

## Data Sheet

<b>USAID Mission:</b>	Economic Growth, Agriculture and Trade
<b>Program Title:</b>	Environment and Science Policy
<b>Pillar:</b>	Economic Growth, Agriculture and Trade
<b>Strategic Objective:</b>	905-701
<b>Status:</b>	Continuing
<b>Planned FY 2005 Obligation:</b>	\$38,200,000 DA
<b>Prior Year Unobligated:</b>	\$0
<b>Proposed FY 2006 Obligation:</b>	\$36,200,000 DA
<b>Year of Initial Obligation:</b>	2004
<b>Estimated Year of Final Obligation:</b>	2009

**Summary:** The Environment and Science Policy (EGAT/ESP) Program supports a portfolio of biotechnology, climate change, and agricultural/environmental research activities. It coordinates Agency efforts with multilateral issues related to science and technology by representing the Agency in multilateral environmental agreements, reviewing environmental aspects of multilateral development bank (MDB) programs and developing policy on environment and conflict. It is also responsible for coordinating USAID's compliance with its Environmental Regulation 216. This strategic objective (SO) replaces SO 934-004 Agency Climate Change program Effectively Implemented, as well as the international research and biotechnology portions of SO 933-009, Science and Technology Developed to Improve Agricultural Productivity, Natural Resources Management, Markets and Human Nutrition.

### **Inputs, Outputs, Activities:**

**FY 2005 Program:** Increased Agricultural Productivity. EGAT/ESP will support the development of productivity-increasing technologies, for example those improving drought and salt tolerance, through genetic enhancement and more efficient use of natural resources. EGAT/ESP will promote efforts to move biotechnology research from the laboratory to the field, developing technology and regulatory systems for biotechnology. EGAT/ESP will engage U.S. universities in collaborative research with developing country scientists as well as leverage private sector research for adaptation to Africa. Biosafety programs will be developed to create the regulatory systems necessary for commercialization of biotech crops. Partners: Cornell University, Danforth Plant Science Center, AgBios, Consultative Group for International Agricultural Research (CGIAR) Centers, and 30 U.S. universities.

Improved Sustainable Management of Natural Resources and Biodiversity Conservation. Within EGAT/ESP's biosafety program, a competitive grants component will fund research on the potential risks of bioengineered crops to biodiversity. EGAT/ESP will support international and climate change research leading to the conservation and sustainable management of forests, water, aquatic resources and land through the development of appropriate natural resource management and agricultural technologies, and capacity building. Tools developed as a result of this research will lead to increased productivity and livelihoods for the poor while also contributing to the conservation of biodiversity and mitigation of greenhouse gases. Activities supported will include the measurement and monitoring of carbon and the co-benefit impacts. Partners: Winrock International, U.S. Department of Agriculture (USDA), U.S. Forest Service, U.S. Geological Survey, Colorado State University, International Resources Group (IRG), CORE International, Jorge Scientific Corporation, CGIAR centers, 25 U.S. universities, the World Conservation Union (IUCN) and World Wildlife Fund.

Reduce, Prevent and Mitigate Pollution. EGAT/ESP's global climate change program will reduce greenhouse gas emissions in the energy, industrial, urban and transportation sectors by promoting capacity building, communication and outreach contributing to the transfer of clean energy technologies. Partners: Winrock International, U.S. Department of Energy Lawrence Berkeley National Laboratory, International Council for Local Environmental Initiatives, Global

Environment and Technology Foundation, World Resources Institute, SRA, International Resources Group, CORE International, and Jorge Scientific Corporation.

**Improve Child Survival, Health and Nutrition.** EGAT/ESP, in partnership with USAID's Global Health Bureau, will support the Harvest Plus program of the Consultative Group on International Research. Harvest Plus improves nutrition through the development of micronutrient enriched crops through breeding and biotechnology. Work will continue on the development and use of Vitamin A-enriched sweet potatoes, Golden Rice and Golden Maize in combating malnutrition. CGIAR Centers will also promote policy interventions aimed at preventing malnutrition at the household and community level. Partners: World Vegetable Center, CGIAR Centers, U.S. Department of Agriculture, University of California at Davis.

