried but failed to convince local authorities to accelerate the approval of biotech crop varieties, including some longstanding Monsanto and Pioneer seed applications.[98] In 2008, the ambassador in Argentina penned an opinion piece in the local newspaper promoting the expanded cultivation of Monsanto's insect-resistant cotton.[99] In 2005, the embassy in South Africa informed Monsanto and Pioneer about two recently vacated positions in the government's biotech regulatory agency, suggesting that the companies could advance "qualified applicants" to fill the position.[100]

The State Department even continued to advocate on behalf of Monsanto after the company was charged with violations of the Foreign Corrupt Practices Act. In 2005,

Monsanto admitted that it was responsible for bribing an Indonesian official to weaken environmental oversight of GE crops and paid $1.5 million in fines to the U.S. government.[101] A Monsanto consultant tried to persuade an Indonesian official to relax or repeal an environmental rule governing the planting of GE crops; when the official demurred, a Monsanto official approved an illegal payment of $50,000 to "incentivize" the official to weaken GE oversight.[102] There were 49 cables that mentioned Monsanto interests even after the company paid the fine.

Patently Offensive: State Department Intervenes in Commercial Disputes for Monsanto

Some embassies attempted to iron out intellectual property law and patent wrinkles for Monsanto. Biotech seed companies vigorously defend their patents and seed royalty payments in the United States.[103] One out of 14 cables (7.1 percent) addressed intellectual property laws, patents and seed royalty issues. In 2007, the embassy urged the Ukraine to pursue biotech counterfeiters to protect companies like Monsanto.[104] When Burkina Faso only offered Monsanto a one-year authorization for a new insect-resistant cotton, the company withheld the seeds until the U.S. ambassador lobbied the Prime Minister, who "instructed that the administrative order be changed to meet Monsanto's terms" for a five-year authorization.[105]

The embassy in Argentina intervened extensively for Monsanto in a seed royalty dispute. Argentina approved Monsanto's herbicide-resistant Roundup Ready soy in 1996 without granting patent protection for the seed (Monsanto still earned money selling the brand name herbicide Roundup, which was patented).[106] By 2001, 90 percent of Argentina's soybeans were grown from Monsanto seeds.[107] Monsanto began to increase pressure on Argentina to allow the company to charge farmers seed royalties after its patent on Roundup expired in 2000, as a way to recoup the profits Monsanto lost when farmers switched to generic glyphosate instead of Roundup.[108]

In 2005, the embassy tried to facilitate unsuccessful seed royalty negotiations between Monsanto and Argentina.[109] Monsanto instead suspended its Argentina-based research and threatened to extract royalty payments from Argentinean soy exports.[110] Farm groups agreed that Monsanto had the right to royalties, but complained that Monsanto would not agree on a price for the seed royalties.[111] In 2007, the Ambassador reiterated a request that Argentina "support a resolution of Monsanto's disputes" and communicated Monsanto's desire for even an "informal signal" of Argentinean government support in order to get the producers on board.[112]

Despite the ongoing negotiations, Monsanto withheld its next generation of biotech soybeans in 2007 until a deal on royalties was inked.[113] The embassy tried to improve the public perception of the dispute. In 2008, the embassy collaborated with Monsanto to arrange a junket of Argentinean journalists to the United States "to learn about new technologies and the importance of [intellectual property rights] protection."[114] In 2008, the president of Monsanto's Argentinean subsidiary formally thanked the U.S. Ambassador for supporting the company.[115] Argentina allowed Monsanto to patent its next-generation soybeans in 2011, but the company secured royalty payments by requiring farmers to sign individual contracts when buying seeds.[116]

Pressuring Foreign Governments to Reduce Oversight of Biotech Crops

The State Department worked to weaken other nations' oversight of biotech crops and to quickly quash efforts to establish new biotech rules and safeguards. The embassy in Poland worked to keep the nation in the biotech camp. In 2006, the top biotech State Department official suggested that proposed Polish biotech crop rules could "be harmful to joint U.S.-Polish trade interests."[117] In 2008, the State Department joined Polish livestock and grain interests and the American Soybean Association to defeat a proposed ban on GE livestock feed.[118] The embassy in Poland promoted pro-biotech rules and legislation but recognized that "we need to take care to be seen as protecting choice, not pushing use."[119]

