

KEITH L. KLINE

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Summary of Qualifications

Twenty-five years of experience in design, management and evaluation of energy, environmental, and development programs in Latin America, Africa and the U.S.

Work History and Accomplishments

- 2006 - present** **Oak Ridge National Laboratory, Oak Ridge, Tennessee; Environmental Sciences Division, Research Staff**
- Research and modeling on the sustainability of bioenergy feedstock production in US and abroad.
 - Investigate international land use change dynamics; empirical data analysis and models.
 - Assess commercial forestry potential for bioenergy in the Southeastern U.S.
 - Assist the U.S. Agency for International Development with environmental program design, monitoring, evaluation and results-based reporting.
- 2004 to 2006** **U. S. Agency for International Development (USAID) Southern Africa, Team Leader for Regional Environmental Programs**
- Led successful start-up of a program for integrated river basin management (Okavango River).
 - Developed constructive relationships with government officials in multiple countries and facilitated negotiations toward agreements on shared river basin management goals.
 - Recruited, mentored and trained local staff to continue work.
- 1990 to 2004** **Oak Ridge National Laboratory, Oak Ridge, Tennessee:**
- CHP Coordinator - FEMP Team, Engineering Science and Technology Division**
- Coordinated the accelerated development and deployment of clean, distributed energy generation systems—combined heat and power (CHP)—as a national initiative for federal facilities under the Federal Energy Management Program (FEMP).
 - Guided FEMP activities to reduce costs of government through innovative financing, property management, public-private partnerships and application of proven but underutilized technologies.
- USAID Team Leader, Environmental Strategic Objective, Guatemala (1990-2000)**
- Supervised and managed a \$6 million per year (average annual US contribution) environmental project portfolio, including the Maya Biosphere Project. Annual program performance reviews resulted in highest possible rating, “exceeding expectations.”
 - Led evaluation and design teams that integrated new approaches for civil society participation in policy issues including those related to protected areas, forestry, community participation and land-use planning, with verifiable performance metrics.
 - Coordinated a diverse team to assure successful execution of a program that involved over \$50 million in total funding and twelve partner organizations.
 - Conceptualized and drafted major elements of USAID/Guatemala's Natural Resource Management Strategy including policy agendas, resource planning and project designs.
 - Provided direction and oversight for monitoring and reporting activities, the development of customer service plans, results-based indicators, internal assessments, external evaluations and audits.
 - Managed multiple, multi-million-dollar agreements with private contractors and non-profit partners (TNC, CI, CARE, Peregrine Fund, Rodale and others).
 - Led scoping processes and supervised implementation of various Environmental Assessments, Programmatic and Site Specific, involving forestry, sustainable agricultural technologies, tourism, land titling and park management.

1984 to 1990

Independent Contractor supporting U.S. Agency for International Development programs in Central America and Peru:

Regional Environmental and Natural Resource Management (RENARM)

- Mobilized and directed the start-up of a seven-country, \$60 million project described at that time by Ambassador Jack Hood Vaughn as "the most ambitious and complex natural resource management effort attempted in Central America" (1989).
- Created effective partnerships between international assistance agencies and private voluntary organizations by developing concepts and procedures to address environmental concerns and leveraged over \$5 million in matching grants.

Central American Research Institute for Industry and Technology (a.k.a. ICAITI)

- Served as USAID Advisor to the ICAITI Director and technical expert for clean energy. Assessed institutional capacity and impacts after nine years of USAID assistance and provided recommendations for sustaining program benefits.
- Evaluated two regional projects promoting renewable energy technologies and energy conservation in industry.
- Edited 25 technical publications (30-150 pages each; most in Spanish) related to renewable energy resources and conservation issues. Evaluated two regional projects promoting renewable energy technologies and energy conservation in industry.

Disaster Rehabilitation and Reconstruction Project, USAID Lima, Peru

- Managed and monitored national disaster reconstruction activities involving a USAID staff of 33, for this \$60 million project to rebuild after the 1983 El Nino event. Developed standards for project selection, monitoring and performance reports. Resolved audit issues and documented achievements.
- Developed procedures for improved planning and implementation by decentralized public agencies, achieving a dramatic 300% increase in the implementation capacity of fifteen participating regional development institutions.

1980-1984

Peace Corps, Ecuador

- Planned and completed 60 small projects involving renewable energy, sustainable agriculture, water, forestry and sanitation including earthquake-resistant housing design, windmills, methane gas digesters, solar water heating, fuel-efficient cook stoves and institutional development in collaboration with USAID/Quito.
- Assessed the feasibility of 150 small projects to help beneficiaries identify and implement most appropriate solutions. Designed and conducted technology-transfer events for trainers and community groups, applying non-formal education concepts.

Education

M.Ed., International Education Program (environmental emphasis), Framingham State College, Framingham, Mass. 2000.

B.S., School of Natural Resources (Energy & Environment), University of Michigan, 1979.

