

USAID:

Making

the

world

hungry

for GM

crops

ABOUT GRAIN

GRAIN is an international non-governmental organisation which promotes the sustainable management and use of agricultural biodiversity based on people's control over genetic resources and local knowledge.

GRAIN was established at the beginning of the 1990s to launch a decade of popular action against one of the most pervasive threats to world food security: genetic erosion. The loss of biological diversity undermines the very sense of "sustainable development" as it destroys options for the future and robs people of a key resource base for survival. Genetic erosion means more than just the loss of genetic diversity. In essence it is an erosion of options for development. Central to our approach is the conviction that the conservation and use of genetic resources is too important to leave to scientists, governments and industry alone. Farmers and community organisations have nurtured genetic diversity for millennia, and continue to do so. Any effort in this field should take their experience as a starting point.

Now entering its 15th year of work, GRAIN has witnessed and contributed to an enormous and ever-growing momentum of international concern, debate and action to redress the imbalances in the management and control of biodiversity. What started as a small and Euro-centred outfit in the early 1990s, has now grown into a dynamic and mature organisation with 14 staff in 10 countries and spread across five continents, carrying out a broad and challenging programme on local and global management of genetic diversity and the impacts of biotechnology on world agriculture, particularly in developing countries.

This evolution would not have been possible without permanent efforts to strengthen the growing network of partner groups in every continent of the world. The foundations of our work lie in the daily networking, communications and information activities of our small organisation. It is on this basis that we are able to strengthen our capacities and those of our many partners the world over in mobilising popular concern and constructive action for the safeguarding of the world's genetic diversity.

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This briefing examines how the US government uses USAID to actively promote GM agriculture. The focus is on USAID's major programmes for agricultural biotechnology and the regions where these programmes are most active in parts of Africa and Asia¹. These USAID programmes are part of a multi-pronged strategy to advance US interests with GM crops. Increasingly the US government uses multilateral and bilateral free trade agreements and high-level diplomatic pressure to push countries towards the adoption of many key bits of corporate-friendly regulations related to GM crops. And this external pressure has been effectively complimented by lobbying and funding from national and regional USAID biotech networks.

INTRODUCTION

In 1990, two Monsanto executives got in touch with Joel Cohen, the Senior Biotechnology Specialist for USAID (the US Agency for International Development).² Monsanto wanted USAID to help develop a GM crop for Africa that would give GMOs a good name. Cohen, who had come to the agency from the US seed industry, turned to USAID's most trusted research institute in Africa-- the Kenyan Agricultural Research Institute (KARI). The three men set up a meeting with KARI and began to put their plan into action.

They decided to work on sweet potato, a crop neglected by seed companies and scientists but for which there were some promising GM applications being developed in the US. KARI had the perfect person for Monsanto to collaborate with - Florence Wambugu³, a KARI scientist who had just completed a PhD programme on sweet potatoes.⁴ Monsanto immediately hired Wambugu to work in the United States on a GM sweet potato resistant to the sweet potato feathery mottle virus. Fourteen years later, it is pretty clear that Wambugu's sweet potatoes are far from ready for the fields of Kenya's farmers; in recent field studies the GM crop failed to resist the virus and underperformed compared to non-GM local varieties.⁵

But getting the GM sweet potato out to farmers was not the real intention anyway. The overriding goal was to open doors to GM, and in this it was a great success (see *Box: The Trojan Sweet Potato*). Most importantly, the project served as a vehicle for driving forward a regulatory framework conducive to GM crops. And this is where USAID is making its mark - getting Southern countries to set up the regulatory frameworks and the technical capacity that US corporations require to build-up global markets for their GM crops.⁶

1 - The paper does not cover, in any detail, USAID's biotechnology activities in Latin America or Central and Eastern Europe, or its role in the shipment of US food aid containing GMOs. These important areas of research are beyond the scope of this briefing.

2 - The two Monsanto executives were Robert Horsch and Earnest Jaworski.

3 - Florence Wambugu - more details available from the GMWatch pages: www.gmwatch.org/profile.asp?Prid=131

4 - F. Wambugu, "Biotechnology Seminar Paper: Control of African Sweet Potato Virus Diseases through Biotechnology and Technology Transfer," ISNAR Biotechnology Service, April 1995: www.isnar.cgiar.org/lib/papers/wambugu.pdf

5 - Gatonye Gathura "GM technology fails local potatoes," *The Daily Nation*, Kenya Online, Thursday January 29, 2004

6 - Bhavani Pathak, "The process of biotechnology development and dissemination in developing countries: Experience of USAID's agricultural biotechnology program", Presentation to the 6th International ICABR Conference Ravello, Italy, July 11-14, 2002



ABSP

This Kenyan GM sweet potato initiative has become the template for USAID's overall biotechnology⁷ strategy. In 1991 USAID launched the Agricultural Biotechnology for Sustainable Productivity project, later renamed as the Agricultural Biotechnology Support Project (ABSP). The Project, run by a consortium of private companies and public research institutions under the direction of Michigan State University (MSU), was mainly interested in identifying more GM sweet potato-like projects from amongst the ongoing research projects at US university and corporate labs. These could then be used as entry points for US companies to collaborate with public research institutions in the South and to promote US models of biosafety and IPR legislation. During the anticipated six-year project life, the project was supposed to move its targeted GM crops from the research and development stage to field-tests.⁸

As explained by former ABSP Director, Catherine Ives:

*"We will be working with countries to assist them in developing biosafety regulatory systems and intellectual property management systems that will promote access to, and development of, agricultural biotechnology."*⁹

The ABSP, as USAID's first major biotechnology programme, signalled a change in US foreign agricultural policy.

In the post WWII era, the US government was primarily concerned with opening markets to its surplus agricultural commodities. With globalisation, however, the policy context changed. US food corporations are now interested in flexibility and substitution; they want free access around the globe to source and sell their products wherever they face the least costs and make the most profits.¹⁰ The US government has generally embraced these changes and has looked to protect and consolidate its dominance in the global food system by expanding the monopoly control of its corporations over key sectors of the food system, thereby ensuring that profits and royalties continue to flow back to the US. In this new global context, GM crops are not just another technology for US agriculture; they are the front and centre in US foreign policy and critical to control over seeds (see *Box: The US Model*).

7 - *Biotechnology*: In this report we have referred to "biotechnology" or "biotech" which refers specifically to agricultural biotechnology, unless otherwise stated.

8 - Bhavani Pathak, "*The process of biotechnology development and dissemination in developing countries: Experience of USAID's agricultural biotechnology program*", Presentation to the 6th International ICABR Conference Ravello, Italy, July 11-14, 2002

9 - ABSP News Linkages, June 1999.

10 - Philip McMichael, "*Global Development and the Corporate Food Regime*", Presented at the Sustaining a Future for Agriculture Conference, Geneva, 16-19 November 2004: www.agribusinessaccountability.org/page/33211

The ABSP projects were the early components of what has become a multi-pronged strategy to advance US interests with GM crops. Increasingly the US government uses multilateral and bilateral free trade agreements and high-level diplomatic pressure to push countries towards the adoption of many key bits of corporate-friendly regulations related to GM crops. But this external pressure must be complimented by internal pressure to be effective. You need people within the countries with strong connections to the levers of power making the same push and you need domestic structures that can bring the GM crops to farmers' fields and peoples' stomachs.

This is where the ABSP projects and their consortium partners are so important. Through the ABSP research and development projects they channel funds and support to domestic players, typically scientists close to or involved in policy-making, who serve as the basis for a domestic lobby that can articulate and indirectly push the US agenda and help open the doors to GM agriculture.

TECHNOLOGY TRANSFER OR POLICY IMPLEMENTATION?

ABSP I ran for 12-years, from 1991 to 2003, at a cost to USAID of US\$13 million. In the first phase of ABSP I (1991-1996), around a dozen projects were initiated, involving

Box: WHAT IS USAID?

The US Agency for International Development (USAID) has been the principal U.S. agency for providing economic and humanitarian assistance to developing and “transitional” countries since 1961, though it spends less than 0.5% of the federal budget. It is “an independent federal government agency that receives overall foreign policy guidance from the Secretary of State”. US foreign assistance has always had the furthering of America’s foreign policy interests, which includes supporting the US economy, US agriculture and US trade, as a key part of its remit.

The USAID website candidly stated, “The principal beneficiary of America’s foreign assistance programs has always been the United States. Close to 80% of the USAID contracts and grants go directly to American firms. Foreign assistance programs have helped create major markets for agricultural goods, created new markets for American industrial exports and meant hundreds of thousands of jobs for Americans.”

The head of the agency Andrew Natsios has aggressively attacked critics of GM, accusing environmental groups of endangering the lives of millions of people in southern Africa by, he claimed, encouraging governments in the region to reject the US’s GM food aid. “The Bush administration is not going to sit there and let these groups kill millions of poor people in southern Africa through their ideological campaign,” he said.

Promoting GM is an official part of USAID’s remit - one of its roles is to “integrate GM into local food systems”. USAID launched a \$100m programme for bringing biotechnology to developing countries. USAID’s “training” and “awareness raising programmes” will, its website reveals, provide companies such as “Syngenta, Pioneer Hi-Bred and Monsanto” with opportunities for “technology transfer”. Monsanto, in turn, provides financial support for USAID.

