

**University of Vermont Extension and Vermont Agricultural Experiment Station
FY 2005 – FY 2006 Plan of Work Update**

This FY 2005 – FY 2006 Plan of Work Update (2-Year Update) for University of Vermont Extension (UVM Extension) and Vermont Agricultural Experiment Station (VT-AES) outlines changes and additions made to the FY 2000 – FY 2004 5-year Plan of Work (FY 2000 POW). This document includes information regarding changes occurring for statewide research and outreach planning and activities. Vermont’s 2-Year Update describes how the institutions continue to address short-term, intermediate, and long-term issues related to the five National Goal Areas outlined by USDA, to effectively extend the FY 2000 POW with new and ongoing efforts.

Projected Resources

National Goal Area-oriented shifts in personnel have occurred, emerging from a combination of retirements, university-determined new appointment foci, and grant-funded foci as grants represent an increased proportion of total funding. These changes have resulted in focal shifts within and between National Goal Areas. Table 1 illustrates that while the FY 2000 POW anticipated a total of 87.45 professionals and para-professionals working through UVM Extension and VT-AES in research and outreach for the State of Vermont, current projected resources for the 2-Year Update are lower, with 67 FTE’s proposed. With changes in the financial management area, inconsistencies in prior year reporting of personnel resources were identified. Data provided in Vermont’s FY 2003 Annual Report of Accomplishments for CSREES-AREERA and subsequent FY 2005-2006 POW update reflect corrections made to the process.

**Table 1 Changes in Projected Allocations of Personnel Resources by National Goal Area
(combined UVM Extension and Vermont Agricultural Experiment Station resources)**

FY 2000 POW	FY 2005 - 2006 UPDATE					
			FY 2005		FY 2006	
	FTE's	% Total FTE's	FTE's	% Total FTE's	FTE's	% Total FTE's
NGA 1	46.13	52.8%	18	26.9%	18	26.9%
NGA 2	5.06	5.8%	5	7.5%	5	7.5%
NGA 3	6.66	7.6%	9	13.4%	9	13.4%
NGA 4	8.3	9.5%	14	20.9%	14	20.9%
NGA 5	21.3	24.4%	21	31.3%	21	31.3%
TOTAL	87.45	100	67	100	67	100

Projected Fiscal Resources

Total federal and state funding since the FY 2000 POW was written, has risen 36 percent, from \$5.75 million to \$8.96 million. Programming resources from state and federal sources for research and outreach have shifted in terms of their allocation toward goals in the five NGA’s, with the predominant shift being a move of funds away from NGA 1 toward all other NGAs (Table 2). This can be explained through attrition and non-replacement of faculty and staff, through changes in program delivery and scope, and through standardizations made to the internal reporting process, which have better linked programs and monies with corresponding National Goal Area foci. Whereas 52 percent of all funds were allocated to NGA 1 in the FY 2000 POW, projected allocation of fiscal resources for FY 2005 and FY 2006 directs the largest percentage of funding to be shared between NGA 5 (31.8%) and NGA 1 (31.3%). Planned funding toward NGA 4 also increased significantly, from 11% to 18% of all funds distributed.

**Table 2 Changes in Projected Allocations of Fiscal Resources by National Goal Area
(combined UVM Extension and Vermont Agricultural Experiment Station resources)**

FY 2000 POW	FY 2005 - 2006 UPDATE					
	(Millions of dollars)		FY 2005 (Millions of dollars)		FY 2006 (Millions of dollars)	
	\$	% Total \$	\$	% Total \$	\$	% Total \$
NGA 1	2.99	52.0%	2.80	31.3%	2.80	31.3%
NGA 2	0.37	6.4%	0.73	8.1%	0.73	8.1%
NGA 3	0.48	8.3%	0.98	10.9%	0.98	10.9%
NGA 4	0.63	11.0%	1.60	17.9%	1.60	17.9%
NGA 5	1.28	22.3%	2.85	31.8%	2.85	31.8%
TOTAL	87.45	100	8.96	100	8.96	100

Changes anticipated for Vermont Agricultural Experiment Station

Personnel participate in a highly competitive proposal process to obtain Hatch Act funds for research programs. On average, researchers have used Hatch Act funds to support between 40 and 50 research projects annually since FY 2000 (Table 3). The majority of projects funded fall under NGA 1. Nine new programs were funded this past year, and a similar number are expected to receive support during FY 2005 and FY 2006. Accepted proposals show the highest merit based on stringent guidelines and target priority research areas selected through citizen and expert input. No changes in guidelines for competitive Hatch funding grants are anticipated for FY 2005 and FY 2006.

