Proposal for a  
Nebraska Center for Energy Sciences Research  
Energy Education Grant

Project Title: Nebraska Biofuel Economics Website

Principal Investigator:  
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Attachments:  
Abstract  
Project Description  
Budget Request and Justification  
CV for Perrin

Approval Signatures:

[Signature]
Principal Investigator  
1 December 2006

[Signature]
Department Chair/Head  
12/4/06

[Signature]
Dean  
12/1/06
Proposal for Nebraska Biofuel Economics Website

Abstract

A website will be established to provide information related to economic choices and impacts related to the expansion of ethanol and biodiesel in Nebraska and the U.S. The website will include data on the current and expected processing capacities; on prices of oil, gasoline, ethanol and grain and information about the relationships between them; information about grain supplies and the biofuel industries; and research results regarding the likely economic impacts of biofuel demand on land prices, livestock industries, community development, etc. It is intended that the website will be a vehicle for disseminating information generated by various faculty members in the Department of Agricultural Economics.
Proposal for Nebraska Biofuel Economics Website

Project Description

Goals and Objectives

The goal and objective of this project is to establish an attractive, functional and easily updated website for informing the public about economic issues related to biofuels (primarily ethanol and biodiesel) in Nebraska and the U.S. This will include, but not be limited to, such information as: (a) data on the current and expected capacity for biofuel processing in Nebraska and the U.S., (b) data on prices of oil, gasoline, ethanol and grain and information about the relationships between them, (c) information about grain supplies and their relationship to Nebraska and U.S. ethanol industries, (d) budget data for ethanol and biodiesel plants, (e) research results regarding the likely economic impacts of ethanol and biodiesel on land prices, livestock industries, community development, etc.

Project Justification

The dramatic expansion of grain ethanol production in Nebraska and the U.S. is bringing prosperity to some, economic pain to others, and risks of both to many in Nebraska. Information is especially valuable during such times of substantial economic change, to help private decision-makers make wise investment choices, to help policymakers to adjust public policies appropriately, and to help ordinary citizens better appreciate the changes occurring around them. The PI and others in the Department of Agricultural Economics have developed and/or assembled a considerable amount of information that would be useful for these persons, and have plans to generate a flow of new information over the next year or two. A website making this information easily available, and providing links to additional information sources, would make available much of the information needed by these persons.

Work required

1. Construct a CMS-driven website with an initial directory of information categories.
2. Assemble secondary data (prices, production, budgets, subsidies, etc), and transform it to a suitable format for the website.
3. Take original research done and being done in the Agricultural Economics Department and elsewhere within IANR on the economics of biofuels and transform it to suitable formats for the website.
4. Work to expand the material on the initial version of the website, and to make it more attractive and functional
**Expected Educational Outcomes vis a vis selection criteria**

The information on the website will explicitly attempt to inform the public about linkages among energy supply, costs and economic development at state and national levels.

**Timeline - 2007**

**January**
- Train personnel in use of CMS
- Design the initial website structure and directory
- Establish the trial website
- Transform pilot nodules of data sets, budgets and analyses

**February-March**
- Continue acquisition and transformation of data sets, budgets and analyses
- Contract services to enhance attractiveness and functionality
- Publish the website

**April-May**
- Continue acquisition and transformation of data sets, budgets and analyses

**September-November**
- Continue acquisition and transformation of data sets, budgets and analyses
- Contract services to enhance attractiveness and functionality
## Proposal for Nebraska Biofuel Economics Website
### Budget Request

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<thead>
<tr>
<th>Item</th>
<th>FY2006/07</th>
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<td>Salaries</td>
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<td>Contract services</td>
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<td>Travel</td>
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<td>Publications</td>
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<td>Total Request</td>
<td>$2300</td>
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</tbody>
</table>

### Budget Justification

During January-May, an undergraduate student will work about 6 hours per week, for a total of 100 hours. Responsibilities will be to help develop the structure and design of the website, to do the research for and development of some of the content (basic spreadsheets and charts relating to prices and quantities, plant budgets, tables of subsidies offered, etc.), and to convert content provided by other faculty and students into a form suitable for posting on the website. During September-November, the student will work about 3 hours per week, for a total of 40 hours, maintaining and enhancing the website under the supervision of the PI. CIT will provide instruction in using CMS on their server, and skilled design and programming services to enhance the appearance and functionality of the website.
CURRICULUM VITA
Richard K. Perrin

