

Draft

**RURAL ENTERPRISE
PARTNERSHIP, INC.**

summary plan

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RURAL ENTERPRISE PARTNERSHIP, INC.

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RURAL ENTERPRISE PARTNERSHIP, INC.

Summary Plan

I. Background

In 1985, the governors of nine midwestern states formed the Midwest Technology Development Institute (MTDI) to promote technological collaboration among government, universities and industry for the purpose of expanding economic development and job creation. To help accomplish this objective, MTDI is forming research and development partnerships in selected areas.

One of these organizations is the Rural Enterprise Partnership, Inc. (REP), a cooperative partnership focusing on research, development and transfer of technology for viable family farms; development of more effective marketing approaches and technology for processing food closer to the farm; and community-based economic development.

REP, which will operate as a cooperative effort among government, universities, non-profit organizations and industry, is based on four major and interrelated premises:

1. Meeting the needs of rural America requires broadly-based public/private partnerships which plan and implement programs that strike an appropriate balance among social values, natural resource conservation and protection and competitiveness in world markets.
2. Universities, government laboratories, foundations and community-based organizations have important resources required for addressing current problems in rural America. However, these resources must be supplemented by additional funding and marshalled in a coordinated way to achieve significant progress.
3. Farm input costs can be significantly reduced through the use of regenerative farming techniques which are, at the same time, more protective of soil and water resources. Additionally, through expanded plant biology research, new agriculture technologies can be created which are both more appropriate to the nature and scale of family farming and more environmentally protective.
4. The growing need for more jobs in rural America can only be met through expansion and diversification of the business base, including more local food processing. Achieving this goal requires both greatly increased expertise at the community level in managing technology and establishment of institutions to facilitate cooperation in expanding innovation.

II. Organization and Sponsorship

MTDI has established the Rural Enterprise Partnership as a non-profit corporation and is applying to the Internal Revenue Service for tax exempt status under Section 501(c)(3) of the Internal Revenue Code. The Partnership will be registered under the National Cooperative Research Act of 1984.

The Partnership will be governed by a Board of Directors appointed by MTDI. It will include individuals from corporations, universities, and foundations and other organizations which are stakeholders in rural America. The Board will establish one or more research advisory committees which will develop and recommend research plans and projects to the Board.

The Partnership's activities will be organized into several major programs. Funding will be sought from a mix of government, corporations, foundations and other non-profit organizations appropriate to each program's efforts. Various categories for corporate sponsors may be established so that benefits can accrue to these sponsors in relation to their participation.

Each state wishing to benefit to the maximum extent may find it advantageous to participate through a coordinating organization affiliated with REP. For example, Minnesota participates through the Minnesota Family Farm Institute. Such a coordinated organization may provide a more effective means of:

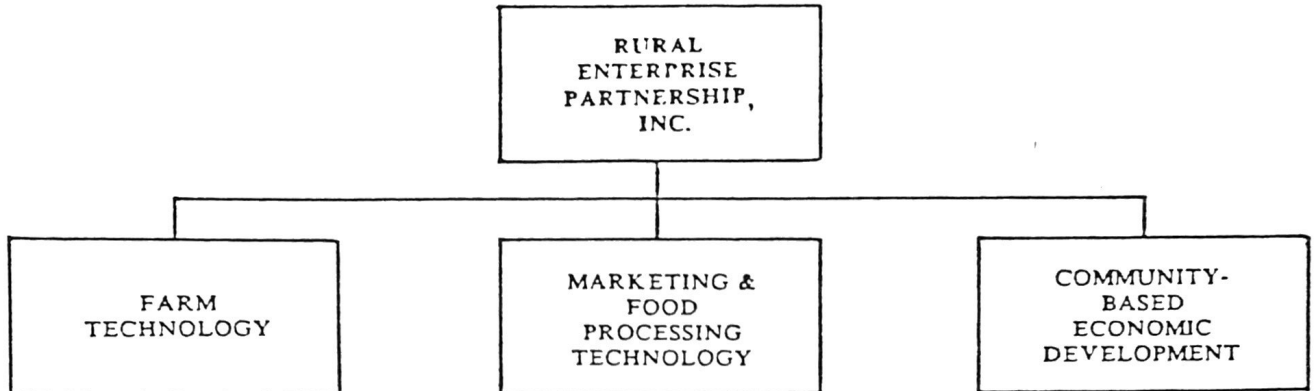
- o Identifying the most appropriate areas for research that are responsive to the needs of the state;
- o Transferring technology developed by REP to the state's businesses and farms;
- o Assisting local communities in expanding innovation.