In 2007, the State Department and the USDA worked with Turkish biotech proponents to defeat proposed legislation that threatened over $1 billion in U.S. GE crop exports.[120] In 2005, the USDA launched a lobbying and public relations campaign to successfully derail proposed anti-biotech legislation in Nicaragua.[121] The embassy in Thailand lobbied to lift the ban on biotech papaya field trials in 2006.[122] The embassy in Egypt tried to break "the regulatory logjam" that was stalling the approval of new GE crops.[123]

In Europe, the State Department has targeted the EU to weaken the regulatory safeguards that have delayed the approval of GE crops and to force the EU to accept biotech imports. Almost two-fifths of all biotech cables (38.0 percent) were from embassies in EU member states. U.S. embassies tried to persuade nations that had been hostile to biotech crops and to shore up countries that

had been supportive. The embassy in France proposed hosting a conference highlighting how biotech can "help address food shortages in the developing world" as a tactic to counteract France's negative public opinion of GE crops.[124]

The State Department worked to increase the acceptance of GE crops in the EU by encouraging the most biotech-supportive member states to affirmatively support U.S. biotech positions. Spain cultivated more biotech crops that any EU member state,[125] making it "worth continuing to target" to encourage acceptance of GE crops and foods in Europe.[126] In 2005, before Romania had entered the EU, the embassy worked to ensure that the government maintained a pro-biotechnology stance and continued to cultivate GE soy so that it could join the EU with its "biotech industry firmly secured."[127] In 2009, a senior State Department biotech advisor pressed Romania "to play an active role in the EU to preserve biotech options for farmers."[128] The State Department also urged "Bulgaria to become a successful model and advocate of agbiotech within the EU."[129]

The State Department has encouraged the most receptive countries to support the approval of GE crop varieties within the EU. In 2008, Bulgaria supported a European Commission proposal to approve GE crop varieties.[130] In 2007, the embassy reported that the Czech Republic supported the approval of two GE corn varieties and GE sugar beets in the EU.[131] Monsanto helped the embassy target EU member states for some of these biotech variety fights. In 2009, Monsanto presented its strategy to embassy and USTR officials, including outlining which EU countries Monsanto felt were pro-biotech, anti-biotech and undecided to help the embassy target its diplomatic efforts.[132]

U.S. Embassies Aggressively Opposed GE Labeling Efforts

Consumers worldwide want to know what is in their food, but biotech companies and food manufacturers would rather keep consumers in the dark about the contents of their grocery carts. The State Department has lobbied against efforts to require labeling of biotech foods. About one out of eight biotech cables (11.6 percent) from 42 nations between 2005 and 2009 addressed biotech-labeling requirements.

The United States opposed mandatory GE labeling laws as trade barriers because allowing consumers to know the contents of their food also "wrongly impl[ies] that these foods are unsafe."[133] The EU requires all foods, animal feeds (but not meat from animals fed with GE feed) and processed products with biotech content to bear GE labels.[134] Australia, Brazil, China, Japan, New Zealand, Russia, Saudi Arabia and South Korea all require labels on GE foods, although labeling requirements vary from zero tolerance to 5 percent GE content.[135]

U.S. embassies lobbied against new labeling efforts and for weakening existing labeling requirements. The embassies in Malaysia and Vietnam reported concerns to the State Department headquarters about the potentially negative impact of proposed labeling laws.[136] In 2008, the consulate in Hong Kong "played a key role" in convincing regulators to drop a proposed mandatory labeling requirement.[137] To stave off labeling efforts in 2009, the consulate in Hong Kong worked to cultivate "a local cadre" of pro-biotech advocates, redoubled efforts to combat consumer groups and legislators that favored labeling and even promoted biotech to high school students.[138] Hong Kong did not adopt mandatory labeling.[139]

Some countries adopted labeling rules despite U.S. opposition. During 2008 and 2009, the embassy in South Africa lobbied parliamentarians and other opinion leaders to prevent the mandatory GE labeling law that was enacted in 2009.[140]