Source: Text from GMWatch - <http://www.gmwatch.org/profile1.asp?Prid=165>

national research centres in at least seven developing countries.¹¹ ABSP I’s original objective was to bring these GM crops to farmers’ fields by supporting its collaborators with research and development and eventually the commercialisation, including support in regulatory and intellectual property issues. But few of these phase I projects produced potential commercial GM crops.

When ABSP moved into its phase II programme in 1998, all of the phase I projects except for two, Bt potato and virus-resistant cucurbits, were dropped, in order to focus the programme on “product development”. Yet, as one retrospective study points out, in phase II:

“... no provision was made in the ABSP budget for contributing to the costs of complying with the necessary regulatory procedures for the risk assessment complex of the ‘near market’ technologies, even though the ABSP Annual Impact Report dated July 2000 acknowledged that ‘... depending on the stringency of the commercialization procedures, it will be difficult for a public-funded effort to meet the regulatory costs.’”¹²

With its private sector partners not showing any interest in seeing the projects through to market, ABSP eventually backed away from its last two remaining projects, leaving the IPR and regulatory issues unresolved.¹³

During its two phases, ABSP I accomplished little in the way of “technology transfer”. But through its projects and its many workshops and exchanges, scientists from the South learned how to collaborate with US companies. They learned how to respect material transfer agreements, how to breed GM traits into local varieties and how US companies perform field tests. All of this “training” and “capacity-building” helped pave the way for US corporations to bring in their patented GM varieties. Moreover, even though the ABSP crops never made it to farmers’ fields, the projects went far enough to initiate and influence political processes, for both biosafety and IPRs, as the case of Egypt illustrates.

11 - Carliene Brenner, “Telling Transgenic Technology Tales: Lessons from the Agricultural Biotechnology Support Project (ABSP) Experience”, ISAAA Briefs No. 31. ISAAA: Ithaca, NY. 2004

12 - *ibid*

13 - Josette Lewis (USAID) maintains that the Bt potato work has now moved to South Africa, where USAID is supporting regulatory studies. She estimates that the Bt potatoes will be commercialised within 5 years (Personal communication, February 25, 2005).



TABLE: SOME OF THE ABSP GM CROP PROJECTS

Country	GM crop	Project status
Egypt	Bt potato	Successful development of local GM variety. No application for commercial release due to concerns over loss of export markets, regulatory costs and IPRs
	Tomato yellow leaf curl virus (TYLCV) resistant GM tomato	Project ends in 2001. In 2004, Egyptian government imports US\$1.5 worth of conventional tomato seed resistant to TYLCV from Israel.
	Virus resistant GM cucurbits	Project ends in 2001. Successful development of several local GM varieties, but regulatory and IPR issues for commercial release unresolved.
Indonesia	Bt potatoes	Research abandoned due to lack of local interest in the project.
	Bt maize	Project abandoned due to issues over patent rights.
Kenya	Sweet Potato	No application for commercial release. GM sweet potatoes fail to perform.

Source: Bhavani Pathak 2002; Carliene Brenner 2004; and ABSP final reports

BOX: THE TROJAN SWEET POTATO

There were multiple advantages to working with a specific GM crop like sweet potato. It opened up a long-term, direct collaboration between Monsanto and a Southern public research centre, in this case KARI, in which several scientists would be trained at Monsanto’s US headquarters. These scientists would end up forming a vocal domestic lobby with a personal stake in the GM debate. It was also an obvious source of public relations for Monsanto and other GM corporations. Here was a company “donating” its technology to African scientists in order to improve a subsistence crop in which it clearly had no financial interest.

Most important, though, was getting the relevant regulations on GM implemented. Before you can commercialise GM sweet potatoes, you have to field-test them, and for this you need regulations, or so the argument goes. The project thereby provided a way to side-step the larger question of whether there should be any introductions of GM crops and the critical questions about the merits and risks of the GM crop in question to proceed to the technical matter of how to “manage risk” in field tests. Who cared if the GM sweet potatoes actually worked; what mattered was that Kenya and other countries became places where Monsanto can sell its GM seeds and have its patents enforced.

Whatever the fate of GM sweet potato, what is certain is that Monsanto now has the green light to start field trials of its Bt cotton in Kenya.

ABSP IN EGYPT

Egypt was the main target of ABSP's work in the 1990s, a result of a generous US\$7 million funding for biotechnology from USAID's Cairo office.¹⁴ Its most significant project in the country was the Bt potato project, which used a model that would be repeated again and again in other places. The project brought together a US based university (MSU¹⁵), a US seed company (Garst Seeds - now owned by Syngenta), and an Egyptian research centre - the Agricultural Genetic Engineering Research Institute (AGERI). The aim was to genetically modify popular Egyptian potato varieties with Garst's patented Bt gene and release them to Egyptian farmers. The potatoes were transformed in the US and the first three years of field trials were carried out at MSU. In the meantime, ABSP set to work on other matters.

Egyptian scientists were flown to an ABSP biosafety workshop in Jamaica and then to the US for an 8-week internship where they spent time touring the US agencies responsible for biosafety policy and the offices and labs of Monsanto and Syngenta. The pay-off was immediate. According to one ABSP official:

*"One of these scientists assisted in drafting Egypt's biosafety regulations and went on to become the first biosafety officer at AGERI. Egypt adopted biosafety guidelines in January 1995 and by Ministerial decree the Egyptian National Biosafety Committee was established in 1995. To date, several biosafety officers at AGERI, the primary institutions charged with biosafety in Egypt, have continued to receive training by ABSP."*¹⁶

In 1997, after the construction of a greenhouse at AGERI, supervised and financed by ABSP, MSU sent over a batch of its GM potatoes and AGERI began field tests. AGERI would continue field tests for another six years until the project was shelved, having come up against what should have been a foreseeable barrier: AGERI simply did not have the resources to bring the potatoes through the regulatory system.¹⁷

Despite the failure to develop a feasible GM crop for Egypt, ABSP saw its work in the country as a success. According to one ABSP official:

*"Having policy decisions driven by technologies of national importance and practical experience results in development of regulatory frameworks that are more implementable and permissive towards technology development and deployment. The [Bt potato] project was successful in ... building capacity in policy and regulatory issues surrounding the use of this technology that will facilitate entry of other agricultural biotechnology products into Egypt."*¹⁸

In reality, these "other biotechnology products" boil down to GM varieties from US corporations. The GM crop with the best chance of making it to Egyptian farms is Monsanto's Bt cotton, and, if it does, Monsanto will have ABSP to thank.¹⁹ On top of its Trojan horse GM projects, ABSP intervened directly to keep Egypt's GM regulations "permissive". In 2001, it parachuted consultant Hector Quemada into Egypt at a critical moment to work with key USAID contractor Development Alternatives Inc (see *Box: Development Alternatives Inc*) in ensuring that the country's draft biosafety regulations stayed on the right track. For Quemada, a former regulatory affairs officer for a leading US biotech corporation,²⁰ his role was to support "food and feed safety testing guidelines and environmental safety testing guidelines to **enable** commercialization of genetically engineered crops in Egypt" (emphasis added).²¹

14 - Carliene Brenner, "Telling Transgenic Technology Tales: Lessons from the Agricultural Biotechnology Support Project (ABSP) Experience", ISAAA Briefs No. 31. ISAAA: Ithaca, NY. 2004

15 - Michigan State University

16 - Bhavani Pathak, "The process of biotechnology development and dissemination in developing countries: Experience of USAID's agricultural biotechnology program", Presentation to the 6th International ICABR Conference Ravello, Italy, July 11-14, 2002

17 - In a detailed study of the ABSP, Carliene Bremmer writes:

"No provision was made in the ABSP budget for contributing to the costs of complying with the necessary regulatory procedures for the risk assessment complex of the 'near market' technologies, even though the ABSP Annual Impact Report dated July 2000 acknowledged that '...depending on the stringency of the commercialization procedures, it will be difficult for a public-funded effort to meet the regulatory costs.'" (Carliene Brenner, "Telling Transgenic Technology Tales: Lessons from the Agricultural Biotechnology Support Project (ABSP) Experience", ISAAA Briefs No. 31. ISAAA: Ithaca, NY. 2004.)