VT-AES priority research foci may shift, but any changes have not yet been determined, since citizen polling and advisory input assist in directing research priorities. An annual poll of Vermonters has been used with considerable success toward making sound decisions regarding research priorities. This year (FY 2004), questions have been devised to improve VT-AES' ability to interpret citizen-proposed research needs regarding sometimes conflicting topics considered by polled citizens to be of highest priority – that is, how to have a sustainable, vibrant agriculture in harmony with prospering suburban and urban areas. It is expected that results of this year's Vermonter poll, when combined with expert and advisory recommendations, will be reflected in shifts in research priorities.

Table 3. Vermont Hatch-supported research projects and funding by National Goal Area for FY 2003

NGA	Number of Hatch-Supported Research Projects for FY 2003	Funding (\$)
NGA 1	31	\$1,514,478
NGA 2	2	\$942,082
NGA 3	2	\$1,326,115
NGA 4	6	\$2,392,407
NGA 5	2	\$2,941,013

Changes anticipated for University of Vermont Extension

NGA 1: An agricultural system that is highly competitive in the global economy

Supporting Vermont farmers in their endeavors to achieve new standards in agricultural competitiveness is strongly supported by UVM Extension. Developing a competitive agricultural base has become a more holistic endeavor. For Vermont, addressing the needs of farmers on its many small farms often

necessitates that research and outreach also focus on issues outlined for other NGAs, such as ensuring the highest quality and safety of value-added foods, enhancing community and economic development, improving access to local, safe foods by limited-income individuals and families, and educating youth about futures in agriculture. Concomitantly, the need for fiscal restraint and resource consolidation has led to a reduction in program number and a more efficient use of personnel and monetary resources. Therefore, some programs that were placed in NGA 1 at the outset of the five-year plan were either absorbed into existing or updated programs, or moved to other National Goal Areas to better reflect intended outcomes. Much of the programming has remained intact, with a more efficient and coordinated approach to conducting outreach efforts with other states and partners in order to maintain and improve levels of service.

Agriculture in Vermont has a large dairy base. We are currently conducting a survey designed to assist us in understanding the changing needs of our dairy clientele and to gauge our level of service with dairy farmers, in particular. As the number of dairy farms in Vermont has decreased, the number of diversified farms has increased. The 2002 Census of Agriculture indicates that Vermont has almost 6,600 farms, of which approximately 1,400 are dairy. Sixty-two percent of these farms report sales of less than \$10,000 per year. Extension programs have responded to the situation by shifting attention from traditional animal and crop production to focusing on assisting farmers in the production and marketing of value-added and alternative products, and improving agricultural business management skills and practices.

Programmatic changes since the FY 2000 POW for NGA 1 include the following:

New Programs Offered in NGA 1

- Dairy Profitability Enhancement Program (DPEP) -- began in 2001 and is a program serving farms in northern and western Vermont. DPEP enables farm families to build teams of experts to help critique, prioritize and solve challenges to farm profitability. The program will continue into FY05.
- Agriculture Viability Program -- project has garnered about \$130,000 from the Vermont Housing and Conservation Board. These monies have hired a consultant who has a deliverable of 20 business plans (for dairy farmers) by December 2004. UVM Extension will hire an additional employee for southern Vermont to work as a dairy generalist with dairy farmers. This person will have primary responsibility to solve simple problems on site and to refer more complex problems to specialists.
- Risk Management Programming -- supported by a significant set of grants from the USDA Risk Management Agency (RMA), has increased the reach and scope of risk management-oriented programming UVM Extension can offer.
- AgrAbility – increases scope and reach of the highly successful Rural Farm Family Vocational Rehabilitation Program
- Land Link Vermont – with the increase in funding obtained through the Center for Sustainable Agriculture (director salary is base funded), programs to maintain lands in productive agriculture are flourishing, and Land Link is an example of a program where people interested in purchasing farmland for new or expanding enterprises are matched with farmers planning to sell lands. The service also provides important support for sellers and purchasers with the various agencies needed to complete a land sale, and assists agricultural entrepreneurs in obtaining additional education to increase the likelihood that their business will succeed.
- NxLevel – an agricultural business course designed to help agricultural entrepreneurs produce and implement business plans for their operations.
- Wool Mulch – research, testing, and marketing of a new product that may provide a necessary market for sheep producers to sell their wool.