Pushing Biotech on the Developing World

The State Department has been instrumental in promoting pro-biotech laws and policies in the developing world. U.S. embassies have offered technical advice, provided legislative language, lobbied to enact pro-biotech laws and helped create pro-biotech regulations. In 2005, the embassy in Brazil claimed that its "intensive outreach was an important catalyst" for the law that legalized GE cultivation.[141]

High-priced seeds and herbicides are ill suited to farmers in the developing world. The prestigious 2009 International Assessment of Agricultural Knowledge, Science and Technology for Development concluded that the high costs for seeds and chemicals, uncertain yields and the potential to undermine local food security make biotechnology a poor choice for the developing world.[142] Most farmers in the developing world plant seed that they saved from the previous year's crop, and biotech patents prohibit farmers from cultivating saved seeds, forcing them to buy more seeds every year.[143]

The State Department actively promoted pro-biotech rules and laws in Africa. In 2008, only three African countries cultivated biotech crops: South Africa, Egypt and Burkina Faso.[144] The pro-biotechnology organization International Service for the Acquisition of Agri-biotechnology Applications (ISAAA) called Africa the "final frontier" for biotechnology.[145]

In 2003, the USAID announced a program to promote biotech crop research, regulatory infrastructure and cultivation in a handful of countries, including South Africa, Nigeria, Zambia, Kenya and Mali.[146] In 2005, the State Department promoted the acceptance of GE seeds at a four-day conference of the Economic Community of West African States.[147] In 2009, the United States urged Brazil to leverage "its presence and experience in Africa to positively influence acceptance of agricultural biotechnology."[148]

In 2009, the USAID launched a $3.5 billion "Feed the Future" partnership with biotech seed and agribusiness company partners — including Monsanto, DuPont, Cargill and Syngenta and major foundations — to reduce world hunger.[149] This partnership has invested heavily in Africa. In 2010, DuPont agreed to help develop supposedly high-yield GE corn for sub-Saharan Africa funded by the USAID and the Bill & Melinda Gates Foundation.[150] As part of the same project, Monsanto donated the genetic material for a promised drought-tolerant corn to be offered royalty-free to African farmers.[151]

Secretary of State Hillary Clinton listens to a presentation on "genetic improvement" for local crops hosted by the Kenya Agricultural Research Institute. / PHOTO BY USAID

The unusual royalty concession by Monsanto may be little more than a long-term investment to build goodwill with African farmers while strengthening the perception that the seeds are more productive.[152] But selling more seeds in new markets — with or without initial royalties — is likely the real prize. In 2013, ISAAA estimated that the global biotech seed market was already about $15 billion annually.[153] If more countries approve crops, those sales would only increase.

The combination of foreign research investors and the lobbying muscle of U.S. embassies and agribusinesses has encouraged African nations to slowly adopt pro-biotech rules and regulations. In order to pursue biotech crop research, countries need enough regulatory infrastructure to approve GE field trials. Often, the initial rules allowing GE research can go into effect while the legislatures consider permanent rules allowing commercial biotech cultivation. In Kenya, Ghana and Nigeria, the State Department, industry and pro-biotech foundations pursued this multipronged strategy to enact pro-biotech laws.

U.S.-Biotech Industry Campaign to Commercialize GE Crops in Kenya

The United States has pushed Kenya to commercialize GE crops for decades. U.S. officials believed that if Kenya approved biotech crops, other East African countries would follow suit.[154] U.S. Secretary of State Hillary Clinton observed, "With Kenya's leadership in biotechnology and biosafety, we cannot only improve agriculture in Kenya, but Kenya can be leader for the rest of Africa."[155] After decades of supporting biotech research in Kenya, the embassy helped push legislation leading to commercial GE cultivation that was enacted in 2009.

The U.S. government and Monsanto have funded biotech crop research since the early 1990s.[156] Syngenta and the Rockefeller Foundation began funding insect-resistant corn research with a Kenyan research institute in 2001, and the Gates Foundation joined the project by 2008.[157] Some of the research efforts have been high-profile scientific failures, but even unsuccessful biotech research programs were used to open the door to GE commercialization.

