1998 Performance Report

Agricultural Utilization Research Institute



Agricultural Utilization Research Institute

Mission and Vision

AURI was created by the legislature in 1989 to "promote the establishment of new products and product uses and the expansion of existing markets for the state's agricultural commodities and products." Within this broad mandate, AURI has focused its organizational efforts to include three primary goals:

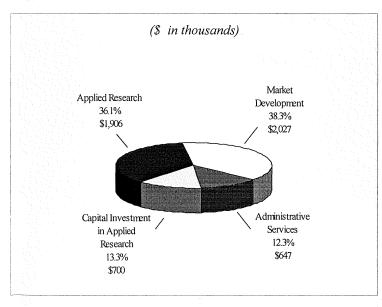
- Provide effective technology transfer and applied research services.
- Facilitate the development of value-added ag businesses.
- Develop and maintain strong partnerships that help to identify and develop opportunities for value-added agriculture.

Core Functions

AURI acts as an access point for development of value-added agriculture products. The core functions of the organization support this process and include:

- Provide access to technical assistance and business development assistance;
- Actively partner with other organizations to transfer technology from theory or the lab, to the marketplace;
- Identify and expand new markets for agricultural products.

1998 Financial Summary



In fiscal year 1998, AURI had an annual operating budget of \$4.5 million. The summary table provided (left) includes an additional \$700K in capital investment for research facilities.

AURI Customers

AURI serves a wide variety of customers. Private entrepreneurs, farmers, business innovators, farm cooperatives and agricultural groups are some of the primary clients at AURI. In addition, the Institute builds working partnerships with federal and state agencies, and scientists to develop new and value added uses for Minnesota agricultural commodities.

FEB 1 5 1959

LEGISLATIVE REFERENCE LIBRARY STATE OFFICE BUILDING ST. PAUL, MN 55155

Leadership, Cooperation & Partnership

AURI not only provides access to technical and financial services, but also provides needed leadership in bringing together other organizations which are stakeholders in value-added agriculture. Strong relationships help build increased collaborations, and AURI maintains strong contact with organizations such as the University of Minnesota, Minnesota Technology Inc., Minnesota Department of Agriculture, agricultural commodity groups, the United States Department of Agriculture, and many others. The objective is to act as the critical link in facilitating the development of value-added agriculture in Minnesota by working together to identify new and expanded markets, and to bring technology to agri-businesses in rural Minnesota. Some notable examples of leadership and cooperation include:

- The Minnesota Hybrid Poplar Research Cooperative, in which AURI has played a lead role in developing and includes researchers from public agencies, universities, and the forest products industries;
- A leadership role in food safety training, helping small and medium-sized meat processors meet federal HACCP standards;
- Alfalfa products research and development toward new and expanded markets for feed and food products in concert with the University of Minnesota;
- Cooperation on a biodiesel fuel made from soybeans, and developed as a result of strong cooperation between AURI, the Minnesota Soybean Growers Association, and Hennepin County;
- Serving as the catalyst for Future Fiber Partners, a collaborative effort to identify and expand markets for agricultural fibers. Partners include Blandin Paper, Wheat & Barley Steering Committee, University of Minnesota, and others;
- The publication of a special report in January, 1999 that focused on the new uses of agricultural commodities. The identification by market segment of value-added opportunities was an intense effort to provide strategic information to farmers, commodity groups, entrepreneurs, and others.

Organization

Applied Research staff conduct applied research and provide technical support to a variety of AURI programs. In addition, staff assist clients in product development, prototyping and analysis. Staff expertise includes food product development, industrial materials, fats and oils, waste utilization, microbiology, fiber, aquaculture, dairy and meat science, Pesticide Reduction Options, and Hybrid Poplar. Technical staff are located at the laboratories and pilot plants in Marshall, Waseca and Crookston.

Market Development staff assist with business start-up issues, as well as facilitate the linkages to other development organizations. Services include feasibility studies, marketing, financing and business planning. Market development staff are located at each of the four field offices located in Crookston, Marshall, Morris and Waseca.

Administrative Services personnel support functions related to contracts, personnel, financial management and organizational planning. Also included within this category are *information systems* staff that provide data management and computer support services, as well as client services such as Internet web pages. In addition, *communications* staff assists with marketing AURI clients and the organization through trade shows, publications and press contacts, as well as promoting the importance of partnerships and cooperation in the successful development of value added initiatives within the state of Minnesota.

The Capital Investment section of the 1998 Financial Summary represents the development of a new meats lab facility in Marshall. The facility provides needed infrastructure for formulation and analytical work on new and improved meat products. Further, AURI plays a significant role in assisting meat processors to meet federal food safety regulations and is certified to provide Hazard Analysis Critical Control Point (HACCP) training. This research and instruction helps small and medium-sized meat processors stay competitive and in compliance with food safety regulations—and the facility directly supports these efforts.

Programs and Services

The Initial Product Assessment (IPA) Program offers funding and assistance for new ideas and includes help such as *Technical Feasibility* for a new process or the improvement of an existing process; development of new value-added food or non-food products; and a review of the product's technical soundness and quality.

