

# Alternative Agricultural Research and Commercialization (AARC) Corporation Strategic Plan



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## Introduction .....

The Alternative Agricultural Research and Commercialization (AARC) Corporation was created as part of the 1990 Farm Bill on November 28, 1990, and was officially established as an agency of the U.S. Department of Agriculture on March 18, 1992. Originally organized as the Alternative Agricultural Research and Commercialization Center, AARC became a wholly owned government corporation with the passage of the Federal Agriculture Improvement and Reform (FAIR) Act of 1996. Program policy and oversight for the AARC Corporation is provided by a board of directors, composed of Federal and private sector scientists, producers, and business experts. As of September 30, 1996, there were seven full-time employees located in Washington, D.C.

AARC was established to help address the economic consequences of surplus agricultural production. It is designed to function as an investment fund to help commercialize non-food/non-feed products made from agricultural, forestry, and animal by-product raw materials. By using such raw materials, companies provide demand that is outside the relatively inelastic food and feed sectors, thus providing a market for agriculture's excess production capacity. In turn, this contributes to rural development by increasing farm income and generating new jobs.

AARC works in a coordinated and complementary effort with the Agricultural Research Service, the Forest Service, the Cooperative State Research, Education and Extension Service, the Small Business Innovation Research program, and the Rural Business-Cooperative Service. Several of the companies in which AARC has invested grew from research done in USDA laboratories and/or were financed in earlier stages by other USDA entities. AARC also works with these agencies as a member of USDA's Bio-based Products Coordination Council. AARC's strategic plan has been reviewed by these and non-USDA agencies as part of the GPRR review process.

Goal 1 of this strategic plan supports the USDA Strategic Goal 1 (Expand economic and trade opportunities for agricultural producers and other rural residents) and 3 (Promote sensible management of our natural resources) and the following USDA Subgoals:

- 1.1 Enhance the economic safety net for farmers and ranchers,
- 2.2 Open, expand, and maintain global market opportunities for agricultural producers,
- 1.3 Provide access to capital and credit to enhance the ability of rural communities to develop, grow, and invest in projects to expand economic opportunities and improve the quality of life for farm and rural residents; and
- 3.1 Promote sustainable production of food and fiber products while maintaining a quality environment and strong natural resource base.

In an effort to improve USDA coordination of industrial agriculture efforts, Secretary Glickman approved the establishment of the Bio-based Products Coordination Council on September 13, 1995. Departmental Regulation 9600-2 supersedes the February 22, 1991, regulation entitled "Industrial Products from Agricultural Materials." The new regulation sets forth the policy of the department with "regard to the development and use of bio-based industrial products and processes from agricultural and forestry materials and to establish collaborative strategies and systems to accelerate such development."

Part of the mission of the Council is to..."meet on a regular basis to share information, implement strategic planning, and provide policy advice to the Secretary..." and to host a government-wide conference on procurement of value added industrial products from agricultural materials. That conference, the National Marketplace for the Environment, is being held November 18-20, 1997, at the Washington, DC, Convention Center. The "Marketplace", although initiated by AARC and the Council, is now being supported by all mission areas of USDA as well as the Department of Energy, the Environmental Protection Agency, General Services Administration, Department of Defense, and others.

Attendance and participation by policy and procurement officials from most Federal agencies, and the White House, is anticipated. USDA is a charter sponsor of the conference.

AARC's board of directors developed a strategic plan prior to the requirement for a GPRA Strategic Plan. That initial plan serves as the basis for this plan. The milestones expressed in the initial plan were based on the collective agricultural, scientific, and business expertise of the board of directors. The investment milestones established for this plan are taken from AARC's business plan that was published in December 1996.

**Legislative Mandates**

Subtitle G of Title XVI of the Food, Agriculture, Conservation, and Trade Act of 1990 ("FACT Act"), Pub. L. No. 101-621, as amended by Title VII, Subtitle A, Chapter 2 of the Federal Agriculture Improvement and Reform Act of 1996, Pub. L. No. 104-127 ("FAIR Act") (7 U.S.C. 5901 et seq.).

**Key External Factors** .....

Three circumstances beyond AARC's control can contribute to or hinder AARC's ability to meet its business plan goals. These are a lack of outside capital available to match AARC investment funds, insufficient enforcement of environmental regulations, and amendments to the Agricultural Acquisition Regulations (AgAR) and Federal Acquisition Regulations (FAR) to reflect AARC's statutory procurement preference.