From 1992 to 2004, the USAID, Monsanto and the World Bank invested $6 million in a Kenyan research project to develop a virus-resistant GE sweet potato variety.[158] But the GE sweet potato never succeeded in protecting against disease or increasing yields. Conventional crop researchers in Uganda developed a successful, high-yield, virus-resistant sweet potato more quickly and cheaply than the failed GE attempt.[159] In 2006, a USAID and Monsanto-funded project to develop virus-resistant GE cassava was scrubbed after researchers confessed to "revelations of the resistance failure" just before pre-commercial field trials were to begin in Kenya.[160]

A Kenyan farmer with a pest-resistant variety of maize, procured with USAID assistance. / PHOTO COURTESY OF USAID/AATF

These research failures highlight the significant opportunity cost of exclusively promoting biotech research solutions. The millions spent on GE sweet potato and cassava development could have funded much more and potentially more successful conventional crop research. But the GE cheerleaders viewed the wasted GE research investments as successful because they encouraged Kenya to develop a legislative and regulatory system "to govern the technology," which, of course, would also facilitate biotech field trials and cultivation.[161]

This research combined with embassy pro-biotech advocacy ultimately paved the way for legislation to approve GE crop cultivation despite public opposition. Kenyan small farmers and consumers did not want GE crops, and have protested against GE imports and cultivation.[162] In 2009, the Kenya Small Scale Farmers Forum opposed the introduction of GE crops because it could imperil Kenyan exports to Europe.[163]

The USAID developed and promoted advocacy materials for the media and policymakers, helped to craft legislative language and lobbied members of parliament.[164] The embassy urged Kenya to adopt "trade-friendly" laws that would allow the United States to deliver GE food aid crops.[165] The Kenyan Agriculture Minister praised preliminary rules to approve GE crops as a way to "fast-track the integration of Africa in the global bioeconomy."[166] In late 2008, the parliament approved legislation to approve GE field trials and ultimately commercialization; the president signed it into law in early 2009.[167]

In 2011, Kenya released guidelines to approve GE cultivation (although no GE crops were planted), began developing labeling rules and planned to allow GE imports while the regulations were being finalized.[168] In 2012, strict labeling rules covering any foods with more than 1 percent GE content went into effect.[169] Biotech trade associations and scientists expect Kenya to begin planting GE corn and cotton by 2014.[170] Despite the promised adoption, Kenya halted the import and sale of GE foods in late 2012 until the Ministry of Public Health certified the crops' safety; the U.S. embassy rapidly promised to work to overturn the regulatory decision.[171]

PHOTO COURTESY OF THE INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE I NIGERIA (IITA)

U.S. Government Pushes Ghana Biotech Law Over Finish Line

The United States has pushed for Ghana to adopt GE crops and develop regulations to approve cultivation since 2004.[172] In 2005, the USAID promoted biotech research although Ghanaian scientists warned that "public wariness about biotech and popular support for regulatory precautions" made the effort premature.[173] That year, the U.S. ambassador met with the Minister for Food and Agriculture to lobby for pro-biotech legislation, and a senior State Department biotech crop official met with government and industry leaders in Ghana to promote GE crops.[174] Nonetheless, the embassy admitted that there was too little parliamentary support for pro-biotech legislation, and foreign assistance was required to "operationalize" biotechnology.[175]

In 2007, the USAID partially funded a conference in Ghana to build momentum and political will in West Africa to enact biotechnology legislation.[176] It seemed to help. In 2008, Ghana passed temporary legislation to permit biotech field trials until permanent biotech approval regulations were enacted.[177] After eight years of embassy pressure, the pro-biotech law was enacted in 2011.[178] The Gates Foundation provided $6 million to implement the law in 2012.[179] But public opposition did not disappear. One political party challenged the rules approving GE imports in court in 2012.[180]

Nigeria Advances U.S.-Drafted GE Legislation

Monsanto and the United States began promoting GE crops in Nigeria in 2001.[181] In 2002, the USAID partially funded the drafting of legislation to facilitate GE crop approval in Nigeria, but the legislation stalled for years.[182] In 2003, the USAID and companies like ExxonMobil and Coca-Cola cosponsored a conference that included a pro-biotech agricultural plenary, including major biotech speeches and smaller workshops, and also featured a keynote speech by President George W. Bush.[183]