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Lincoln, NE 68583-0922
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fax: 402/472-3460
e-mail: rperrin@unl.edu
http://www.ianr.unl.edu/agecon/perrin/index.htm

EDUCATION
Ph.D., Agricultural Economics, Iowa State University, 1968
B.S., Agricultural Business, Iowa State University, 1960

EMPLOYMENT
1960-1963 U.S. Marine Corps: Quantico, VA; Okinawa; Washington, DC
1963-1966 Campus Coordinator of Foreign Contracts, College of Agriculture,
Iowa State U.
1966-1968 Research Associate, Department of Economics, Iowa State U.
1968-1972 Assistant Professor of Economics and Business, North Carolina
State U.
1972-1977 Associate Professor of Economics and Business, North Carolina
State U.
1975-1976 Economist, International Maize and Wheat Improvement Center
(CIMMYT), Mexico City
1977-1990 Professor of Economics and Business, North Carolina State U.
1982-1987 Associate Head for Agricultural Research and Teaching Programs,
Department of Economics and Business, North Carolina State U.
1990-1993 Professor, Department of Agricultural and Resource Economics,
NCSU.
1991-1992 Visiting Professor, Department of Economics, Iowa State
University
1993- Jim Roberts Professor of Agricultural Economics, University of
Nebraska.
TEACHING EXPERIENCE

Graduate: Production Economics  
Agricultural Production and Supply  
Applied Welfare Economics and Public Policy  

Undergraduate: Economic Principles  
Economics of Agriculture (principles level)  
Intermediate Microeconomic Theory  
Managerial Economics  
Farm Management  
Agribusiness Management  

GRADUATE STUDENT COMMITTEE CHAIRMANSHIPS/CO-CHAIRMANSHIPS:

Master's  
Farid Taher (1980) - non-thesis  
Uma Ramakrishnan (1983) "Supply analysis of North Carolina agriculture"  
John Beghin (1984) "Food production and price policy in Senegal: A displacement model"  
Carlos Gargiulo (1988) "Social cost analysis of alcohol production"  
Kevin Bernhardt (1989) "Predicting supply shifts from new technology: Diethylstilbestrol"  
Abiola Owokoniran (1989) - non-thesis  
Sri Ernawati (1990) - non-thesis  
Tri Rini Wulan (1991) "Supply response and input demand for paddy rice in Indonesia"  
Rohan Perera (1993) "Genetic contribution to productivity gain in soybeans"  
Phillip Anthony (current) "Welfare effects of the Nebraska ethanol checkoff"  
Ramiro Garcia-Olano (current) “Welfare impacts of import quotas for Argentine beef”  
Avinash Alok (2006) "Rural vs Urban Food Stamp Participation in Nebraska"  
Van Wart (2007) "Spatial economic impacts of ethanol plants"

Ph.D.  
James Ryan (1972) "A generalized crop-fertilizer production function"  
Bala Batavia (1973) "Specification errors and empirical estimation of generalized crop-fertilizer functions using cross-section data"  
George Ecker (1974) "Optimal replacement pattern of standard apple trees with dwarfs"  
Seok Jung Chang (1976) "An economic analysis of the adoption of new wheat varieties under uncertainty in Ferozepur District (India)"  
Nelson Updaw (1979) "Market analysis of the component pricing of soybeans"  
Cicely Amaral (1984) "Information in United States agriculture: the farm press"  
Robert F. Brooker (1984) "A characteristics approach model applied to analysis of multiple component milk pricing"  
Mellie Warner (1984) "A portfolio model of wheat acreage"  
James Leiby (1985) "An analysis of farm size and growth: the case of southern dairy farms"  
Lilyan Fulginiti (1986) "Argentine agricultural policies in a multiple output, multiple input framework"
Bruce Ahrendson (1990) "Optimal capital structure for the proprietary firm: An empirical analysis of North Carolina dairy farms"

Jirong Wang (1993) "Government price policy, output price uncertainty and measurement of productivity in U.S. agriculture"

Joan Poor (1997) A Contingent Evaluation of Wetlands in the Rainwater Basin of Nebraska


Jason Duarte (2001) "Effects of biotechnology and intellectual property rights law in the seed industry"