Languages, Awards, Other

- Languages: native English, fluent Spanish, some Portuguese, Setswana and French
- Certified "Cognizant Technical Officer" (CTO) for USAID (updated in 2005 for grants and contracts)
- Security and medical clearances for foreign service assignments (2006)
- ORNL Engineering Science and Technology Division "Exceptional Effort Award," 2003
- USAID Meritorious Honor Award, 1998; USAID Certificate of Commendation for Outstanding Performance, 1986; Kalamazoo Science Foundation Scholar, 1976-78
- Enjoy hiking, biking, photography

Publications and reports (selected examples)

Kline KL, Dale VH, Lee R, Leiby P. 2009. In Defense of Biofuels, Done Right. *Issues in Science and Technology* 25(3): 75-84. <http://www.issues.org/25.3/kline.html>

- Kline, KL and Dale, VH. 2008. Biofuels, causes of land-use change, and the role of fire in greenhouse gas emissions. *Science* 321:199 <http://www.sciencemag.org/cgi/reprint/321/5886/199.pdf>
- Hecht, AD, Shaw D, Bruins R, Dale VH, Kline KL, Chen A. 2009. Good Policy Follows Good Science - Using Criteria and Indicators for Assessing Sustainable Biofuel Production. *Ecotoxicology* [18(1):1-4].
- Kline KL and Oladosu G. Presentation: Using Economic Models to Simulate Land-Use Change for Biofuels - Issues for Discussion. Purdue University Workshop on LUC and GTAP, January 13, 2009.
- Oladosu G, Kline KL and Dale VH. Presentation: Crop Land Use Change Data and Modeling: Case Study of Brazil. Purdue University Workshop on LUC and GTAP, January 13, 2009.
- Kline KL, Sanchez J. and Wallace W. "China-US Cooperation on Bioenergy R&D" in the Proceedings of *Bioenergy Consequences for Global Environmental Change* - Beijing, October 15-17, 2008; the Second Workshop of the China-US Joint Research Center for Ecosystem and Environmental Change [University of Tennessee, 2009]. <http://isse.utk.edu/jrceec/workshops/pdf/proceedings08.pdf>
- Kline, KL and Colman, MD.* Woody Energy Crops in the Southeastern United States: Two Centuries of Practitioner Experience. *Submitted (in review, 2009) for Special Issue of *Biomass & Bioenergy*.
- V Dale, K Kline, P. Mulholland, M. Downing, R. Graham, and L Wright titled "Selecting Metrics for Sustainable Bioenergy Feedstocks" in the Proceedings of the Second Workshop. Beijing, October 15-17, 2008, China-US Joint Research for Ecosystem and Environmental Change [University of Tennessee, 2009].
- Kline KL, Oladosu GA, et al. 2007. Biofuel Feedstock Assessment for Selected Countries. ORNL/TN-2007/224. http://apps.ornl.gov/~pts/prod/pubs/doc10201_ornl_feedstock_potential_final_feb18.pdf
- Hadley, SW, Kline, KL, Livengood S, Van Dyke J. 2002. Analysis of CHP Potential at Federal Sites. ORNL/TM-2001/280. Prepared for DOE Federal Energy Management Program.
- Kline, KL and Gant K. 2000. Energy and Environmental Issues in Eastern Europe and Central Asia: An Annotated Guide to Information Resources. ORNL TM-2000/299. [U.S. EPA contract No. 62XSY696].
- Kline, KL. 2000. Improved Natural Resource Management and Conservation of Biodiversity (section author) in annual Guatemala Program Results and Resource Requests (1996-01), USAID/G-CAP.
- Kline, KL. 2000. Desarrollo sostenible y el proyecto de la RBM: desafíos, avances y reflexiones sobre lecciones aprendidas [Sustainable Development and the Maya Biosphere Project, Challenges, Progress and Reflections on Lessons Learned]. Pg 241–253 in *Encuentro internacional de investigadores: nuevas perspectivas de desarrollo sostenible en Petén*. FLACSO, Guatemala City, Guatemala.
- Kline, KL. 1988. "Biomass Consumption Trends in Central America" and "ICAITI's Regional Industrial Energy Efficiency Program (PEEIR)," in *Proceedings: Energex '88*, Tripoli, Libya, November 1988.
- Kline, KL (co-editor). 1988. Aprovechamiento de Efluentes de Biodigestores. ICAITI, Guatemala.
- Kline, KL 1988. "ICAITI's Role in Fuelwood Conservation in Central America" in *Proceedings: Stoves for People Workshop*, Guatemala. Foundation for Woodstove Dissemination, Utrecht, Holland.
- deLucia, R.J., Garriott G., Kline K, et al. 1987. Final Report: Evaluation of ICAITI, Fuelwood and Alternative Energy Sources Project and Regional Industrial Energy Efficiency Project. ROCAP/Guatemala.
- Kline, K. 1983. "Involving Users to Develop Socially Acceptable Technologies," in *Proceedings: Latin American Workshop on Seismic Resistant Earthen Constructions, Lima, Peru* (OFDA-USAID).
- Kline, K.L. 1982. "The Hydro Option" book chapter in *Community Energy Options, Getting Started* in Ann Arbor. University of Michigan Press.
- Kline, K.L. "Energy Quiz," in *Sierra*, March 1979.