**Improve Early Warning and Response Mechanisms.** EGAT/ESP will assist USAID Missions to evaluate regional environmental threats and develop strategies to address environmental problems before they become significant contributors to conflict. Partner: Foundation for Environmental Security and Sustainability (FESS).

**Improve Emergency Preparedness and Disaster Mitigation.** Recognizing the potential of climate change to impact development, EGAT/ESP will continue to manage the Agency's global climate change program to increase adaptive capacity to climate impacts. To address climate-related vulnerability, USAID will conduct pilot studies to deploy and test methods to improve climate resilience in development projects. New tools will be developed and incorporated into programs to address and measure climate change impacts. An integral part of the development and dissemination of these tools and mechanisms will take the form of capacity building, communication and outreach. Partners: Nexant, Chemonics, Stratus Consulting, SRA, International Resources Group, CORE International, Jorge Scientific Corporation and CGIAR Centers.

**Increase Food Security of Vulnerable Populations.** Outreach to food aid recipient governments and PVOs will be supported to address concerns among developing countries related to biotechnology in U.S. food aid. EGAT/ESP will support analyses of factors affecting vulnerable populations and then develop appropriate policy interventions to address food needs and strengthen coping capacities. EGAT/ESP will also promote a program to strengthen seed systems in Africa. Partners: International Food Policy Research Institute, AgBios, International Crops Research Institute for the Semi-Arid Tropics, International Fertilizer Development Center, Iowa State University, Catholic Relief Service, World Vision, other NGOs and other CGIAR and national partners.

**Increase Participation in Global Trade and Investment.** EGAT/ESP will continue to educate trade officials on the impacts of biotechnology regulation on agricultural trade and the treatment of biotechnology under the WTO. EGAT/ESP will sponsor research and policy development to incorporate trade opportunities in priority setting for technology development programs, particularly for increasing incomes among smallholder farmers. Partners: International Food Policy Research Institute (IFPRI) DAI and DTB Associates

**FY 2006 Program:** Increased Agricultural Productivity. Support to the CGIAR will continue for long-term research that conserves the resource base while improving livelihoods of poor producers. Breeding and bioengineering will contribute to the development and use of pest-resistant crops; solutions for increasing animal production will be disseminated. Goals for FY 2006 include field testing of cassava in Kenya, Nigeria, and Malawi as well the development of the regulatory environment to permit private sector testing of biotech cotton in Mali. EGAT/ESP will also consider a program to develop drought tolerant rice and maize. Partners: Same as above.

**Improved Sustainable Management of Natural Resources and Biodiversity Conservation:** EGAT/ESP will continue to support the CGIAR's efforts to develop production and resource

management systems that increase productivity and protect the environment and save biodiversity. EGAT/ESP will continue to support risk assessment research on the potential impacts of bioengineered crops on biodiversity. EGAT/ESP's management of the Agency's climate change program will address greenhouse gas sequestration in the land-use, forestry and agriculture sectors. Tools for carbon measurement will be developed and disseminated. Partners: To be determined.

Reduce, Prevent and Mitigate Pollution. EGAT/ESP's management of the Agency's global climate change program will address the mitigation of many sources of greenhouse gas emissions in the energy, industrial, urban and transportation sectors. The program will deploy tools and provide training to include climate change considerations in energy, transportation and industrial development projects. Partners: To be determined.

Improve Child Survival, Health and Nutrition. EGAT/ESP, matched by funding from USAID's Global Health Bureau, will continue support for the Harvest Plus program. We expect to support the first field trials of Golden Rice in Asia. Partners: Same as above.

Improve Early Warning and Response Mechanisms. EGAT/ESP will continue to support work on reducing and mitigating regional environmental threats. Partner: Foundation for Environmental Security and Sustainability (FESS).

Improve Emergency Preparedness and Disaster Mitigation. EGAT/ESP's management of the Agency's global climate change program will include efforts to increase adaptive capacity to climate impacts in Agency's development assistance efforts. There will be increased dissemination of techniques for vulnerability assessment and adaptation planning, incorporating new science and methods. EGAT/ESP will conduct training and outreach efforts. Partners: To be determined.

