

### III. Executive Summary (limited to one page)

Recent market research revealed the biggest gaps and the most viable opportunities are in locally grown and specialty production, including organic. While locally grown and specialty vegetable sales have steadily increased in the US over the last 10 years, North Dakota businesses have had little success entering these markets. Paul Deutsch, a specialty greenhouse producer in North Dakota stated, "One of the biggest challenges for producers is the lack of information and research about greenhouse production in this climate... Having practical research being done on varieties and production methods would undoubtedly grow the industry in North Dakota." Other industry stakeholders echo Deutsch's statement. The development and growth of this value-added agriculture industry depends on research and transferring technology to producer businesses. Technical research, demonstration and education need to be done in a variety of areas: low input season extension, vegetable variety market trends, post harvest handling, packaging for distribution, direct marketing, and growing techniques. A key demonstration feature will be alternative growing techniques for extreme northern climates such as North Dakota. Producing vegetables in high demand requires minimal financial investment by producers, making it an economically feasible start up business for entrepreneurs. A distribution and marketing system has also been identified as a significant research and development need.

The Entrepreneurial Center for Horticulture (ECH) is designed to grow the value-added organic and specialty vegetable industry in North Dakota on a two tier level. Tier 1 "entry-level" is production marketing through direct sales and coops and Tier 2 is "commercial" production primarily accessing the wholesale market. The ECH will: 1) provide research and demonstration of high-skilled production methods; 2) expand and provide new opportunities for product commercialization and distribution networks in North Dakota and the region; and 3) provide the technology transfer necessary to make these business opportunities flourish.

# Minot State University -- Bottineau Center of Excellence Proposal

## Entrepreneurial Center for Horticulture

Projected Revenue and Expenses for the Center of Excellence

7/30/2008

	Program Devel. & Implementation	
	(Years 1-4)	Year 5
	Total	Total
<b>Income and Investment</b>		
Federal Funding	\$ 2,310,218	
MAGIC fund	\$50,000	
REAP-CONAC fund	\$220,000	
Regional Economic Development Funding	\$36,000	
Community Support	\$50,000	
Research Grants	350,000	350,000
Centers of Excellence Funding	400,000	
Private Sector Partner Investment	226,000	23,200
International Peace Gardens	20,000	10,000
Training Fees		150,500
Sales	20,000	95,787
<b>Total Income</b>	<b>\$ 3,682,218</b>	<b>\$ 629,487</b>
<b>Expenses</b>		
<b>Estimated Start-Up Costs</b>		
Planning & Organization Expenses	\$ 342,000	
Buildings & Real Estate	576,000	
Capital Equipment List	197,000	
Administration Expenses	54,000	
Reserve for contingencies	100,000	
<b>Total Start-Up Costs</b>	<b>\$ 1,269,000</b>	
<b>On-Going Program Expenses</b>		
Salaries	\$ 1,856,200	\$ 499,365
Administration	235,530	1,500
Buildings & Real Estate	11,000	11,275
Equipment & Technology	27,500	3,750
Publicity and Marketing	84,000	9,200
Travel	82,000	8,400
Utilities	67,500	30,000
Legal & Professional	36,000	\$14,000
Miscellaneous	7,500	2,000
<b>Total On-Going Program Expenses</b>	<b>\$ 2,407,230</b>	<b>\$ 579,490</b>
<b>Total Expenses</b>	<b>\$ 3,676,230</b>	<b>\$ 579,490</b>
<b>Net Profit</b>	<b>\$ 5,988</b>	<b>\$ 49,997</b>

## Minot State University - Bottineau Center of Excellence Proposal Budget Narrative\*

\*Budget narrative is for years one through four of the Center's operation. By year 5, the Center will be self sustaining and thus year 5 budget numbers are not included in this justification narrative.