18 Bhavani Pathak, "The process of biotechnology development and dissemination in developing countries: Experience of USAID's agricultural biotechnology program", Presentation to the 6th International ICABR Conference Ravello, Italy, July 11-14, 2002

19 - Joseph Krauss, "Egypt develops GM, others fight", Ellinghuysen, 4 April 2004

20 - Carol Kaesuk Yoon, "Reassessing Ecological Risks of Genetically Altered Plants" *New York Times*, 3 November 1999: www.biotech-info.net/reassessing.html

21 - Hector Quemada's Résumé: www.croptechology.com/pages/912975/page912975.htm



Box: CULTIVATING CORRUPTION IN INDONESIA

Thanks to the public records of a recent case brought against Monsanto by the Security and Exchange Commission (SEC) of the US we now know a little more about the corporate culture that Monsanto brought to Indonesia's public sector. In its complaint¹, the SEC details how, in 1998, Monsanto hired an American working with a Jakarta-based investment consulting firm to lobby for Indonesian legislation and ministerial decrees favourable to GM crops. From 1997 to 2002, the SEC found that Monsanto's Indonesian affiliates made at least US\$700,000 of illicit payments to at least 140 current and former Indonesian government officials and their family members. According to the SEC: "when it became clear that the lobbying efforts were having no effect on [a] Senior Environment Official, the Senior Monsanto Manager told the Consulting Firm Employee to 'incentivize' the Senior Environment Official with a cash payment of US\$50,000." On 5 February 2002, Monsanto's lobbyist handed an envelope to the Senior Environment Official containing an agreed US\$50,000 in \$100 bills. Although Monsanto has admitted liability, this same "Senior Monsanto Manager" is now president of the American Chamber of Commerce in Beijing, a privately financed organisation promoting US companies in China.²

Throughout this period of rampant corruption documented by the SEC and prior to it, ABSP worked extensively in Indonesia with US companies and local officials to facilitate the introduction of GM crops. ABSP began working directly with the Central Research Institute for Food Crops (CRIFC) in drafting biosafety guidelines in 1995. ABSP's principal collaborators in the country were selected to sit on the committee writing the first draft of national biosafety guidelines under the Minister of Agriculture. ABSP then organised a workshop where a new draft was produced that became the basis for the national biosafety guidelines brought into law by decree of the Minister of Agriculture in September 1997. Similarly, ABSP "assisted" in the preparation of draft plant variety protection legislation, which was approved by the Indonesian parliament in December 2000.³

The Indonesian "collaborators" that ABSP brought to the US for workshops and internships designed to build a "pool of well-trained people"⁴ include two of Indonesia's national focal points for biosafety legislation, Sugiono Moeljopawiro and Muhammed Herman of the CRIFC.⁵ Herman was the national coordinator of ABSP from 1996-2002 and he has coordinated Indonesia's Plant Group of Biosafety and Food Safety Technical Team since 1997.⁶ ABSP's partner organization, ISAAA, which receives funding from both Monsanto and USAID, brought Joko Budianto, another national focal point for biosafety legislation on a two-week study tour of the EU and North America for six "senior policy makers" from ISAAA's "client countries". Budianto, who, as director of the Agency for Agricultural Research and Development, was the lead person responsible for biosafety regulations within the Ministry of Agriculture, met with Monsanto Europe, Monsanto Canada, and eight representatives of Monsanto USA during his two-week study tour.⁷ ABSP proudly notes that its collaborators were not only involved in ABSP GM crop projects; they also oversaw field trials of Monsanto's GM crops in the country.⁸

Sources

¹ <http://www.grain.org/research/?id=252>

² Smith, R, 2005, Monsanto's Bad Seed, *The Motley Fool* (fool.com), http://news.yahoo.com/news?tmpl=story&u=/fool/20050407/bs_fool_fool/111288972208

³ ABSP, Annual Impact Report 1999-2000.

⁴ Karim Maredia and Bruce Bedford, "Team Building in Biosafety: The ABSP Internship Program" *BioLinks*, Vol.1, No.4, p.7

⁵ ABSP, *BioLink*, v.2, n.2-3; ABSP, Annual Technical Report and 2000 Workplan; and ABSP, Annual Impact Report 1999-2000.

⁶ ABSP website: <http://www.absp2.cornell.edu/absp2team/bios/hermannm.cfm> (Checked January 12, 2005).

⁷ J.E. Van Zanten, A.F. Krattiger and R.A. Hautea, "Food Biotechnology: European and North American Regulatory Approaches and Public Acceptance: A Traveling Workshop," ISAAA Briefs No. 18. ISAAA: Ithaca, NY, 2000.

⁸ ABSP, Annual Technical Report, September 1 – December 31, 1998.

Yet perhaps of more value to Monsanto were the ties that ABSP helped forge between the corporation and key Egyptian scientists and biosafety officials by way of joint projects and visits to corporate headquarters. As noted by Josette Lewis of USAID:

*"There is also an indirect benefit from such collaborations through the introduction of private sector culture to public sector research institutes in developing countries."*²²

The full implications of this cultural exchange recently came to light in Indonesia (See *Box: Cultivating Corruption in Indonesia*)

22 - Josette Lewis, "Enhancing Agricultural Technology Transfer in the Developing Countries: the ABSP Experience", Presentation to the Association for International Agriculture and Rural Development 35th Annual Meeting, Washington D.C., June 1999, ed. Julie A. McDaniels, Dec. 1999.



THE US GOVERNMENT CHANGES GEAR

During the 1990s, USAID's biotechnology activities mainly served to channel technical and financial support to national biotechnology scientists and officials within the Ministries of Agriculture. These people were likely to favour GM crops and were well placed to influence, if not determine, relevant political processes. But near the end of the decade, with phase I of the ABSP completed, it was clear that things were not going entirely as planned. USAID's activities were influencing the political processes but increasingly these were escaping its control, with growing public pressure, awareness and opposition. USAID was struggling to get its ABSP target countries to take the final steps onto the GM train, and some of these countries were even thinking of jumping off.

By 2000, only four countries were growing GM crops, with nearly 70% of the world total still grown in the US.²³ Europe was in a state of *de facto* moratorium while it revisited its regulatory system and many countries of the South, including some of those countries where USAID was heavily investing, having realised what was at stake, were clamouring for a more precautionary approach. The new dividing lines came to a head in the negotiations for an international regulatory framework on the transboundary movement of GMOs under the Convention on Biological Diversity. In these negotiations, the US took a beating. The Biosafety Protocol that emerged from the negotiations in 2000 recognised the precautionary principle and gave countries a green light to set up strong national biosafety frameworks for the regulation of GM crops across environmental, health and socio-economic concerns. In Africa, the negotiations provided the African Union with the impetus to produce its own Model Law, designed to help African countries implement and harmonize biosafety legislation suited to their conditions. The Model Law embraced the precautionary principle, laid out the essential elements for a liability and redress regime, and recognized the sovereign right of every country to require a rigorous risk assessment of any GM crop for any use before any decision regarding a GM crop is made.²⁴ These were not the kind of developments that the US wanted to see.

The Protocol was a setback but not a complete disaster for the US. While it opened up the political space for biosafety discussions and decisions, giving weight to more Ministries and encouraging public participation, this space was constrained by the Protocol's ambiguous relation to other agreements. For instance, it is not clear if the Protocol takes precedence over the WTO's Sanitary and Phytosanitary (SPS) measures. Moreover, although the Protocol gives momentum and support to the development and implementation of national biosafety frameworks, it does not offer any guarantees as to where these national processes will go. The situation is similar with the international standard setting body CODEX Alimentarius, the reference point for WTO SPS measures. The guidelines developed by its Task Force on Food Derived from Modern Biotechnology support pre-market safety assessments of GM foods, a practice at odds with US regulations. While the guidelines could shield countries trying to go beyond the US-model from attack at the WTO, they are only recommendations to governments and ultimately, as with the Biosafety Protocol, they offer little protection from bilateral pressure, which is increasingly where the US is focussing its efforts.²⁵

The US is responding to this new international context with the heavy hands of bilateral trade and aid politics. On the trade side, the US offers bilateral trade agreements to those that cooperate and threatens trade sanctions on those that dare venture outside of what the US considers to be a "*science-based*" regulatory framework. On the aid side, the US has shifted from funding long-term research projects to focus on "*near-market*" GM projects and "*policy change*" in key countries. In this regard, USAID took ABSP into phase II in 1998 and then, at the FAO's World Food Summit: Five Years' Later in 2002, it launched the Collaborative Biotechnology Initiative (CABIO), bringing in new programs, new money and a new structure.

23 - Clive James, "Global Status of Commercialized Transgenic Crops: 2000", ISAAA Briefs No. 21. ISAAA: Ithaca, NY. 2000.