- Beef Production and Marketing – with the hiring of new personnel, a program was developed to improve profits of dairy and beef producers through enhanced state-based and New-England-wide initiatives (e.g. retained ownership program, slaughterhouse cooperative, and value-added beef product development).
- Apple Orchard Diversification – beginning in FY 2004, grape cultivation is being researched and marketed for Vermont apple growers, who have shown tremendous interest in diversifying operations to include this crop and its value-added products.
- Master Composter – in addition to a Master Gardener program, a Master Composter program has been added, to improve home gardening knowledge of appropriate and effective composting measures.
- Agricultural Curricula and School Partnerships and Horticulture-oriented Career Center Programs – intensive, hands-on and experiential courses run through schools during academic years and summers that assist high-risk and agriculturally inclined high school students to engage in farming, develop business plans and enterprises, and sell and donate agricultural products.

Programs Reduced in Scope, Extinguished or Moved from NGA 1

- Holistic Resource Management -- concepts of this program are included in newer programs.
- Farm Labor Service – maintaining only an advisory role, UVM Extension has successfully turned over the program to a privatized farmer-controlled service.
- Milk Marketing and Pricing – program has been curtailed and absorbed into other agricultural business offerings since the retirement and non-replacement of the specialist in this area.
- Pasture Management – bovine-directed program has been absorbed into small ruminant dairy farm programs.
- Soybean Production – program ended with non-replacement of the soybean specialist.
- Master Shepherd Program – focus has changed to invest resources into finding markets for sheep products, and ensuring safe, high quality production of value-added sheep products to improve sheep farm profitability.
- Vermont Farm Youth Corps – program designed to assist students (many high-risk) in effectively apprenticing on farms, and to learn about farming as a career, was discontinued due to state funding decisions. Smaller scale educational programs have been added.
- Applied Agricultural Research – aspects of this are absorbed into existing soil quality and nutrient management programs, but whole-animal research has been conducted primarily through VT-AES, and not UVM Extension.

Other Changes Projected for NGA 1

- A Maple Outreach Specialist retired, but a campus specialist has filled the position part time.
- The Women’s Agricultural Network (WAgN) program received increased funding resulting in the addition of a 0.8 FTE position to coordinate and conduct new farmer education.

NGA 2: A safe and secure fiber system

Effort toward NGA 2 has remained relatively stable since the FY 2000 POW was written, and the 2-Year Update reflects an intention to maintain this stability, despite shifts away from some other NGAs. Primary thrusts for NGA 2 have been an increase in multistate collaborations, with other New England states in particular, and an increase in multidisciplinary projects addressing agricultural production and processing issues related to food safety and security.

Programmatic changes since the FY 2000 POW for NGA 2 include the following:

New Programs Offered in NGA 2

- Germ City – in FY 200, an interactive food safety program curriculum focusing on proper hand washing as a safe food practice was developed and tested, and is now being used in venues around the state.
- Interactive Food Safety Program for Middle School Children – Development and testing of a web-based nutrition and food-safety curriculum that is aligned with state academic standards for schools begins in FY 2004.
- Garden to Table: Food Safety Practices of Home Gardeners – along with five other New England states, personnel work with home gardeners using Master Gardener methodology. The first step will be to develop a survey instrument designed to assess the knowledge of and attitudes toward Good Agricultural Practices by home gardeners.

Programs Reduced in Scope, Extinguished or Moved from NGA 2

- People Grow – organized collaboration with food, nutrition, and hunger organizations to address food security issues and programs in two Vermont communities has not yet come to fruition, although collaborating with other organizations, and limiting the scope to providing expertise, has helped to bring this about for the largest Vermont community.
- Safe Food for the Hungry – concept of educating limited-income people about safe food handling practices have been incorporated into other programs offered through NGAs 2 and 3.

Other Changes Projected for NGA 2 – no other shifts in focus are planned for the period.

NGA 3: A healthy, well-nourished population

Effort toward NGA 3 actually shows an upward trend that is expected to level off for the FY 2005 to FY 2006 period. Personnel working in NGA 3 have increased focus on youth and senior populations, work with an identified at-risk population otherwise potentially omitted from programs (people predisposed to or diagnosed with diabetes), and partnered with other agencies to expand their reach to additional limited-income populations.

Programmatic changes since the FY 2000 POW for NGA 3 include the following:

New Programs Offered in NGA 3

- Senior Farm Share – beginning in FY 2002, low-income Vermont seniors who live in subsidized housing receive fresh produce from participating CSA farms and nutrition education related to storage, preparation, and consumption of the produce.
- 4-H Growing Connections – beginning in FY 2002, this curriculum was developed and pilot tested to assist youth from limited-income families to improve nutrition-oriented and food safety behaviors; the program is being expanded into after-school programs around the State of Vermont.
- Healthy Eating Activities – Long-term, intensive education to adults via one-on-one home visits and group classes provided by trained paraprofessionals supervised by a nutrition professional, and volunteers. Education focuses on topics most relevant to pregnant women and families with young children, including making healthy food choices, meal planning, food purchasing, food safety, storage, preparation and sanitation. This program merges several nutrition-oriented programs directed toward socially disadvantaged groups, including Making It Fit and ABC's of Good Health. Intended outcomes and performance indicators remain similar to subsumed programs, and better reflect the most current nutritional guidelines.
- Dining with Diabetes -- series of 3 classes (2 hours/class) targeting older adult diabetics and their caregivers to reduce diabetes-related risks through improved food consumption behaviors.