INCOME	BUDGET
<b>Federal Funding</b>	<b>\$2,310,218</b>
We are currently designated as a University Center by the EDA. The funds allocated to this project total \$310,218 over three years. Additional HUD-EDI (\$500,000) and EDA (\$1,500,000) funds are being pursued. Souris Basin Planning Council, Senator Dorgan's office, and MSU-B have been fully involved and are committed to securing this funding. <i>Note: only the \$310,218 currently committed through EDA are listed as Center of Excellence match.</i>	
<b>Economic Development Funding</b>	<b>\$306,000</b>
\$50,000 committed through the Minot MAGIC Fund, \$220,000 committed through the Center of North America Coalition (CONAC), and \$36,000 committed from the Bottineau Regional Economic Development Corporation. <i>Note: All of these funds have been secured and were used as Center of Excellence match.</i>	
<b>Community Support</b>	<b>\$50,000</b>
Regional lending institutions and donors. The ECH is currently working with the Turtle Mountain Community College Extension to pursue collaborative activities that may lead to Turtle Mountain Venture Community funding. The Rolette Community Horizon's program is interested in investing in the center by supplying mini-grants for producers. Other possibilities for community support through utility companies and lending institutions are possible. <i>Note: only \$45,000 currently secured for this Center is listed as Center of Excellence match.</i>	
<b>Centers of Excellence Funding</b>	<b>\$400,000</b>
Marketing, to include: promotion of locally grown produce, technology transfer opportunities, Publications, newsletters, databases, web site - \$16,334.88	
Demonstration, to include: operations and maintenance of season extension growing facilities, research of specialty and niche market varieties, packaging and post harvest handling facilities and organic growing methods - \$65,726.64	
Distribution, to include: best practices research, online or direct marketing methods, partnerships with distributors, UPC and PLU packaging, legal and professional assistance - \$27174.99	
Technology Transfer, to include: workshops, field days, teleconferences, online training, publications, and organic verification processes for producers - \$18,790.60	
Salaries, to include: Salary for faculty, researchers, grant writers, greenhouse technicians, and costs associated with relocation or hiring of personnel - \$260,147	
Other, to include: Reserve for contingencies - \$11,825.66	
<b>Research Grants</b>	<b>\$350,000</b>
It is expected that private and public research funding will become available as the Center develops. The ECH has submitted a SARE pre-proposal for \$175,000. This proposal will be acted upon by Spring of 2009. Other grant opportunities include the Organic Farming Research Foundation (proposal due date July 15, 2008), the CROPP cooperative, National Science	



Foundation grants, Rodale Institute grants, and Leopold Center cooperative research activities. <i>Note: These funds are not counted towards the Centers of Excellence match.</i>	
<b>Private Sector Partner Investment and Contribution</b>	
North Star Organic Farm - \$6,000 has already been invested in a new greenhouse for the production of organic transplants that will be sold to producers contacted through the Center and to provide transplants for demonstration to the MSU-B production/technology transfer projects. The remaining funds will purchase: Land – up to 10 acres, 3 – 26' x 48' High Tunnel greenhouses, Wind turbine, solar energy and geothermal systems to heat the greenhouses and power the drip irrigation system, Computerized timers for water pumps, Fans to cool permanent greenhouse, Greenhouse seedling watering system, Drip irrigation system and pump; all of which will be used to demonstrate new production technologies for the Center.	\$226,000
North Dakota Farmers Market and Growers Association – value of NDFMGA logo and tag line \$2800 for design and layout; \$400 for additional revisions and proofing costs	\$3,200
<b>Collaborative Partners</b>	\$30,000
International Peace Gardens (IPG)– The IPG will provide consulting and lobbying (\$3,000 yearly for three years), high tunnel operational costs (\$7,000 yearly for three years) to include use of facility, utility costs, labor costs, and daily operational costs for a high tunnel structure located at the IPG.	
<b>Sales</b>	\$30,000
The Center plans to start selling products (starts and vegetables) produced in the greenhouses by Year 2 and to continue these sales as an income source to support the on-going activities of the Center. We anticipate these sales to grow in the subsequent years. <i>Note: These funds are not counted towards the Centers of Excellence match.</i>	
<b>Total Income</b>	<b>3,682,218</b>