Lack of private sector capital becomes a hindrance to AARC because by law AARC funds are required to be matched on a dollar-for-dollar basis with outside capital. Lax enforcement of environmental laws and regulations has an adverse effect on the market for the products of AARC-funded companies. Many of these products were developed to replace hazardous substances or products in use prior to the promulgation of these laws and regulations.

Finally, the preferential procurement language provided for AARC in the FAIR Act of 1996 gives Federal procurement officials greater latitude in purchasing products from AARC companies. To expedite this process, both the Agricultural Acquisition Regulations (AgAR) and the Federal Acquisition Regulations (FAR) must be amended. The amended AgAR Regulations will be submitted for a 60-day comment period in September 1997.

**Mission** .....

The mission of AARC is to support the commercialization of new products that involve innovative uses of agricultural and forest products while creating investments.

AARC serves as a bridge between technology and commercialization. Its ultimate objectives are the establishment of profitable renewable resource-based products and companies, new jobs, and development in rural America. AARC has a special responsibility to help in the development of products with favorable environmental impacts, and those that replace imported petroleum with U.S. renewable resources.

**Goals** .....

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**Goal 1**

**To accelerate the commercialization of industrial and consumer products made from renewable agricultural, forestry, and animal by-product raw materials.**



### ■ Objective 1.1

**Catalyze the development of profitable U.S. companies that manufacture products from renewable agricultural, forestry, and/or animal-based raw materials.**

#### *Time Frame for Completion*

September 2002

#### *Strategies for Achieving the Objective*

- Invest in projects that meet AARC objectives. Focus funds on: processes that are environmentally friendly, products with identifiable markets; companies with entrepreneurial leadership and a strong management team; and primarily on start-up and small companies.
- Broker with other organizations to fund quality proposals that the AARC is unable to fully fund.
- Develop formal and informal information networks that include potential sources of projects, financing, and business/technical advice.

#### *Performance Measures*

- Establish Investment Partnerships: AARC's target is to invest \$54 million in 60 companies engaged in the manufacture of bio-based products. The purpose of the investments will be to create new companies or strengthen existing ones, as well as earn a return on investments for AARC.
- Leverage Private Sector Investment Funds: AARC's target is to leverage \$162 million of private sector funds to match its \$54 million in investment. The private sector funds will increase the likelihood of AARC's investments contributing to successful companies, as well as earning a return for AARC.

AARC

### ■ Objective 1.2

**Contribute to economic development and job creation in rural areas.**

#### *Time Frame for Completion*

September 2002

#### *Strategies for Achieving the Objective*

- Build partnerships between and among appropriate local, State and Federal agencies, universities, private companies, and cooperatives so as to accelerate commercialization and long-term viability of renewable resource-based ventures.

#### *Performance Measures*

- Create jobs in rural America: AARC's target is to create 10,000 new jobs in rural America. Companies that use bio-based materials as their raw products must process and manufacture the goods close to the raw material's source. Due to their typical high-volume/low-value nature, such raw materials cannot be shipped profitably over long distances. Thus, the employment opportunities derived from AARC investments will be predominantly rural.

### ■ Objective 1.3

**Contribute to more profitable and efficient use of limited natural resources.**

#### *Time Frame for Completion*

September 2002

#### *Strategies for Achieving the Objective*

- Invest in projects that meet AARC objectives. Focus funds on: processes that are environmentally friendly, products with identifiable markets; companies with entrepreneurial leadership and a strong management team; and primarily on start-up and small companies.

#### *Performance Measures*

- Expand use of agricultural land: AARC's target is to have 500,000 acres of farmland engaged in the production of raw materials for use by AARC-funded companies. These acres are anticipated to be acres currently out of production for economic reasons, such as set-aside programs.
- Conserve non-renewable resources: By using renewable resources as raw materials for manufacturing, AARC's target is to conserve 1 million barrels of petroleum.

### ■ Objective 1.4

**Reduce or eliminate the need for appropriated funding for AARC by September 2002.**

AARC's business plan identifies three rates of return for its investments — low (0%), medium (6%), and high (10%). To be independent of appropriated funds by 2002, AARC should be achieving at least a 6 percent return.

#### *Time Frame for Completion*

December 1998

#### *Strategies for Achieving the Objective*

- Obtain private-sector assessment of AARC's net future value.
- Identify the appropriate future structure for AARC per the FAIR Act of 1996; i.e., private entity or Government Sponsored Enterprise.