- Healthy Eating, Healthy Aging – an integrated project including an outreach pilot phase will be translated into an outreach program to improve fat, fruit and vegetable intakes for participants identified as consuming amounts that do not correspond to dietary guidelines.
- Healthy Children – a community-based food systems participation and education approach to improve children’s health by addressing issues of food management, body weight, physical activity, and food choices.

Programs Reduced in Scope, Extinguished or Moved from NGA 3

- Making It Fit – concepts submerged into Healthy Eating Activities.
- ABCs of Good Health – concepts submerged into Healthy Eating Activities.
- Food, Fun, and Reading -- development and distribution of curriculum to educators of young children (<8 years) in Vermont and to other states; concepts incorporated into other, more comprehensive programs offered, such as 4-H Growing Connections.
- Team Nutrition – concepts incorporated into other, more comprehensive programs offered, such as 4-H Growing Connections.

Other Changes Projected for NGA 3 – no other shifts in focus are planned for the period.

NGA 4: An agricultural system that protects natural resources and the environment

Effort toward NGA 4 has increased since the development of the FY 2000 POW. Programs will be emphasizing water quality issues in all areas of the state. Water quality education will have a community-wide focus, educating people within neighborhoods and towns, and including all ages in the process. Water-quality education will emphasize a stronger watershed focus, and a greater focus on the Lake Champlain Basin than has occurred in the past. Effort toward wood products-related business development will be reduced, while effort toward natural-resource based tourism-oriented businesses will increase.

Programmatic changes since the FY 2000 POW for NGA 4 include the following:

New Programs Offered in NGA 4

- Natural Resources Public Issues Education Forum- program designed to collaborate with state agencies and non-profits having interests in natural resource issues to communicate effectively, and to provide relevant information to Vermont policy makers and citizens (supplants Sustainable Environment Project)
- VT Natural Resource Based Tourism Industry Development - work collaboratively with businesses to increase the sustainability and success of natural resource-based businesses and address their impact on the natural environment.
- Watershed Alliance – school based program partnering university students, schoolteachers, water quality scientists, and students to improve student understanding of human impacts on watersheds through directed education and water quality monitoring experiences.

Programs Reduced in Scope, Extinguished or Moved from NGA 4

- Aquaculture and Water Quality Education – aquaculture portion of this program removed; focus has shifted to community- and watershed-based water-quality education programs.
- Sustainable Environment Project – program designed to collaborate with state agencies and non-profits having interests in natural resource issues to communicate effectively, and to provide relevant information to Vermont policy makers and citizens (now being accomplished through Natural Resources Public Issues Education Forum).

- 4-H Volunteer Leadership Training – moved to NGA 5 to reflect corresponding performance indicators being measured.
- Value-Added Wood Products – program designed wood processors and products manufacturers to identify and utilize new markets for products will be discontinued.
- Sustainable Processing and Use of Wood Resources – program designed to improve the environmentally sound use of wood resources will be discontinued.

Other Changes Projected for NGA 4

- During FY 2004, we will lose 1.6 FTEs working in NGA 4. As a result, foci will shift away from well water testing to more lake-oriented community level issues associated with water quality. Additionally, effort toward the development of wood processing skills and value-added wood products will be reduced or removed temporarily. The latter of these has been moved to NGA 5, due to the corresponding alignment of outcome indicators measured.

NGA 5: Enhanced economic opportunity and quality of life for Americans

Effort toward NGA 5 has increased significantly as a proportion of total effort. NGA 5 has undergone more dramatic shifts, as more effort has shifted toward youth- and youth-adult partnership-oriented programs. Shifts have been made in response to citizen advisory, external expert, and internal requests. Personnel working with 4-H have taken on new roles to address after-school issues for children and youth using the 4-H Club method and curricula. The traditional 4-H Leadership Training approach has been replaced by a new model that has 4-H educators working one-to-one and in small groups with 4-H volunteer leaders and 4-H foundation and camp boards. This method is providing more consistency and appropriate support for 4-H leaders, and is improving the effective inclusion of youth on decision-making boards.