In 2006, the embassy in Nigeria proposed training regulators to push pro-biotech legislation during the next parliamentary sessions.[184] The embassy noted in 2009 that the proposed legislation would "facilitate market access to U.S. agribusinesses in Nigeria."[185] The embassy planned to send two Nigerian junkets to the United States between 2007 and 2009.[186] In 2008, Nigeria first allowed confined field trials for a GE cowpea, partially funded by the USAID.[187]

The combination of diplomatic pressure and U.S.-funded research eventually helped to break the legislative logjam. In 2009, the embassy trumpeted that "U.S. government support in drafting the legislation as well as sensitizing key stakeholders through a public outreach program" was crucial to advancing the bill over a legislative hurdle.[188] In 2011, the biotech legislation advanced to the Nigerian Senate, and while the legislation continued to move through the grueling process, Nigeria permitted field trials of GE cowpea, sorghum and cassava to continue.[189] The parliament finally passed the legislation in 2011, but as of early 2013 it was still awaiting the president's signature.[190]

Combining Diplomatic Carrots With WTO Sticks

The State Department has targeted the European Union's reluctance to allow the cultivation or importation of biotech crops or foods as the key to forcing developing countries to accept agricultural biotechnology. The EU represented a lucrative export market for biotech crops, and forcing the EU to accept these imports would assuage fears in the developing world about losing exports to the EU if they cultivated GE crops. The United States successfully challenged the EU's biotech approval rules and EU member states' unwillingness to approve GE crops at the World Trade Organization (WTO). The State Department aggressively pressed the EU to comply with the WTO ruling by weakening its biotech rules.

The EU had approved 18 biotech crop varieties for cultivation and sale by June 1999, when five EU member states (Denmark, France, Greece, Italy and Luxembourg) effectively declared a moratorium on new authorizations until the European Commission introduced legislation on labeling and traceability.[191] Austria, Belgium, Finland, Germany, the Netherlands, Spain and Sweden did not apply a moratorium but invoked a *"thoroughly precautionary approach"* and urged the Commission to rapidly develop traceability and labeling regulations.[192]

In 2003, the United States, Canada and Argentina challenged the EU's biotech approval process and the member state moratoriums at the WTO. While the WTO was considering the dispute, the United States continued to push for the EU to drop its biotech rules. In 2005, the USTR demanded that the United States "get the access that we think we're entitled to in the EU market" for biotech crops."[193]

PHOTO COURTESY OF COMMONS.WIKIMEDIA.ORG

In 2006, the WTO ruled that the "undue delay" in the EU's approval process for 24 biotech crop varieties from 1999 to 2003 constituted a de facto biotech moratorium that was inconsistent with WTO rules.[194] It also ruled that individual EU member state bans violated trade rules and were unjustified without adequate biotech risk assessments.[195] The ruling did not prohibit the EU from applying its own standards and laws, including restricting biotech crop approvals, provided that the rules were implemented properly. Despite the limited and theoretical ability of countries to regulate GE crops, the WTO's biotech decision was another attack on the right of countries to ensure food safety and protect the environment.

Canada and Argentina settled and dropped their biotech claims with the EU, but the United States has maintained its complaint.[196] The State Department biotech strategy cables reiterated the effort to "continue to seek full EU compliance with the 2006 WTO ruling."[197] In France, the U.S. embassy "support[ed] aggressive retaliation against WTO-illegal trade barriers maintained by the European Union," such as France's moratorium on GE crops.[198] The State Department recommended leveraging the successful WTO ruling to convince countries in the developing world that they ultimately would be able to export biotech crops to the EU.[199]

Conclusion and Recommendations

The U.S. State Department must stop its imposition of biotech agriculture on the rest of the world. Over the last decade, U.S. foreign policy has pushed other countries to accept biotechnology as the primary agricultural policy and development policy alternative. The United States has pressed countries to accept unwanted biotech crop and food imports, change their laws to encourage the cultivation of biotech crops and lobbied against regulatory safeguards that are opposed by the biotech seed industry.