EXPENSES	BUDGET
<b>Estimated Start-Up Costs</b>	
<b>Planning &amp; Organization Expenses</b>	\$342,000
This includes moneys to update the previously compiled market research, feasibility assessment and business plan as these were originally completed in late 2004. Also included are funds for the development of the Center's mission and vision and the research and development of a distribution system, organic certification, networking with industry professionals, and grant writing. Finally, this also includes funds to conduct the initial staff searches.	
<b>Buildings &amp; Real Estate</b>	\$576,000
These funds will be used to buy and construct 8 full-scale growing structures at MSUB and at North Star Organic Farm as an extension site to the Center. It will also be used to remodel the current greenhouse facilities on campus for research purposes; construct outbuildings including a packing/wash facility, and a storage/potting shed; to construct a remodel current facilities to house offices for the Center; and all architectural and site preparations. Construction is anticipated to take place at the end of Year 1 and beginning of Year 2.	
<b>Capital Equipment</b>	\$197,000
New equipment and fixtures needed for project implementation, including: tools, water filtration/softening equipment and office equipment for new employees.	

<b>Administration Expenses</b>	<b>\$54,000</b>
These funds will be used for staff search expenses including candidates' interview travel. These funds will also be used to pay for expenses for professionals consulting on the project including distribution industry, grocery, and organic specialty representatives.	
<b>Reserve for Contingency</b>	<b>100,000</b>
Contingency funds will be used to supplement any overages in building and capital equipment costs as well as planning and organizational expenses.	
<b>Total Start-Up Costs</b>	<b>\$1,269,000</b>

**Entrepreneurial Center for Horticulture  
Budget Narrative (continued)**

<b><i>On-going Program Expenses –Over a four year period</i></b>	
<b>Salaries, total reflects four years of salary</b>	<b>\$1,856,200</b>
A variety of personnel will need to be hired for the project's success. A Project Developer (\$85,000 annually) will oversee the project. Additional full-time staff includes a Program Director (\$85,000 annually), Researcher (\$33,475 annually), and Fundraiser/Grants Manager (\$50,000 annually assuming the grant writer would not be hired until year three of the project) and two faculty members (\$81,750 and \$66,950 annual salary respectively) to oversee demonstration and research. Administrative and support staff will include: Greenhouse Technician (\$35,000 annually), Administrative Assistant (\$35,000 annually), Part Time Custodian (\$11,875 annually) and student workers (\$5,000 annually).	
<b>Administration</b>	<b>\$235,530</b>
This includes relocation costs and possible housing allowance for the professional positions listed above. Also included are the estimated insurance costs for the new facilities and greenhouses.	
<b>Buildings &amp; Real Estate</b>	<b>\$11,000</b>
These expenditures include general building and greenhouse maintenance in the first four years.	
<b>Equipment &amp; Technology</b>	<b>\$27,500</b>
This includes computer and technology upgrades as well as the replacement of other equipment as needed from regular use.	
<b>Publicity and Marketing</b>	<b>\$84,000</b>
These funds will be used to publicize the research findings through publications and other appropriate venues and to market the Center and its services. Marketing includes use of the North Dakota Farmers Market and Growers Association logo and tag line for use in distribution and branding of North Dakota grown produce (value \$3,200) and possibly the purchase of UPC or PLU labels.	
<b>Travel</b>	<b>\$82,000</b>
Travel expenses will include travel to state-wide meetings and conferences of key industry representatives to promote and publicize the research and activities of the Center, to attend grant proposal request conferences and mandated federal conferences. Also included in this	

item are funds for travel to four other organic/specialty greenhouse facilities to research model facilities.	
<b>Utilities</b>	<b>\$67,500</b>
These are the estimated utility expenses for the greenhouses and the new packing and washing facilities for the first four years.	
<b>Legal &amp; Professional</b>	<b>\$36,000</b>
This includes fees for accounting services and any legal fees associated with the establishment of the Center as well as consulting and technical services provided by the International Peace Gardens.	
<b>Miscellaneous</b>	<b>\$7,500</b>
The only expenditure under this category is for organic certification starting in Year 2 of the project and continuing as needed.	
<b>Total On-Going Program Expenses</b>	<b>\$2,407,230</b>
<b>Total Expenses</b>	<b>\$3,676,230</b>
<b>Net profit in first four years</b>	<b>\$5,988</b>