24 - Mariam Mayet, "Why Africa Should Adopt the African Model Law on Safety in Biotechnology", African Centre for Biosafety: www.biosafetyafrica.net/biosafety_laws_and_comments.htm

25 - Phil Bereano and Elliott Peacock, "To eat or not to eat: An obscure UN agency tries to provide an answer," Seedling, April 2004: grain.org/seedling/?id=282



Box: THE US MODEL

One of the main reasons for the explosive growth of GM crops in the US is the lax system of regulations. US regulations are based on the concept of substantial equivalence,¹ in which a GM crop is assumed to be safe if the applicant can demonstrate, through a coarse chemical analysis, enough compositional similarity between their GM varieties and non-GM varieties to satisfy the regulators. Complicated assessments of immunological and biochemical effects or ecological and socio-economic impacts are not required.² For the pesticide and pharmaceutical corporations that dominate the global GM industry, securing approval for their GM crops in the US is relatively cheap and easy - approximately 100 times less costly than for pesticides and 500 times less costly than for pharmaceuticals.³

Risk management in practice: Field trials in the US

From 1987-2002, the United States Department of Agriculture (USDA) authorised 15,461 field releases of genetically engineered organisms on 39,660 field test sites spanning 482,226 acres. Only 3.5% of applications were denied, and these for reasons such as incomplete applications or other minor paperwork errors. Over 300 of these field test sites were for crops engineered to produce pharmaceuticals, industrial chemicals, or other so-called biopharmaceuticals. Meanwhile, the percentage of field tests conducted with introduced genes considered to be Confidential Business Information increased nearly every year, from 0 percent in 1987 to more than 69 percent in 2002.⁴

There is always the risk that GM crops that are field-tested will enter into the food supply by way of contamination. US regulators have responded to this risk by looking for ways to authorise possible contamination. In November 2004, the US Food and Drug Administration (FDA) issued a draft plan to allow experimental GM crops grown on "test" sites to legally enter the food chain. According to Friends of the Earth:

*"The new policy sets out loose 'safety assessment' guidelines under which a company may voluntarily consult with the FDA to have its experimental GM crop material deemed 'acceptable' as a contaminant in food. The 'safety assessment' is based on paperwork and two inadequate tests that the FDA estimates will take companies just 20 hours to complete. The proposed review also excludes testing for unintended effects caused by genetic modification. This inadequate review would grant biotech companies the legal cover to allow their experimental GM crops to enter the American food supply."*⁵

A country's right to precautionary principles

While the US, by far the world's largest producer of GM crops and the financial base for the GM industry, has a clear interest in exporting this model, there is growing international consensus on the need for an alternative approach that considers the full complexity involved in assessing the risks from GM crops. Such an approach would go beyond the now discredited assumption of a one-to-one correspondence between genes and proteins, which the US model is built upon, towards a more elaborate analytical system of risk assessment involving the emerging sciences of genomics, proteomics and metabolomics.⁶ It would also assess the agronomic, social, cultural and ecological impacts of GM crops, already evident from the limited experience with GM crops to date, on a country-by-country basis, taking into account the different ecologies, agricultural systems and cultural practices. Evidently, such an approach is much more costly and demanding, for both the companies trying to bring their GM products through the regulatory system and the authorities carrying out the assessments, but it is well within the rights afforded to countries under international agreements - the Biosafety Protocol, CODEX and even the WTO SPS Measures.⁷

"The attractiveness of Africa for the commercial use of transgenic crops will to a large extent be determined by the cost of the regulatory procedures that are put in place. Structures that parallel US regulatory structures may keep costs low." from Abt Associates, 'Mali Seed Sector Development Plan, Initiative to End Hunger in Africa: Agricultural Policy Development Program' Prepared for USAID, March 2003.

Sources:

¹ Definition available here: <http://www.grain.org/jargon/?id=33>

² Erik Millstone, Eric Brunner and Sue Mayer, "Beyond 'substantial equivalence,'" *Nature*, October 7, 1999.

³ Erik Millstone, Evaluating the acceptability of GM crops: the scope for autonomy in developing countries, *SciDev.Net*, January 2005: <http://www.scidev.net/dossiers/index.cfm?fuseaction=policybrief&policy=55&dossier=6>

⁴ Philip Mattera, "USDA Inc.: How Agribusiness has hijacked regulatory policy at the US Department of Agriculture," *Agribusiness Accountability Initiative and Corporate Research Project, Good Jobs First*, July 23, 2004: <http://www.agribusinessaccountability.org/page/325/1>

⁵ FOE Press release, "Anger over US plans to allow GM contamination of food," 23 Nov 2004: http://www.foe.co.uk/resource/press_releases/anger_over_us_plans_to_all_23112004.html

⁶ Erik Millstone, Evaluating the acceptability of GM crops: the scope for autonomy in developing countries, *SciDev.Net*, January 2005: <http://www.scidev.net/dossiers/index.cfm?fuseaction=policybrief&policy=55&dossier=6>

⁷ Erik Millstone, Evaluating the acceptability of GM crops: the scope for autonomy in developing countries, *SciDev.Net*, January 2005, <http://www.scidev.net/dossiers/index.cfm?fuseaction=policybrief&policy=55&dossier=6>;

Phil Bereano and Elliott Peacock, "To eat or not to eat: An obscure UN agency tries to provide an answer," *Seedling*, April 2004: <http://www.grain.org/seedling/?id=282>;



CABIO: THE NEW USAID BIOTECH MACHINE

CABIO splits the former ABSP program into two main components: ABSP II and the Program for Biosafety Systems (PBS). ABSP II is responsible for the research side of the old ABSP programme but its focus is now on clearly defined “*product commercialisation packages*” and it is no longer interested in long-term research and development projects of GM crops that risk not making it to the field trial stage. PBS, a five-year, US\$15 million program, continues with and deepens USAID’s work at the policy level, which was formerly handled through ABSP. Its goal is to set up “*systems*” in target countries that can bring GM crops to market. This means orchestrating public relations and crafting GM crop approval processes, regulations, and IPR regimes.

After many assessments, USAID decided that ABSP II and PBS would focus on a few target countries: the Philippines in Southeast Asia, Bangladesh and India in South Asia, Kenya and Uganda in East Africa and Mali and Nigeria in West Africa - a region where the former ABSP program was rarely active. These are countries where the USAID presence is strong or where the biotech lobby has already made some inroads - in the words of USAID where the process is “*demand driven*”.²⁶ As with the ABSP II’s chosen crops, USAID is no longer interested in wasting its time on countries that may not toe the line. The idea is to work on a few countries, even if they are not the most critical markets, and build from there.

The activities of ABSP II and PBS compliment and reinforce each other. PBS puts in place the systems that facilitate ABSP II’s GM crops, while ABSP II serves as a local reference point for the system that PBS advocates. Moreover, both PBS and ABSP will look to USAID partners with established local networks in order to help move their projects forward, partners such as Development Alternatives Inc (see *Box: Development Alternatives Inc*) or Chemonics International²⁷ (see the section *The case of Uganda* below).

ABSP II

ABSP II is headquartered at Cornell University, USA. The project has been fine-tuned to operate much like one of its corporate consortium partners. It goes into target countries and looks for promising GM crops for commercialisation. Then it puts a scientific team together, works out the relevant IPR and regulatory issues and, in the meantime, invests heavily in public relations (“*communications*”). But, unlike Monsanto and Syngenta, it’s not in these countries for the money, and this is its big advantage. ABSP II can position itself on the middle road, an organisation interested in making GM crops work for the poor, even as it builds up and finances networks of local scientists, policy-makers and spokespeople to ensure GM policies work for its US corporate consortium partners.

The first step, then, is in identifying the priority crops.

In Asia, ABSP II plans to bring Bt aubergine to market for 2007. It is developing the GM aubergines in collaboration with Monsanto’s Indian subsidiary, Mahyco, which is already conducting field trials in India and working with scientists from the Institute of Plant Breeding in the Philippines.²⁸ The other priority crops targeted for field trials in the near future are a late-blight resistant GM potato and a virus-resistant GM papaya, which has already wreaked havoc in Thailand.²⁹ A multiple virus resistant tomato project³⁰ may also be in the works for Indonesia and the Philippines.

In Africa, ABSP II has yet to set its priority crops, though Bt cowpea and virus resistant cassava seem to be the lead candidates. The Donald Danforth Plant Science Centre has already imported GM cassava into Kenya for field trials with KARI and has submitted

26 - Josette Lewis, Personal communication, February 25, 2005

27 - www.chemonics.com

28 - Personal communication from James Shanahan (ABSP II), February 16, 2005 and ABSP website : www.ahsp2.cornell.edu/newsroomarchives/dsply_news_item.cfm?articleid=120

29 - grain.org/research/?id=167

30 - www.isaaa.org/Regional_centers/SEAsiacenter/ABSP/II/tomato/mvr.htm



an application for field trials in Nigeria.³¹ For Mali and Uganda, USAID found that Bt cotton is the only short-term possibility for field trials. However, ABSP II cannot work directly with cotton as internal rules prevent USAID from financing research on crops that compete with US exports. Therefore, ABSP II is putting together longer-term research projects with local scientists, such as multiple virus resistant tomatoes for Mali, whilst working with PBS to prepare the general groundwork for GM field tests. More direct support for Bt cotton from the US will take place through the funding instruments the US has mobilised to counteract international efforts to end its cotton dumping practices.³²

ABSP II does not implement its projects alone; it is a consortium that works through and with its various partners. One of its key consortium partners is ISAAA,³³ a pro-GM outfit funded by the GM industry which has become famous for its annual reports on global production of GM crops. ISAAA is very active in supporting GM crop projects for ABSP II and similar programmes:

- ISAAA brokers the IPR deals between US corporations and participating public research centres in the South.
- ISAAA offers fellowships to scientists in its target countries to train in GM techniques at US private and public labs.
- ISAAA carries out socio-economic impact assessments of the potential GM crops and, most importantly,
- ISAAA handles much of the “communication and outreach” work, through its network of Biotechnology Information Centres.

This makes for a lot of crossover between ABSP II, PBS and ISAAA.

When Mali became a target country for USAID’S biotechnology programmes under the ABSP II and PBS, ISAAA was there to set up a Biotechnology Information Centre with the national agricultural research centre (the *Institut d’Économie Rurale*) that re-distributes a French version of ISAAA’s electronic biotech news digest in the sub-region. ISAAA also launched operations in India shortly after it became an ABSP II and PBS target country.

