

# Agricultural Research, Development, and Education



RTI International is advancing agriculture worldwide with our knowledge of environmental sciences, pollution control technologies and practices, food security, food safety and risk assessment, agricultural economics, and biofuels and microbial technology development. RTI's outreach programs communicate effective environmental management practices to the agricultural community.

RTI's multidisciplinary approach to problem solving and innovation uses multimedia modeling skills and geographic information systems to assess and plan site-specific, regional, and national strategies that promote and enhance both sustainable agriculture and sustainable environments.

## Focus Areas and Capabilities

- Agriculture economics, including feasibility studies and ecosystem valuation
- Agriculture educational capacity building
- Biofuels research, development, and outreach for farm-level implementation
- Climate change (e.g., emissions inventorying, impacts analysis, sequestration) and vulnerability analyses (e.g., flooding, water and food supply, disease)
- Local and regional governance of predominantly agricultural regions
- Food security and food safety risk and economic analyses
- Livestock nutrient management planning and environmental assessment of agricultural operations (including manure management)

- Outreach and risk communication to agricultural communities
- Tools, methods, and protocol development (nutrient, carbon, and air pollution credit trading, impact assessment) to leverage agriculture value.

## Example Projects

- Excellence in Higher Education for Liberian Development (EHELD) Project—Developing universities' centers of excellence to supply skilled graduates in engineering and agriculture (U.S. Agency for International Development)
- Comprehensive Environmental Assessment and Nutrient Management Plans for Livestock Operations (U.S. Environmental Protection Agency, Office of Water; <http://livestock.rti.org>)
- Uruguay Low-Carbon Development Options (World Bank)
- Developing and Refining Ecosystem Services Approaches Relevant to Restoring the Chesapeake Bay (U.S. Environmental Protection Agency, Office of Research and Development)
- Development of a Nationwide Geospatial Database of Poultry Farms for the Models of Infectious Disease Agent Study (MIDAS) Project (National Institutes of Health)

- Full Economic Feasibility Assessment of the Smithfield Foods Agreement (State of North Carolina)
- Farm Energy Efficiency Program (FEEP) Project (North Carolina Farm Bureau Federation)

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RTI 8115 R2 1014