New Programs Offered in NGA 5

- 4-H After-School Program – program working with schools to incorporate 4-H curricula and the 4-H club model to improve achievement of life-skills oriented goals for youth participating in after-school programs.
- Youth Adult Partnership – program working with community boards to increase the effective inclusion of youth on boards.
- Migrant Education Program – program to assist youth of agricultural, and often transient, workers to secure eligible support toward attaining educational goals.
- Becoming an Outdoor Family – weekend camping program designed to strengthen family opportunities to engage in healthy recreation through experiences in and awareness of the natural environment.
- Forests, Fields, and Futures – program directed to improving engagement and academic achievement of at-risk middle school youth through school-based trail-building experiences and skill-building opportunities.

Programs Reduced in Scope, Extinguished or Moved from NGA 5

- Women's Agricultural Network – moved to NGA to better correspond to program objectives.
- Stewardship of the Urban Landscape/ Community Involvement Projects – program designed to improve citizen leadership toward realizing natural resource stewardship-oriented community goals was discontinued with change in personnel during FY 2003.
- H₂O Quality Survival Series – concepts incorporated into Watershed Alliance and other water quality program in NGA 4.

- Bowen Family Systems Research – workshops to improve family dynamics; determined not to feasibly correspond to UVM Extension priorities identified for NGA 5; replaced by Youth Adult Partnership program (see above)
- Babysitting Program – after FY 2004, we will supply materials to trained educators, but will no longer lead trainings.
- Life Skills Education – concepts incorporated into 4-H youth activities.
- Marriage and Couple Education – determined not to correspond to priority shifts toward youth
- VT Money 2000 Plus – adult-oriented money-management program discontinued due to change in personnel and does not correspond to priority shifts toward youth.
- Brattleboro Mentoring Program – program to assist unemployed people in entering or re-entering the workforce determined not to correspond to priority shifts toward youth.
- Getting Ready to Work – program to assist limited income adults transition from welfare to work determined not to correspond to priority shifts toward youth.
- Community Business Matching – similar program (Jobs Coaching) to be initiated in FY 2004.
- International Trade Education – marketing and export counseling for Vermont-based businesses has focused on agricultural enterprises; concepts included in business activities in NGA 1.
- Workforce Development Starter Kit – program to develop youth entrepreneurship not continued, but concepts are incorporated into several agricultural career-oriented youth education programs.
- Active Parenting – training volunteer instructors to teach parenting and positive discipline skills; being discontinued during FY 2004 due to personnel changes.

Other Changes Projected for NGA 5

- 4-H Leadership Training -- being replaced by an updated model for leadership training called Cohesive Statewide 4-H Leadership Program that emphasizes one-on-one and small group meetings and cross-state consistency for identified club activities and achievement goals; incorporates Washington Life Skills Evaluation System to standardize life-skills outcome performance measures.
- 4-H Camp Board Development and Counselor Training – being replaced by updated model for leadership training with a program entitled Youth Adult Partnership, where UVM Extension personnel work with 4-H and other community boards to increase the effective inclusion of youth on boards; recognizes youth as contributing decision-makers for today, and not just the future.

Integrated Programs

Funding for integrated programs has increased from \$532,660 in FY 2000 to \$877,741 in FY 2004. Budget constraints require slight funding reductions to \$800,000 in FY 2005 and \$750,000 in FY 2006. The competitive process for obtaining funds for integrated projects will continue to ensure that projects target priorities in each of the NGA's.

Multistate and Multi-Institution Programs

An increase is expected in the number and proportion of programs involving coordinated collaboration with other states and other institutions. Trends are expected in all NGAs and have already occurred in NGAs 1, 2, and 4. Funding for multistate programs has increased from \$140,186 in FY 2000 to \$506,340 in FY 2003. Funding is expected to level off during the FY 2005 – 2006 period to approximately \$500,000 each year.

Stakeholder Input

UVM Extension has recently implemented a process for incorporating targeted input by advisory groups to guide program direction and cost-recovery efforts through the use of tools based on questions and

criteria developed to rate program alignment with mission, audience reach, program effectiveness, program uniqueness, and cost-benefit analyses. Information will be used to determine whether projects will be established, expanded, reduced, or eliminated during the FY 2005 – 2006 period and beyond, as well as to determine appropriate expectations for cost recovery.

Process Review Changes

UVM Extension uses a revised outcomes-based program development model and standardized reporting and review process tied to faculty and staff evaluations. Details of the model, process, and the annual chronology of events are included in Vermont's FY 2003 Annual Report of Accomplishments for CSREES-AREERA.