In Southeast Asia, the relation between ABSP II and ISAAA is seamless. They organise joint workshops and work together on various projects including, late blight resistant potato, fruit and shoot borer resistant aubergine, ringspot virus resistant papaya (see *Box: GM Papaya*) and multiple virus resistant tomato. All of these are being developed for the Philippines and Indonesia. Where ABSP II focuses on biotechnology research, ISAAA promotes “*safe and effective*” biosafety regulatory procedures in Southeast Asia and as such compliments both ABSP II and PBS.

PROGRAM FOR BIOSAFETY SYSTEMS (PBS)

PBS is run by a consortium of groups, under the direction of IFPRI (International Food Policy Research Institute),³⁴ which brings together the bulk of the groups and people involved in USAID’s biotechnology policy work.

Many of these groups are also involved with the UNEP/GEF Initial Strategy on Biosafety,³⁵ which assists countries in establishing national biosafety frameworks. Josette Lewis of USAID says that PBS compliments the UNEP/GEF programme by providing technical assistance that goes beyond what UNEP/GEF provides.³⁶

31 - Lawrence Kent, “*Moving Transgenic Cassava from the Lab to the Field: Early Experiences and Observations of the Danforth Plant Science Center*”, Presentation to the Sixth International Scientific Meeting of the Cassava Biotechnology Network (CBN), 8-14 March 2004, CIAT, Cali, Colombia :www.ciat.cgiar.org/biotechnology/cbn/sixth_international_meeting/pdf_presentations/Lawrence_Kent.pdf

32 - World Trade Organisation, “*Implementation of the development assistance aspects of the cotton-related decisions in the July Package: First Periodic Report by the Director-General*”, 3 December 2004.

33 - International Service for the Acquisition of Agri-biotech Applications grain.org/briefings?id=137

34 - www.isnar.cgiar.org/ibs.htm

35 - UNEP (United Nations Environment Programme) and GEF (Global Environmental Facility) www.unep.ch/biosafety/

36 - Personal communication with Josette Lewis, USAID, 25 February 2005



Box: GM PAPAYA

In 2004, papaya trees, contaminated with GM papaya from a local research station were found to be growing in farmers' fields in Thailand. The controversy became big news as importers of papaya threatened to stop all imports of Thai papaya and farmers crops were forcibly destroyed by the government. This papaya scandal in Thailand is a good example of field trials of GM crops - carried out in secrecy - contaminating local non-GM production. It is also a clear rejection of USAID's argument that field trials are completely contained and necessary to determine the potential of GM crops.

Lewis also concedes that PBS allows the US to pursue “*bilateral responses*” through one-to-one dialogues with “*target countries*”.³⁷ This form of “*bilateral response*” therefore furnishes the US with far more influence over national processes than multilateral processes, such as those run by UNEP/GEF or CODEX, or even the African Union's efforts to translate the Model Law on Rights of Local Communities, Farmers, Breeders and Access³⁸ into national legislation.

This does not mean that the US has reverted to a simple country-by-country approach. PBS's bilateral activities are the basis for regional agendas. The biosafety systems that PBS helps to build in target countries are to serve as “*templates*” for the region.³⁹ The eventual goal is to harmonise legislation across regions, creating regional markets for GM crops with uniform regulatory processes. PBS therefore coordinates several USAID-initiated regional processes, such as the South Asian Biosafety Program, the West African Biotechnology Network (WABNET) and the South African Regional Biosafety Program (SARB).⁴⁰ USAID states that SARB's “*specific objective is laying the regulatory foundation to support field testing of genetically engineered products in four [Southern African] countries by 2003.*”⁴¹ PBS now also manages USAID's biotech collaboration with CORAF (*le Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles*), the Association for Strengthening Research in East and Central Africa (ASARECA) and the Common Market for Eastern and Southern Africa.

PBS people see themselves as biosafety “*capacity-building providers*” - the intermediaries between donors (in this case the US government) and “*client countries*”. In their words, providers offer client countries:

- policy advice, assistance in drafting new laws or regulations,
- assistance in building the capacity of regulatory institutions,
- and assistance in communications. (in which they refer to “*educating stakeholders*”, “*identifying target audiences and trusted sources of information*”, “*developing key messages*” and “*training public spokespersons.*”⁴²)

But the providers must, of course, respond to the donors' agendas. USAID launched PBS to steer countries towards the US model (see *Box: The US Model*), which it portrays as the only practical approach for poorer countries. According to PBS, “*modelling biosafety systems for developing countries, based on the complex and resource-intensive approaches for developed countries [i.e. Europe], is inappropriate.*”⁴³ Developing country policy makers have to understand the “*consequences of policy-choice*” and the “*costs of regulatory complexity*”.⁴⁴

So PBS proposes to help policy-makers make regulatory “*trade-offs*”, sacrificing comprehensive risk assessments in order to access the “*benefits*” of introducing GM crops into their countries, and to backup these decisions with “*communications strategies*” that will reassure the public.⁴⁵

37 - Personal communication with Josette Lewis, USAID, 25 February 2005

38 - African Union's Model Law on Rights of Local Communities, Farmers, Breeders and Access available online: www.grain.org/brl/?docid=798&lawid=2132

39 - Joel Cohen, Presentation to meeting of the UNEP-GEF Projects on Implementation of National Biosafety Frameworks, 26–30 January 2004, Geneva Switzerland: www.unep.ch/biosafety/Implementation/GenevaMeetingJanuary2004/Cohen.pdf

40 - www.gmwatch.org/profile1.asp?PrId=271

41 - USAID Fact Sheet, “SARB: Southern African Regional Biosafety Program”: www.usaid.gov/press/factsheets/2003/f6030623_7.html

42 - Patricia L. Traynor, “Beyond Cartagena: Collaboration in Biosafety Implementation” in M.A Mclean, R.J. Frederick, P.L. Traynor, J.I. Cohen, and J. Komen (eds), “A Framework for Biosafety Implementation: Report of a Meeting organized by ISNAR Biotechnology Service”, July 2001, Washington, DC : www.doylefoundation.org/icsul/ISNAR%202003%20bioframework.pdf

43 - PBS Website: www.ifpri.org/themes/pbs/components-print-all.htm

44 - Joel Cohen, Presentation to meeting of the UNEP-GEF Projects on Implementation of National Biosafety Frameworks, 26–30 January 2004, Geneva Switzerland: www.unep.ch/biosafety/Implementation/GenevaMeetingJanuary2004/Cohen.pdf

45 - PBS Website: www.ifpri.org/themes/pbs/components-print-all.htm



TABLE: ABSP II PRIORITY GM CROP PROJECTS

GM crop	Estimated timeline for field trials	Targeted countries / regions
Bt aubergine (eggplant/brinjal)	2005-2006	Bangladesh, India, Philippines
Late blight resistant potato	>2007	Bangladesh, India, Indonesia
Papaya ringspot virus resistant papaya	2005-2006	Philippines
Cassava mosaic virus resistant cassava*	2005-2006	Kenya, Nigeria
Bt cowpea*	Not known	East and West Africa

*Projects not confirmed

With GM crop field trials, for example, PBS advocates an “enabling environment”, akin to the US approach, where the “regulatory issue is risk management not comprehensive risk assessment” (see Box: *The US Model*).⁴⁶ As explained by Lawrence Kent of PBS:

“If developing countries want the benefits of transgenic products developed for their needs, they will need to make it possible, if not easy, to conduct field tests under local conditions ... [PBS] is an important and essential initiative that must become effective as soon as possible to provide an alternative to the anti-technology ‘precautionary principle’ being disseminated widely by the United Nations Environmental Program and nongovernmental organisations throughout the developing world.”⁴⁷

In Africa, PBS’s efforts to facilitate field trials are connected to Monsanto’s on-going attempts to deploy its Bt Cotton. In its proposal for a PBS contract, the IFPRI-led consortium said one of the “documented milestones” of its work would be field trials of Bt cotton in Kenya, Uganda and Tanzania in the first two years of the PBS project.⁴⁸ PBS is well on its way: Kenya approved the import of Bt cotton seeds for field trials in 2004 and in February 2005 the Daily News of Dar es Salaam cited a government official as saying that GM cotton trials are to be carried out in Tanzania’s Southern Highland regions. Both countries have yet to implement national biosafety frameworks.⁴⁹

PBS does have a programme component that provides funds to support research for risk assessments. The 5-year, US\$7.5 million Biotechnology Biodiversity Interface (BBI) Grants Program specifically funds research into the environmental risks to “wild biodiversity” of GM crops in order to “provide new knowledge upon which to conduct/complete a risk assessment or devise risk management options”. This programme also fully supports ABSP II regulatory packages by providing research and addressing possible environmental concerns. Indeed, applicants for BBI grants are encouraged to consider questions journalists might ask in their project proposals and to describe how their research project will build “collaborations between the agricultural and environmental or conservation communities.”⁵⁰ Ultimately, BBI cannot provide for independent risk assessment when USAID controls the purse strings and decides which risks are worthy of research and who will do the research.