Saeed Ahmad (2001) "Tradeoffs between nitrate pollution of groundwater and economic returns to irrigated agriculture"

Binxin Yu (2005) "Agricultural productivity in Sub-Saharan Africa"

Villar, Susanna (current) topic undetermined

**REFEREED JOURNAL ARTICLES:**


**WORKING PAPERS**


OTHER PUBLICATIONS


Perrin, R. K. (editor, 1988-93) *North Carolina Farm Income Projections* - a state-level summary of estimated economic indicators for the past year, current year and next year based on a combination of econometric forecasts and expert panel expectations, published semi-annually by the Department of Agricultural and Resource Economics, NCSU.
Perrin, R. K. "Our Natural Resources - How Much Shall We Charge?" Cornhusker Economics, Department of Agricultural Economics, UNL, April, 1995.
Perrin, R.K. "Nebraska Agriculture and the World Food Outlook for the Year 2030."  
Perrin, R. K. "$300/Acre Rent for Wetlands?" Cornhusker Economics, Department of Agricultural Economics, UNL, Jan 21, 1998.
Perrin, R. K. "Returns to Taxpayers' Research Expenditures: A Case in Point."  
Cornhusker Economics, Department of Agricultural Economics, UNL, Jan 19, 2000.
Perrin, Richard K., Joan Poor and Dermot Coyne. Economic Impact of the Chase Variety of Pinto Bean. RB 338, University of Nebraska Cooperative Extension, Lincoln, NE, 2000.
Perrin, Richard. "The Argentine Economy - We Should Care What Happened."  
Cornhusker Economics, Department of Agricultural Economics, UNL, Jan 16, 2002.


Perrin, Richard K., "Ethanol in Nebraska" Cornhusker Economics, Department of Agricultural Economics, UNL, February 16, 2005.


Perrin, Richard K., "Did He Say Switchgrass?" Cornhusker Economics, Department of Agricultural Economics, UNL, February 15, 2006.


Perrin, Richard K., "Whither Grain Ethanol?" Cornhusker Economics, Department of Agricultural Economics, UNL, October 18, 2006.

RECENT PRESENTATIONS:
"What do we know about Sub-Sahara Africa ag productivity and ways to measure it?", with Lilyan Fulginiti, at the 26th Conference of the International Association of Agricultural Economists, Brisbane, Australia, August 22, 2006.

"Pricing and Welfare Impacts of New Crop Traits," with Lilyan Fulginiti, at U.C. Davis (April 7, 2006) and at the 16th Annual IAMA World Symposium, Buenos Aires, Argentina (June 10-13, 2006.)


"Switchgrass for biomass: Farm scale production practices affect feedstock costs and quantities in the Northern Great Plains", with K. P. Vogel, R. Mitchell and M.R.
Schmer, at the 28th Symposium on Biotechnology for Fuels and Chemicals, Nashville, TN, (May 1, 2006)
"Institutions and Agriculture Productivity in Sub-Sahara Africa", with Bingxin Yu and Lilyan Fulginiti, at IAAE meetings, Durban, SA, August, 2003.

RECENT GRANTS AND CONTRACTS

PROFESSIONAL ACTIVITIES:
Chair, American Agr. Econ. Assn. Economic Statistics Committee (1980-81);
Gamma Sigma Delta, NCSU chapter president, 1981-82;
Editorial Council, Am Jl Agr Economics, 1984-86;
Vice-Pres, Southern Agr. Econ. Assn. 1987-88;
Experiment Station Committee on Organization and Policy (ESCOP), Science and Technology Committee, 2004-present.

REFEREE FOR:
Agribusiness: An International Journal
Agricultural and Applied Economics (Southern Journal of Agricultural Economics)
Agricultural Economics
American Journal of Agricultural Economics
Australian Journal of Agricultural and Resource Economics
Economic Development and Cultural Change
European Journal of Operations Research
Johns Hopkins Press
Journal of Agribusiness
Journal of Agricultural and Resource Economics (Western Journal of Agricultural Economics)
Journal of Animal Science
Journal of Development Economics
Journal of Economic Literature
Journal of Environmental Economics and Management
Journal of Production Agriculture
National Science Foundation
Review of Economics and Statistics
Review of Agricultural Economics
Scandinavian Journal of Economics
Southern Economics Journal
Technological Forecasting and Social Change