The United States should not be picking agricultural policy winners and losers. It is past time for the government to abandon corporate diplomacy, and to allow the public and other governments to navigate their own paths toward more environmentally and economically sustainable food and agriculture policies. Biotech agriculture is uniquely unsuited to the farmers of the developing world who generally lack the financial resources to purchase expensive seeds and herbicides sold by the biotech companies.

There are a host of promising, lower-impact agricultural approaches that have been shown to increase productivity, maximize economic return for farmers and enhance

food security. Many academic studies have documented the potential of conventional, organic and other more sustainable approaches to improve agricultural productivity in the developing world.[200]

The State Department approach to agricultural development must put the interests of other countries before the interests of the biotech seed companies. All nations have the right to establish their own priorities for food and agriculture policies, as well as the ability to grow what the public wants in order to feed itself. The State Department must:

1. **Halt the aggressive advocacy of pro-biotech policies in the developing world:** The State Department has lobbied foreign governments to enact pro-biotech laws and policies and opposed efforts to establish sensible biotech safeguards. The promotion of a pro-corporate agenda in the guise of foreign policy is misguided and undermines the U.S. image abroad. This corporate diplomacy must end immediately.
2. **Eliminate the funding to promote biotech crops and policies overseas:** The State Department, the USAID and the USDA direct millions of dollars each year to promote biotech crops and policies overseas. These programs promote an exclusively biotech solution and are a waste of taxpayer money.
3. **Stop demanding that governments accept unwanted biotech crop and food imports:** The United States should drop its WTO challenge to the EU biotech rules and remove the acceptance of biotech crops from its trade negotiating objectives. Countries should have the right to establish their own acceptance of biotech crops and foods free from U.S. interference.

The United States should enhance other countries' abilities to improve agricultural production that encourages economically and environmentally sustainable farming. The United States should work with other nations to develop the policies and objectives that they want to pursue and let the biotech seed industry handle its own public relations.

Methodology

Food & Water Watch analyzed 926 U.S. State Department cables from 113 countries released by the Wikileaks whistleblower organization sent from 2005 to 2009 containing the words "biotech" or "GMO" related to agriculture or crops (out of 1,526 biotech cables; the remainder were related primarily to pharmaceuticals). Although Wikileaks gained notoriety for releasing cables about national security, this analysis does not include any cables classified as "secret" or higher. (Six "secret" cables covering biotech agriculture were excluded and no "secret/nonforn" cables that cannot be shared with any foreign government appeared to cover the topic.) Wikileaks did not release any cables classified as "top secret."[201]

In 2010, Wikileaks released 250,000 diplomatic cables exposing communication between the State Department and more than 270 U.S. diplomatic posts.[202] The cables came from the U.S. military's Secret Internet Protocol Router Network (SIPRNET), developed after September 2001 to provide more secure global communication between U.S. agencies, including embassies and consulates.[203] The Wikileaks cables represented about 10 percent of all State Department cables between 2006 and 2009. Most of the released cables were sent between 2006 and 2009, corresponding to a period when the State Department sent 2.4 million total cables, including through other systems.[204]

Food & Water Watch categorized the prior contacts, future contacts and diplomatic updates into separate diplomatic events. Some cables describe multiple diplomatic events that were catalogued separately. The data analyze 987 diplomatic events from the 926 biotechnology cables: 55 percent of the events were reports of prior outreach, 35 percent were biotech updates from the host country and 10 percent described proposed future diplomatic outreach.

It appears that the number of agricultural biotechnology diplomatic cables increased steadily over the 2005 to 2009 period and increased twice as fast as the overall number of Wikileaks-released cables between 2006 and 2009. Outreach events (meetings, delegations to the United States, and conferences), audiences (officials, industry, scientists/academics, media, farmers, legislators, non-governmental organizations and the public) and topics (benefits, environment, trade, regulations/laws, development/food security, intellectual property and labeling) were drawn from the text of the cables.

All U.S. dollar figures are in nominal values, and conversion to Euros was done with the U.S. Federal Reserve Board's Foreign Exchange Rate G.5A Annual for the year that the U.S. dollar figure was reported.

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