Universities, state agricultural extension services and non-profit rural institutes may affiliate with REP as well.

III. Programs

The research and development efforts of the REP have been structured into three coordinated program areas. These three programs, identified in the diagram in Figure 1, are briefly described below.

Figure 1



- Development of regenerative technologies to reduce farm costs and protect natural resources.
- Development of farming systems optimization models.
- Development of expert systems for farming operations.
- Biotechnology research for scale neutral technologies.

- Identification of new markets and more effective marketing approaches.
- Development of small-scale food processing technology.

- Identification and assessment of technologies as business opportunities.
- Establishment of community-based enterprise support (financing, services, community participation).

A. Farm Technology

In the Farm Technology Program, there are four areas of effort. The first area addresses the identification, development, and implementation of vital agricultural technologies which can reduce farm input costs while simultaneously providing regeneration of soil resources and protection of water resources. A growing number of creative farmers are experimenting with a variety of techniques stressing crop rotations, mechanical cultivation and increased use of legumes and cover crops to offset the effects of decreased use of chemical pesticides and fertilizers. Improved scientific understanding and broader use of such regenerative techniques will result from closer collaboration among creative farmers, university researchers and extension agents.

The second area is targeted on optimizing farming systems through the development and use of models of integrated and diversified farming operations. These models can be used for sizing and structuring family farm operations to achieve the optimal balance among low operating costs, low capital investments and natural resource conservation and protection. Individual farmers can use these optimization techniques to make more informed business decisions.

The third area covers the development of a number of "expert system" programs by participating land grant university faculty. In this effort, under the leadership of the University of Illinois - Urbana, knowledge-based artificial intelligence techniques, such as those now being used in medicine, education, manufacturing and business, will be applied to agriculture. These expert systems in agriculture can then be used by individual farmers to manage their operations more profitably by taking into account a broader base of agricultural experience.

The fourth area is biotechnology research to create new agricultural technologies which will benefit the smaller and medium-sized family farmers. For example, the results of such research will likely include improved plant species which will utilize nitrogen more efficiently and are more resistant to pests, diseases and drought instead of species designed solely to produce higher yields. In general, new biotechnologies will be aimed at being less resource consuming, less capital intensive, more environmentally acceptable and more nearly scale neutral. A research program, which focuses on satisfying these objectives, will be developed to guide the selection of research topics.

B. Marketing and Food Processing

Improved marketing approaches will, in general, prove to be the key to substantial increases in farm income and must be addressed as part of regenerating the rural economy. Hence, farmers must have assistance in shifting to a market-oriented approach in choosing crops and farm animals and other business opportunities. For example, it may be necessary to identify and/or develop new or unfamiliar channels of marketing non-commodity or specialty crops and proprietary foodstuffs. Some farmers have gained limited success through marketing cooperatives for vegetables.

One of the few bright spots in the declining rural economy is the increased number of small-scale entrepreneurial food processing operations in rural communities. Such operations also provide a new market for specialty crops which often are in surplus during the height of the limited growing season in the Northern states. The number of such food processing operations can be increased -- and become an important source of new jobs -- with additional R&D and marketing assistance. Several states have recognized this potential. For example, the University of Nebraska has set up a Food Processing Center to assist private companies in solving technical, business and marketing problems.

Especially in this area, it is important to start with the familiar -- what farmers and small-scale food processors are doing now -- and to help them through exposure to improved marketing techniques. This will integrate the creative farmers and food processing entrepreneurs into a market system which -- although it does not guarantee financial success -- certainly enables them to discover and respond to new opportunities.