46 - Joel Cohen, Presentation to meeting of the UNEP-GEF Projects on Implementation of National Biosafety Frameworks, 26–30 January 2004, Geneva Switzerland: www.unep.ch/biosafety/Implementation/GenevaMeetingJanuary2004/Cohen.pdf

47 - Lawrence Kent, Donald Danforth Plant Science Center, “What’s the holdup? Addressing constraints to the use of plant biotechnology in developing countries”, *AgBioForum*, Vol 7, No. 1&2, 29 October 2004

48 - PBS website: www.ifpri.org/themes/pbs/outcomes-print-all.htm

49 - “Tanzania to grow GM cotton for trial this year”, *Angola Press*, 8 February 2005

50 - PBS, “Tips on Developing and Describing Fundable Research Projects”: www.ifpri.org/themes/pbs/pdf/BBI_proposalstips.pdf



Box: DEVELOPMENT ALTERNATIVES INC (DAI)

DAI¹ is a leading contractor for USAID's agricultural policy implementation activities and the biggest contractor for the US agricultural reconstruction program in Iraq,² with a contract worth US\$101 million. It is also a member of the ABSP II consortium and was a regular collaborator with the former ABSP programme.

ABSP and DAI's work typically came together in USAID efforts to encourage and steer countries in the implementation of plant IPR regimes. In Morocco, DAI worked directly with private companies and the Moroccan government in drafting plant variety protection (PVP) legislation that was passed by parliament in 1996.³ ABSP was then brought in to organise workshops and train Moroccan officials for the operation of the PVP office.⁴ In the Philippines, DAI lobbied Congress and worked with the Department of Agriculture, "redrafting PVP legislation to make it compliant with UPOV standards". DAI says "it took key officials and congresspersons to Argentina and the United States to learn about PVP programs and legislation and, in anticipation of the Act being passed, helped the Department of Agriculture to develop rules and regulations, and establish a PVP board responsible for registration and enforcement of breeders' rights".⁵

USAID uses DAI to work behind the scenes with ministries and influential private sector figures whom it has cultured relations with through its development projects. It tries to avoid public debate as much as possible and, with PVP, tries to move governments towards compliance with UPOV. For instance, in Egypt in 1998, when Parliament was considering a law on intellectual property rights, DAI worked with the Ministry of Agriculture and the government to move quickly in bringing into legislation a PVP decree that would pre-empt parliament from legislating anything that might impede compliance with UPOV. According to DAI: "In 1999, DAI and the Ministry of Agriculture developed a detailed decree for PVP and shared drafts with the UPOV Secretariat in Geneva until it was judged to meet that organization's exacting standards... DAI and the government decided to address the details of PVP through a ministerial decree, which is relatively easy to issue, and to address the broader issues of PVP in a short chapter of a more comprehensive law on intellectual property rights. This strategy allowed the People's Assembly to support PVP without being able to introduce changes in the detailed decree that could threaten its conformance with UPOV standards."

DAI's lead employee on the PVP file was Lawrence Kent. He has since moved to the Donald Danforth Plant Science Centre, another member of the ABSP II consortium, where he is the head of international programs. In the new USAID biotech configuration, the Donald Danforth Plant Science Centre is the agency responsible for "assistance with regulatory packages" under USAID's PBS.

Sources

¹ http://www.dai.com/about/operating_companies.php

² <http://www.zmag.org/content/showarticle.cfm?SectionID=15&ItemID=6159>

³ Lawrence Kent and King Bash, "DAI a Top Banana in Securing Plant Breeders' Rights", Developments (quarterly newsletter of DAI), Spring 2000 : http://www.dai.com/pdfs/Developments_Spring_2000.pdf

⁴ Andrea Johanson and Catherine L. Ives, "Development and Implementation of Plant Variety Protection (PVP) Legislation in Morocco" in Reed Hertford and Susan Schram, Editors, "Food: The Whole World's Business," Association for International Agriculture and Rural Development (AIARD), February, 2001

⁵ Lawrence Kent and King Bash, "DAI a Top Banana in Securing Plant Breeders' Rights", Developments (quarterly newsletter of DAI), Spring 2000 : http://www.dai.com/pdfs/Developments_Spring_2000.pdf



USAID: A COMPLEX WEB

USAID's activities to promote GM crops go well beyond CABIO. It's a giant web and difficult to document in its entirety. With all of the names and the acronyms it is hard to see the whole web, especially if you include links with the US Department of Agriculture, the US Department of State, the Office of the US Trade Representative and the other US government agencies making the world hungry for GM crops.

The web in Africa is particularly complex. But if we stick to the PBS categories of "donors", "providers", and "clients", things become a little clearer. Have a look at the accompanying diagram (see *Diagram: The USAID Biotechnology Web in Africa*).

On the donor side, USAID, the Rockefeller Foundation, the GM industry and the World Bank can be lumped together. They are the key patrons and advisors to the groups within USAID's biotechnology web. They often fund the same groups and are regularly at the same conferences and gatherings.

On the providers' side, the front line includes USAID's core programs: ABSP II and PBS. Then there are the pro-GM advocacy groups funded by the donors, including the African Biotechnology Stakeholders Forum (ABSF), AfricaBio⁵¹, A Harvest, the African Agricultural Technology Foundation (AATF) and ISAAA. In addition we have the centres of the Consultative Group on International Agricultural Research (CGIAR), such as the International Institute of Tropical Agriculture (IITA). Add to this mix a couple of national agricultural research centres, such as KARI, which is heavily financed by all the donors. These front line groups carry out the work on the ground - they organise the workshops and dialogues, they handle the media communications, they meet with government officials, they influence national and regional processes and they are almost always involved, one way or another, with any attempts to bring GM crops into African countries. They also employ the key people that the donors trust to carry out their agendas, such as Florence Wambugu of A Harvest, Jennifer Thomson of AfricaBio, and Walter Alhassan, the African coordinator for ABSP II and PBS.

The secondary providers are also funded by the same donors and always have a few people from the front line participating in or managing their activities. The difference between the two is that the secondary providers keep a less clear pro-GM agenda and bring in wider participation. These secondary providers include: the Forum for Agriculture Research in Africa (FARA), which has Florence Wambugu on its Executive Board; the South African Regional Biosafety (SARB) Program, managed by AfricaBio; the West African Biotechnology Network (WABNET), coordinated by ABSP II; and the National Agricultural Biotechnology Project (NABP) of Nigeria, run by IITA.

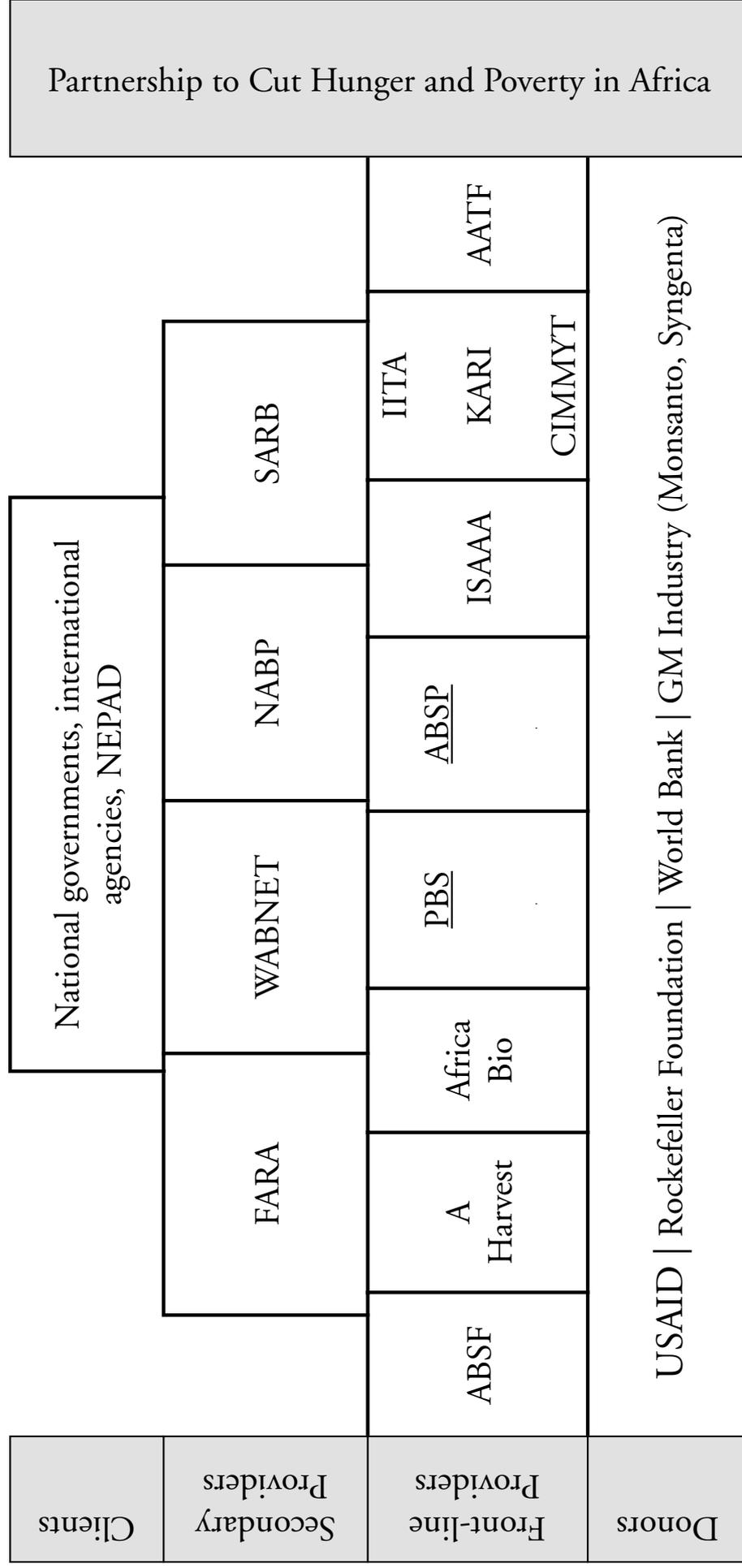
The donors and providers often come together to establish their agendas within more general initiatives focussed on Africa such as the Partnership to Cut Hunger and Poverty in Africa. This partnership was launched in 2001 by a group of high profile US and African people. This included the Presidents of Mozambique, Ghana, Uganda and Mali on the Executive Committee and a Working Group on Capacity Building for Science and Technology⁵² that is dominated by people from the USAID biotechnology web. This latter working group has organised several high-profile workshops on GM agriculture, including one at the 2003 summit of the African Growth and Opportunity Act in Mauritius.