Economic Feasibility is also examined to determine how best to commercialize a product or process. This type of study identifies specific obstacles to commercialization and addresses potential solutions. Whether technical or economic feasibility is examined in the IPA program, AURI scientists, pilot plants and labs are available to assist in the development of ideas, products, or processes.

The New Markets Program is designed to assist farm organizations, commodity groups, grower associations and agri-business groups to complete work that advances research and development leading to new markets for agricultural commodities grown in Minnesota. The program identifies opportunities to develop new or alternative agricultural products for food or non-food uses leading to increased utilization and additional value of Minnesota's agricultural commodities. The program is specifically for projects where a business or research partner is not yet involved in the commercialization process. The program will provide funds to pay for research and development activities performed by universities or business and research consultants, including idea generation and evaluation, product or process development, testing of products or processes, and technical or market feasibility analyses. AURI will also help identify research and/or business partners whenever required.

The Applied Technology Program staff works with agri-businesses, university scientists, federal labs and commodity groups to access new technology and link it with commercial partners. Focus areas include: alternative fuels, fats and oils, food products and cereals, dairy, meat products, fiber, waste utilization and aquaculture.

The Pesticide Reduction Options (PRO) Program funds research and demonstration projects intended to reduce the use of petroleum-based products in production agriculture. Funds for the program are made available annually by the Minnesota Legislature from the pesticide regulatory account. Specifically, the PRO Program helps to foster: research or demonstration of cultural, biological or mechanical control practices, integrated-pest-management methods, or ag chemical spill-site remediation; substitution of renewable resource-based pesticides in agricultural production; incorporation of pesticide-reduction information into pesticide-use decision aids; promotion of safe on-farm pesticide-use practices; and the development of pesticide-use recommendations for alternative crops.

The Hybrid Poplar Program is developing research on the feasibility of hybrid poplar production. This research is being conducted in conjunction with the U of M Crookston, the Natural Resources Research Institute, and the private industry members such as Boise Cascade, Champion Paper, Blandin Paper, Potlach and Minnesota Power. The program is funded by the Minnesota Legislature, which requires matching dollars from the industry.

Building Performance Management into AURI Systems

AURI is in the midst of a strategic review of the programs and services it provides to clients. In order to improve the ability to serve its' wide range of clients, and to more accurately measure the results of the organization, AURI is continuing to streamline programs and services. The continued development of stronger measures that better capture the effect of AURI involvement is central to this strategic review, which is named "New Directions" within the organization.

In order to move to measurement that identifies "outcomes," rather than the more traditional "output" measures, AURI has implemented a series of changes:

- First, the use of technology is critical to an organization with 34 people located across the state in five offices. AURI has identified software modules that complement our existing accounting software and enables AURI to capture on-line the significant consulting aspect of our organization -- we provide Ph.D. level applied research assistance that provides tremendous value to entrepreneurs in rural Minnesota.
- Secondly, we are attempting to build a customer satisfaction process that goes beyond the traditional "pat on the back" approach. By building an organization-wide database approach, and utilizing cutting-edge methods, we hope to more accurately reflect the real value of AURI involvement as seen by the most important player the customer. Therefore, we have accepted the challenge of streamlining programs and processes to free up more staff time to better focus on serving customers, measuring impact, etc.
- Finally, as a small non-profit corporation, we seek to continue learning and growing in quality and performance areas. AURI is involved with other public agencies and organizations in the monthly "Benchmarking" meetings hosted by the Minnesota Department of Revenue. This group, as well as training from the University of Minnesota Employer Education Service, the Minnesota Department of Administration, and the University of St. Thomas, is helping AURI to strengthen its' performance management system.

Summary: Performance Measures

Organizational Goals	Measures	Highlights
Provide effective technology transfer services and applied research services	Percentage of projects provided technology assessment	1995 (69%), 1996 (51%), 1997 (54%), 1998 (51%). Target: 50%
	Hours of consulting time spent on applied research and technology transfer consultations.	This is a new measure.
	Number of private sector partners identified and receiving transfer of appropriate technologies.	1997 (2), 1998 (8). Target: 4
	Satisfaction with applied research	1998 (3.42 on a scale of 4). Target: 3.5
	Satisfaction with pilot plant and lab facilities	1998 (3.18 on a scale of 4). Target: 3.5
Facilitate the development of value-added businesses.	Ratio of private and other public matching funding to AURI project funds.	1995 (3.1:1), 1996 (5.1:1), 1997 (6.3:1), 1998 (5.8:1). Target: 3:1
	New products/processes developed	1997 (19), 1998 (19). Target: 24
	Percentage of projects provided marketing assistance	1995 (45%), 1996 (35%), 1997 (72%), 1998 (61%). Target: 40%
	Overall satisfaction with assistance including market development services and technical assistance	1998 (3.51 on a scale of 4). Target: 3.5
Develop and maintain strong partnerships that help to identify and develop opportunities for value-added agriculture.	Number of new markets for traditional or alternative crops and products identified.	1994 (8), 1995 (14), 1996 (4), 1997 (8), 1998 (13). Target: 8
	Applied technology projects implemented for technology transfer.	1997 (9), 1998 (16). Target: 20