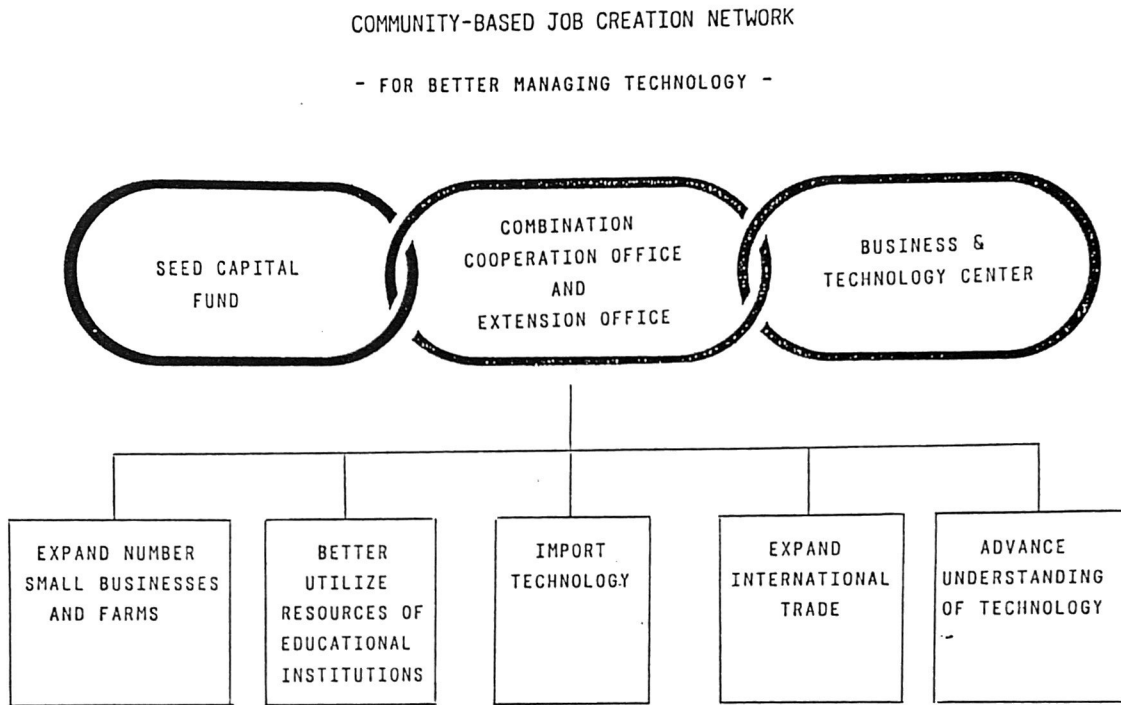
One of the first steps will be to establish a network for information sharing and dissemination among the public and private centers with expertise in marketing and small-scale food processing. As R&D needs of food processing enterprises are identified, technology development projects will be initiated.

C. Community-Based Economic Development

In addition to food processing-based enterprises, further opportunities must be created for technology-based economic development in rural communities. The main thrust of the REP's effort in community-based economic development is to assist communities to put in place a new institution called a Job Creation Network which facilitates more effective management of technology for economic development and job creation. There has been an enormous proliferation of organizations in communities concerned with one or more aspects of economic development, e.g., county economic development corporations, city economic development corporations, chambers of commerce, county extension offices, small business development centers, etc. Each organization functions independently in discharging its mandate. There is no coordination to ensure a holistic or comprehensive approach which assures efficiency and enhances effectiveness of each function.

The main elements of a Job Creation Network are shown by Figure 2.

FIGURE 2



IV. Resource Requirements

A. Funding

Funding will come from several sources. Because part of the REP program has either limited or long-term commercial potential, a major part of the funding, at least during the early years, is appropriately provided by federal and state governments. As the long term research progresses, commercial applications will be identified and a large part of the cost of their development will be borne by the private sector. Thus, over time, the amount of funding from companies will increase substantially. Estimates of sponsored support and program budget are presented below.

Estimates of Partnership Support

<u>Source</u>	Year (\$ - millions)					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Government & other	0.5*	11.5	23.0	33.0	38.0	40.0
Universities	0.2*	0.5	1.0	2.0	4.0	5.0
Corporations	0.3*	1.0	2.0	4.0	7.0	9.0
Total inflow	1.0	13.0	26.0	39.0	49.0	54.0

*Amount received or committed

Estimates of Program Budget

<u>Element</u>	Year (\$ - millions)					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Improved farm technologies	0.2	3.0	5.0	7.0	10.0	10.0
Farming systems optimization	0.2	1.0	3.0	5.0	5.0	5.0
Expert systems development	0.4	2.0	4.0	6.0	8.0	8.0
Biotechnology research	0.1	3.0	6.0	10.0	15.0	20.0
Improved marketing approaches	0	1.0	2.0	3.0	3.0	3.0
Food processing technology	0	2.0	4.0	5.0	5.0	5.0
Community-based development	0.1	1.0	2.0	3.0	3.0	3.0
	1.0	13.0	26.0	39.0	49.0	54.0

B. Facilities

Since it is planned that the research, at least during the early years, be carried out by universities and other existing institutions, the requirement for facilities is primarily leased office space and equipment. Thus, the investment in facilities will be minimal.

C. Staff

By the end of the second year of operation, it is expected that there will be a core of five individuals -- a president, a program director for each of the major regional program functions (Farm Technology, Marketing and Food Processing Technology and Community-based Economic Development) and administrative and clerical support.