51 - www.gmwatch.org/profile1.asp?PrId=170

52 - www.africanhunger.org/?location=front&aid=10



Diagram: The USAID Biotechnology Web in Africa



USAID: CARROTS, STICKS AND WORKSHOPS

“There is a lot of pressure to accept biotechnology from the countries with big biotechnology interests. This is manifested in a number of different ways – political, economic, and scientific. Political pressure is the biggest – accepting biotech is now often a condition for qualifying for other aid money. But most African countries have enough technology to deal with the food production problems they face.” -Professor Johnson Ekpere⁵³

THE CASE OF UGANDA

“Unless someone or some group in the country where policy reform is being pursued feels that the changes are something that they want to see happen, and are willing to contribute to realizing them, externally initiated change efforts, whether at the local or national level, are likely to fail.”⁵⁴ (Excerpt from USAID’s Implementing Policy Change Project, March 1996)

Uganda was one of the most important African countries pushing for a strong Biosafety Protocol. At the WTO Ministerial Conference in Seattle in 1999, it helped defeat a US and Canadian effort to pre-empt the Protocol through the creation of a ‘Working Party on Biotechnology’. In November 2001, it became one of the first countries to ratify the Protocol and it is one of eight countries currently participating in the UNEP/GEF Project on the Implementation of National Biosafety Frameworks that began in December 2002. This active international presence on GMO issues and the imminent establishment of a national biosafety framework, combined with USAID’s established presence in the country, makes Uganda an important target for the US biotech push.

The main US strategy for influencing Ugandan GM policy is to flood the country with money and expert advice. USAID is the main purveyor of both. It has put forward at least US\$200,000 for a Rockefeller Foundation supported biotechnology lab for bananas, which USAID describes as a “high-visibility” project popular with Ugandan scientists.⁵⁵ It has also recently started funding the National Biosafety Committee Secretariat at the Uganda National Council for Science and Technology (UNCST) - the country’s major decision-making body on GM policy. While the Council was once a blockage point for the entry of GM crops, refusing to authorise Monsanto’s application for field tests of Bt cotton, USAID feels that it now has a “leadership that has an aggressive agenda for implementing biotechnology in the country” and the agency expects the UNCST “to approve field-testing [of Bt cotton] in the near future.”⁵⁶

One of USAID’s most trusted tools for “implementing policy change” is the workshop and there has been a slew of USAID supported workshops on GMOs and biosafety in Uganda in recent years.⁵⁷ The main conduit for the workshops is USAID’s local contractor Chemonics, which manages the Agency’s Agricultural Productivity Enhancement Program (APEP). APEP has a biotech component directed by ABSP II’s regional coordinator that is “designed to absorb biotechnology earmark funding from USAID.”⁵⁸ The Agency uses this programme to channel funds to UNCST.⁵⁹ In 2002, Chemonics received a US\$200,000 budget to organise “dialogues” on biosafety among “government and private stakeholders”. In February 2004, it teamed-up with PBS and ABSP II to hold a national workshop, bringing 24 “biotechnology and biosafety stakeholders” together to “discuss the draft annual work plan, to identify national, regional and international key partners and determine their roles, and discuss the implementation modus.” USAID also finances workshops organised under Monsanto and CABI Biosciences’ Uganda Biotechnology Initiative “that specifically look to trail-blaze a number of existing, near-to-the-market crop-related GM technologies.”⁶⁰

53 - Interview, Seedling, July 2003: grain.org/seedling/?id=244

54 - Derick W. Brinkerhoff, “Implementing Policy Change: A Summary of Lessons Learned” Research Notes No. 4, A publication of USAID’s Implementing Policy Change Project, March 1996

55 - USAID, “Uganda Assessment Report: Assessment of Biotechnology in Uganda,” Strategic 07 Document: www.usaid.or.ug/so7%20List%20of%20documents.htm

56 - *ibid*

57 - Derick, Brinkerhoff, “Using Workshops for Strategic Management of Policy Reform”, USAID Implementing Policy Change Project, Technical Note No. 6, June, 1994.

58 - USAID, “Agriculture Productivity Enhancement Program: Statement of Work and Illustrative Budget”: <http://lane-environment.net/Regulations/language/SOW%20Uganda%20APEP.doc>

59 - APEP website: http://mail.apepuganda.org/apeptest/ver1.1/html/rhs_biotechnology.htm



In 2003, Ugandan authorities produced a first set of draft national biosafety regulations that drew heavily from the African Model Law - a clear setback for GM proponents.⁶¹ USAID's team was immediately on the scene to redress the situation. PBS and GM industry people, such as Pat Traynor of IFPRI, Thomas Carrato of Monsanto and Greg Jaffe⁶² of the Center for Science in the Public Interest, came in, some through the UNEP/GEF process, as "international experts" to comment on the draft and make recommendations. Their efforts were backed by high-level diplomatic actions. President Bush brought up GM crops during his visit with President Museveni in 2003, as did the US State Department's Special Negotiator for Biotechnology. The Minister of Agriculture, Kisamba Mugerwa was flown to Sacramento in 2003 for the USDA/USAID Ministerial conference on biotechnology. Soon after, Mugerwa left the ministry for a directorship with IFPRI - the lead institute of the PBS program.

According to Mariam Mayet of the African Centre for Biosafety, at an October 2003 national workshop convened to consider the draft regulations and the comments received by the "international experts", the draft was "completely torn apart".⁶³ Responsibility for a new draft was put in the hands of ACODE - an NGO connected to USAID and Rockefeller Foundation programmes.⁶⁴ Shortly thereafter, the Uganda National Council for Sciences and Technology announced the completion of a new draft biotechnology regulatory framework. This time, as Mayet points out, "most of the previous drafting based on the African Model Law appears to have been lost." It now looks like PBS could reach its objective to have field trials of Monsanto's Bt cotton underway in Uganda in 2005.⁶⁵

US[TR]AID

At the end of his presentation to the January 2004 conference of the UNEP/GEF project, Joel Cohen, the Director of PBS, spoke about the possibility of PBS not succeeding. He noted that, even with the "decision tools" that PBS provides, things can still "fall apart": trade concerns may trump GM approvals; GM-free policies may remain effective even if they're no longer explicit; and countries might even slide back into moratoriums (!).⁶⁶

In Egypt

Indeed, this sort of thing happened recently in Egypt. After all of the money and time USAID spent supporting GM agriculture in the country, the Egyptian government doublecrossed the US in 2003 by backing-out of its complaint to the WTO over EU regulations on GMOs. But, as Cohen surely knows, when the carrots that USAID provides stop working, the US can start using sticks.

The US's immediate response to the Egyptian decision was to suspend negotiations on a possible US-Egypt Free Trade Agreement (FTA). Officials from the Office of the US Trade Representative made it clear that Egypt's decision to walk away from the WTO complaint was to blame.⁶⁷ "When you're given a direct commitment by a government and they do an about-face, that has to have an effect in terms of who you do a free-trade agreement with," said one official.⁶⁸

The US government accused Cairo of denying US textile exporters' access to its market. Given that the US has little business interest in Egypt's textile market, the move was locally viewed as political. "I can relate all of these problems to Egypt's decision to withdraw its support for the US challenge on the ban of imports of genetically modified foods to the EU," said Mostafa Zaki, of the Egyptian Federation of Chambers of Commerce.⁶⁹

A year later, toward the end of 2004, US officials started dangling the FTA carrot to Egypt again. In US trade policy logic, Egypt was showing better progress on economic reforms (read overall liberalisation and deregulation) and might be ready for that exclusive trade pact. The possible hold-ups this time? Complaints about Egypt's intellectual

60 - USAID, "Uganda Assessment Report: Assessment of Biotechnology in Uganda", Strategic 07

Document: www.usaid.or.ug/so7%20List%20of%20documents.htm

61 - Muffy Koch of SARB calls the Model Law "a poor working model, designed to impede rather than promote safe and useful technology", while Florence Wambugu wants FARA to develop an alternative "pro-biotechnology" African Model Law.