#### *Performance Measures*

- Achieve 6 Percent Annual Rate of Return.

## Management Initiatives .....

AARC is serving as the focal point for the development of an internet-based database for bio-based products. The database will link inventors, entrepreneurs, scientists, investors, and other interested parties through a website known as the Agricultural Clearinghouse. AARC is also working with the Small Business Administration (SBA) to place AARC-funded companies on SBA's newly developed Ace Net. Ace Net is a website open to independent investors — individuals of \$1 million net worth, or greater — seeking investment opportunities. Both of these efforts are undertaken to help AARC meet its goal of establishing companies that manufacture products made from bio-based materials.

### ■ Management Initiative 1

AARC is funding the establishment of the Internet-based Industrial Agricultural Clearinghouse. In addition to information at the Agricultural Clearinghouse website itself, there will be links to websites of other organizations — including AARC's and other USDA Agencies — that can provide information to those interested in the areas of new crops or new uses (non-food/non-feed) for old crops. The Agricultural Clearinghouse will serve as a one-stop site for those interested in all aspects of developing bio-based products.

#### *Time Frame for Completion*

March 1998

#### *Strategies for Achieving the Management Initiative*

- Identify all related websites already established on the Internet.
- Construct a website for the Agricultural Clearinghouse.

#### *Performance Measures*

- AARC's goal is to have the Agricultural Clearinghouse website visited a minimum of 1,000 times per year.

### ■ Management Initiative 2

The SBA has established Ace Net for the so-called “angel investor” to find new investment opportunities. The bio-based products niche is a new investment opportunity, and including AARC-funded companies on the Ace Net website will improve their chances of attracting private capital.

#### *Time Frame for Completion*

March 1998

#### *Strategies for Achieving the Management Initiative*

- Complete filing requirements to register AARC-funded companies with Ace Net.

#### *Performance Measures*

- AARC's goal is to attract \$5 million in private capital to its companies through Ace Net investors.

## Linkage of Goals to Annual Performance Plan .....

All of the performance measures used in this plan will also be used in AARC's annual performance plan, however the indicators in some cases will vary. Also, General Goal 1 is related to commercializing industrial products from agricultural materials. The performance of AARC-funded companies is measured annually using the AARC Project Monitoring Summary. This performance survey provides annual data on a company's gross revenue, net income, debt-to-equity ratio, export-generated revenue, raw material costs, and repayments to AARC. It also tracks the degree to which the company's production has contributed to the marketplace replacement of imported petroleum or commodities, value added to raw material, agricultural material/acreage used, and jobs created. These measurements will be incorporated into AARC's annual performance plan as an element of Goal 1.

**Resources Needed** .....

No significant change from current resource demands is anticipated for AARC to achieve its goals and objectives.

The FAIR Act of 1996 dictates that AARC must invest 84 percent of its appropriated funds in commercialization projects. The remaining 16 percent is split statutorily between administrative expenses (15 percent) and project monitoring (1 percent).

**Program Evaluation** .....

A Project Monitoring Summary was used and will continue to be used to evaluate each AARC investment. This provides the basis for an annual, on-site review conducted by AARC board members and staff. Plans exist to make the results of these reviews the foundation of an outside audit of the AARC portfolio conducted annually to determine the net present value of each investment and of the entire AARC portfolio. Additionally, AARC has a contract with the Kansas Technology Enterprise Corporation (KTEC) to develop a software program to assist the AARC Corporation in tracking and monitoring existing projects. The data base is configured to allow for maximum information collection. This information will then be utilized to extract performance data. The system should be in place by early 1998.

AARC published a business plan, which was used in the development of this plan, in December 1996 that projects three rates of return for its investments — low (0%), medium (6%), and high (10%). (The internal rates of return for the three scenarios are, respectively, 4.25 percent, 8.25 percent, and 14.25 percent.) The rate of return for the low and intermediate scenarios is less than the 13 - 20 percent expected for traditional venture capital activities. However, the value of rural job creation and the utilization of agricultural materials must also be taken into account. The projected rates of return serve as a benchmark for the board to measure the success of AARC's investments.

**Role of External Entities** .....

This current plan is derived from the initial strategic plan prepared for AARC by its first board of directors. In preparing that plan, the board held public hearings in eight different parts of the country to solicit ideas and suggestions on how AARC could best meet the needs of its clients. In addition, the plan reflects the private sector expertise of its board members.