Increase Food Security of Vulnerable Populations. EGAT/ESP will continue to address biotechnology-related constraints to the delivery of U.S. food aid. Partners: Same as above.

Increase Participation in Global Trade and Investment. EGAT/ESP will provide support to enhance West African cotton production and participation in global trade through support for the regulatory environment that will allow adoption of bioengineered cotton. Partners: Same as above.

**Performance and Results:** EGAT/ESP's support to the CGIAR continued to develop and disseminate productivity increasing and resource conserving technologies. A few key results in FY 2004 included: the planting of new varieties of drought resistant and low soil fertility tolerant varieties of maize on over 250,000 hectares in southern Africa; the release of 28 new varieties of wheat in Central Asia, including Afghanistan; and the dissemination of mosaic disease-resistant cassava in East Africa. The Global Crop Diversity Trust was formally established to provide a sustainable source of funds for the conservation of crop diversity. EGAT/ESP programs field tested bioengineered cassava in Kenya and Nigeria and supported a science and technology conference for West African ministers that has increased support for development of biotechnology in the region. EGAT/ESP also organized a conference for PVOs in Africa to address problems of biotechnology in food aid.

EGAT/ESP also supported the commercialization, dissemination, and widespread adoption of environmentally sound technologies, including a wind power toolkit and a Biogas Project Development Guidebook. The use of low-cost solar water heating units was promoted in South Africa, leading to reduced household energy consumption. The use of improved tools to measure and monitor carbon and co-benefits assisted USAID missions in project design. EGAT/ESP conducted carbon analysis in the Congo and trained foresters in techniques for the quantification of carbon impacts from logging practices. An environmental security assessment framework was field tested in the Dominican Republic and a regional workshop on assessing environmental

security in eastern Africa was held.

**U.S. Financing**  
(in thousands of dollars)

**905-701 Environmental and science policies mobilized to address global development challenges**

	Obligations	Expenditures	Unliquidated
Through September 30, 2003	0 AEEB	0 AEEB	0 AEEB
	0 CSH	0 CSH	0 CSH
	0 DA	0 DA	0 DA
	0 DFA	0 DFA	0 DFA
	0 ESF	0 ESF	0 ESF
	0 FSA	0 FSA	0 FSA
	0 IDA	0 IDA	0 IDA
	0 TI	0 TI	0 TI
Fiscal Year 2004	0 AEEB	0 AEEB	
	0 CSH	0 CSH	
	40,475 DA	22,052 DA	
	0 DFA	0 DFA	
	0 ESF	0 ESF	
	0 FSA	0 FSA	
	0 IDA	0 IDA	
	0 TI	0 TI	
Through September 30, 2004	0 AEEB	0 AEEB	0 AEEB
	0 CSH	0 CSH	0 CSH
	40,475 DA	22,052 DA	18,423 DA
	0 DFA	0 DFA	0 DFA
	0 ESF	0 ESF	0 ESF
	0 FSA	0 FSA	0 FSA
	0 IDA	0 IDA	0 IDA
	0 TI	0 TI	0 TI
Prior Year Unobligated Funds	0 AEEB		
	0 CSH		
	0 DA		
	0 DFA		
	0 ESF		
	0 FSA		
	0 IDA		
	0 TI		
Planned Fiscal Year 2005 NOA	0 AEEB		
	0 CSH		
	38,200 DA		
	0 DFA		
	0 ESF		
	0 FSA		
	0 IDA		
	0 TI		
Total Planned Fiscal Year 2005	0 AEEB		
	0 CSH		
	38,200 DA		
	0 DFA		
	0 ESF		
	0 FSA		
	0 IDA		
	0 TI		
		Future Obligations	Est. Total Cost
Proposed Fiscal Year 2006 NOA	0 AEEB	0 AEEB	0 AEEB
	0 CSH	0 CSH	0 CSH
	36,200 DA	155,408 DA	270,283 DA
	0 DFA	0 DFA	0 DFA
	0 ESF	0 ESF	0 ESF
	0 FSA	0 FSA	0 FSA
	0 IDA	0 IDA	0 IDA
	0 TI	0 TI	0 TI