62 - www.gmwatch.org/archive2.asp?arcid=4862

63 - Mariam Mayet, "Comments on the Ugandan National Biosafety Framework", African Centre for Biosafety, September 2004: www.biosafetyafrica.net/uganda.htm

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property law (and frozen chickens). The US Biotechnology Industry Organisation had just produced a scathing review of Egypt's IPR rules, bitterly complaining that it was way out of line with the WTO TRIPS Agreement as far as patenting biotechnology products goes.⁷⁰

And in other countries

Similar tactics have been used against other countries. In 2001, the US threatened to launch complaints against both Bolivia and Sri Lanka when they proposed new regulations on GM foods.

A US trade delegation to Thailand threatened trade sanctions if the government went ahead with proposed labelling requirements.⁷¹ Thailand has been under new pressure from the US to align its economic and agricultural policies with those of the WTO in the latest round of US-Thai FTA negotiations. This includes eliminating “*unjustified trade restrictions that affect new US technologies*”.⁷² Monsanto has also been lobbying the US trade negotiators⁷³ - either by itself or as part of the broader US-Thai FTA Business Coalition⁷⁴ - to pressurise Thailand into ending its moratorium on large-scale field trials of GM crops. Under pressure from heavy lobbying, the Thai Prime Minister Thaksin Sinawatra issued a decision lifting the ban on GMO field trials and allowing entry of GM crops in Thailand. “*The FTA was the main motive for Thaksin to reverse the 2001 decision. We know that the weekend before the policy was made, Monsanto sent its people over to lobby the government,*” according to Witoon Lianchamroon, director of a local NGO Biothai and convenor of FTA Watch.⁷⁵ However, within 10 days, the Thai cabinet retracted his decision due to spontaneous public opposition.

70 - Giddings L, 2004, Biotechnology Industry Organization, Letter to the office of the United States Trade Representative, www.bio.org/ip/action/3012004.pdf

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72 - US Trade Representative Robert Zoelick notification letter he submitted to the US Congress to initiate free trade agreement negotiations with Thailand

73 - In its letter to Ms Gloria Blue, Office of the US Trade Representative dated 08 April 2004 www.bilaterals.org/article.php?id_article=93&var_recherche=monsanto+letter

74 - In its letter to Ms Marilyn R Abott, Secretary, United States International Trade Commission, dated 14 May 2004

75 - “*Reversal of Ban on GM crops Incenses Activists*” www.ipsnews.net/interna.asp?idnews=25181

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77 - Office of the United States Trade Representative - www.ustr.gov

78 - PowerPoint presentation by Felipe Manteiga, Managing Director, Markets and Sectoral Assessments, Millennium Challenge Corporation, to the USDA Agricultural Outlook Conference, February 24, 2005, Crystal City, VA : www.usda.gov/ocel/forum/speeches/manteiga-ppt.pdf

The US government has a large number of instruments it can use to arm-twist the target countries of USAID's ABSP II and PBS programmes. One of these instruments is the US Millennium Challenge Account (MCA)⁷⁶, which may eventually provide assistance of up to US\$5 billion per year to a select group of countries.

Mali, for instance, is one of eight African countries now eligible for this funding. In order to touch this money, Mali has to submit a proposal that details how it will commit to and implement “*sound policies*” that promote “*economic freedom*”. The proposal is then assessed by the Millennium Challenge Corporation, which brings together the US Secretary of State, the USTR,⁷⁷ the US Secretary of the Treasury, and the USAID Administrator. If the corporation selects the proposal it then negotiates and signs a compact (a contract) with Mali, laying out the expected outcomes and the benchmarks that Mali must achieve before funds are released.

Burkina Faso, Kenya, the Philippines, Tanzania and Uganda are considered “*threshold countries*”, which “*are committed to undertaking the reforms necessary to improve policy performance and eventually qualify for MCA assistance.*” It is not explicitly listed in the criteria, but according to one senior MCA official, a country's GM policies will definitely be taken into account.⁷⁸

The US's bilateral measures, in the form of both aid and trade politics, are self-serving actions that exploit the vulnerabilities of poor countries. Even if governments are fully within their international rights to protect their people by pursuing biosafety regimes that go beyond the US model of so-called “*science-based*” regulations, in practice, these US bilateral actions can effectively keep them from doing so.



CONCLUSION

It is not easy for poor countries to resist this pressure from the world's superpower. Few governments have the stomach to stand up directly to the US and those that do are always at risk of caving in under the constant pressure. In Mali, for example, one of the world's poorest countries, the US has put a significant amount of money on the table, which the country risks jeopardising if it does not open the door to GM crops. Governments end up going against the desires of their populations in order to appease the US, or worse, to get their share of the crumbs that the US hands out. In this corrupt game of give-and-take among elites, the livelihoods of millions of farmers are at stake.

At the grassroots, however, once people understand what is happening and what is at stake, there is a much greater will to resist.

In Mali, it is more or less clear that if the US is to ever reduce its subsidies to its cotton producers, Mali had better think carefully about its upcoming decisions on field-tests for Bt cotton. Yet, even as scientists and policy-makers take the bait, there is a rising-tide of Malian farmers calling on their political leaders to stand firm against US pressure and to reject GMOs. Mali's National Coordination of Farmers' Organisations (CNOP) spelled things out forcefully in an October 2004 Declaration: *"The CNOP affirms that it is aware of the pressures and threats that countries that sell GMOs are imposing on a small, poor and unarmed African country and that it will vigorously support the Government of Mali as long as it acts responsibly and with strength to protect the interests of its toiling masses - the farmers."* In Thailand, this resistance to GM has been shown by the emphatic rejection of GM agriculture and imports. And this picture of the grassroots rejecting GM has been replicated around the world.

An increasing number of people are no longer tolerant of the biotech industry's, and particularly the US government's, aggressive push of GM crops and their government's acquiescence. In its haste to force-feed the world with its GM crops, the US government may be seriously miscalculating the explosive force of the social movements that its policies are helping to unleash.



ANNEX

ABSP II STAFF AND THEIR BACKGROUND

Staff	Background
Frank Shotkoski	Bt cotton manager for Syngenta
Ronnie Coffman	Director of International Programs of Cornell's College of Agriculture and Life Sciences
K.V. Raman	Director of ISAAA's operations in Latin America
K. Vijayaraghavan (South Asia Coordinator)	Director of Sathguru Management Consultants (representative of Cornell in India)
G.P. Das (Bangladesh Coordinator)	
Desiree Hautea (Southeast Asia Coordinator)	Member of the Philippine Plant Variety Protection Board and country coordinator of the Asian Maize Biotechnology Network
Tilahun Zeweldu (East Africa Coordinator)	National Agricultural Biotechnology Program Coordinator Ethiopian Agricultural Research Organization and board member of the African Biotechnology Stakeholders Forum
Walter Alhassan (Africa Coordinator)	Director General of the Ghana Council for Scientific and Industrial Research and consultant on biotechnology to the FAO and USAID/IITA
Muhammad Herman (Indonesia Coordinator)	Coordinator of the Plant Group of Biosafety and Food Safety Technical Team, Head of the Biosafety Containment Facility, Secretary General of the Indonesian Society of Agricultural Biotechnology and Country Coordinator of ABSPI

KEY PEOPLE WITHIN PBS

Key People	Organization
Joel Cohen, Pat Traynor and José Falk Zepeda	ISNAR/IFPRI
Hector Quemada	Western Michigan University
Lawrence Kent, Claude Fauquet	Donald Danforth Plant Science Centre
Morven McLean, Donald MacKenzie	AGBIOS
Andrea Johanson	Michigan State University

PBS REGIONAL COORDINATORS:

Reynaldo Eborá, Asia

Theresa Sengooba, East Africa

Walter Alhassan, West Africa

Idah Sithole-Niang, Southern Africa

ACRONYMS

AATF: African Agricultural Technology Foundation
ABSF: African Biotechnology Stakeholders Forum
ABSP: Agricultural Biotechnology Support Project
AGERI: Agricultural Genetic Engineering Research Institute
APEP: Agricultural Productivity Enhancement Program
Bt: *Bacillus thuringiensis*
CABIO: Collaborative Biotechnology Initiative
CRIFC: Central Research Institute for Food Crops
DAI: Development Alternatives Inc
FARA: Forum for Agriculture Research in Africa
FDA: US Food and Drug Administration
IDEA: Investment in Developing Export Agriculture
IFPRI: International Food Policy Research Institute
IITA: International Institute of Tropical Agriculture
ISAAA: International Service for the Acquisition of Agri-biotech Applications
ISNAR: International Service for National Agricultural Research
KARI: Kenya Agricultural Research Institute
MCA: Millennium Challenge Account
MSU: Michigan State University
NEPAD: New Partnership for Africa's Development
PBS: Program for Biosafety Systems
PVP: Plant variety protection
SARB: South African Regional Biosafety Program
SEC: Security and Exchange Commission
UNEP: United Nations Environment Programme
UPOV: International Union for the Protection of New Varieties of Plants
USAID: US Agency for International Development
USDA: US Department of Agriculture

GOING FURTHER

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