



**LOGIC MODEL - 2<sup>ND</sup> Draft**  
**UNHCE AGRICULTURAL RESOURCES PROGRAM**  
**AUGUST, 2003**

**Situation:** Agriculture remains an important part of life in New Hampshire. NH's agriculture is very diverse encompassing a wide variety of crops, livestock, and specialty products. A recent NH Department of Agriculture, Markets, and Food's report states that NH has over 3100 commercial farms whose collective production is valued at over \$700 million. Ornamental horticulture which includes greenhouses, nurseries, turf, and landscaping makes up over \$380 million of that total. Specialty & processed food products are valued at \$125 million; Dairy & livestock, \$66 million; Horses, \$50 million; Fruits and vegetables, \$31 million; Hay & other forage crops, \$28 million; Christmas trees, maple, & honey, \$9.5 million. In other words, NH's agriculture provides both "Food for the Body," through its diversity of food production and "Food for the Soul," through its production of beautiful flowers, shrubs, and turf.

In addition to its economic value, NH's agricultural activities provide the fields, pastures, meadows and trees that buffer NH's residential and commercial development and afford the views of the hills, valleys and mountains that attract thousands of tourists. As NH becomes increasingly urban, there is an attendant interest in the benefits associated with agriculture. Agriculture offers such public benefits as providing wildlife habitat, landscape amenities, improving water quality, nutrient recycling, flood control, and carbon sinks. Agriculture also provides opportunities for hunting, recreation, agro-tourism, and agro-entertainment as well as being a major factor for maintaining the highly valued rural character of our towns and state.

UNHCE is considered the critical educational resource for the majority of the state's agricultural producers. A just completed survey by the NH Horse Council found that over 60% of the respondents considered UNHCE to be their #1 source of agriculturally related educational information. Traditionally UNHCE's agricultural programs have focused on production and farm profitability. However, as NH's population increases, issues such as land use, resource conservation, water quality, nutrient management, and food safety are having a significant effect on NH's agricultural producers. These issues not only affect the way producers operate, they also create high stress which negatively affect the quality of life for producers and their families. UNHCE has increased its programming to address these issues; however, it is clear that UNHCE needs to continue to strengthen its capacity in programming that impact social as well as production issues.

**Assumptions:**

- The sustainability of agriculture in NH requires a holistic approach that interfaces production issues, human resources issues, civic policies, environmental issues and economic issues. All must be addressed at some level.
- County Extension Ag Educators will be conversant and responsible for conducting programs in all aspects of agriculture in their respective counties. They will be encouraged and supported to develop one or more specialty areas for state-wide programming, i.e. fruits & vegetables, agronomic crops, holistic farm management, nutrient management, greenhouse production.
- Specialists will continue to provide leadership and support in their specialties to county staff. They will provide leadership to both "commodity" and "issue" programming teams made up of both county educators and specialists.
- The necessary data will be generated and used to develop, implement, and evaluate a Plan of Work(POW) based on this logic model

**External Factors:**

- New methods and approaches are being asked for UNHCE administration regarding the formation of long term programmatic visions, the allocation of available resources, and the format that programs are presented in. The logic model above is in response to these new directions.
- Funding sources are requesting or requiring the following: an articulated strategic plan/vision, documented impacts and achievements, an understanding of the interconnectedness of the elements in a long term program, and illustrations of grass roots participation in the development and implementation of Cooperative Extension programs.

**Barriers to Successful Implementation:**

- Reductions in UNHCE ag staff, particularly key specialist positions
- Need for continued training of ag staff not only in production technology but also in group process and holistic problem solving techniques.
- Federal and State policies that constrain agriculture (e.g. slaughter house regulations, certain ordinances, etc)
- Lack of necessary infrastructure necessary for successful agricultural businesses.
- Loss of land to development

**Stakeholders:**

NH's agricultural producers and their organizations, federal and state agencies, civic boards and organizations, political bodies

INPUTS	OUTPUTS		OUTCOMES		
	Activities	Audiences	Learning/Knowledge	Action/Implementation	Terminal (Impact After Completion of Programming Efforts)
<ul style="list-style-type: none"> <li>▪ A staff consisting of individuals who have different specialized proficiencies and skills, working together as a team to meet the evolving needs of the state's agricultural community.</li> <li>▪ Financial resources including: <ul style="list-style-type: none"> <li>○ SARE grants</li> <li>○ NH Dept of Ag grants</li> <li>○ IR4 money</li> <li>○ Etc...</li> </ul> </li> <li>▪ Specialists in critical positions (<i>*Focused needs assessment needed here</i>)</li> <li>▪ Expertise from UNH System</li> <li>▪ Regional Expertise</li> <li>▪ Etc.</li> </ul>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people.</i></p>	<p><i>Commercial Ag Producers including:</i>  - full &amp; part-time  - dairy, lvst., agron. cr ops, game animals  - fruit &amp; vegetables  - greenhouse, nursery, turf</p> <p><i>Non-commercial Ag including:</i>  - home horticulture  - municipalities (schools, park &amp; rec depts.)</p> <p><i>Organizations and Agencies including:</i>  - Federal &amp; State agencies  - commodity organizations  - NH Farm Bureau  - Beginner Farmers</p>	<p>Our audiences learn the necessary information that allows them to implement the outcomes in the next column and increase their awareness about resources to support these implementation efforts.</p> <p><i>(* Focused needs assessment is necessary to identify current level of producers knowledge and to develop appropriate educational materials that will succeed in building their skill level to the point that they can implement this knowledge base. Also important is data on how producers will best learn this information)</i></p>	<p>Our audiences are implementing business management practices that:</p> <ul style="list-style-type: none"> <li>• Increase labor efficiency</li> <li>• Enhance decision making</li> <li>• Generate and use pertinent data</li> <li>• Market products/services in ways that increase profits</li> </ul> <p>Our audiences are using production methods that are sustainable socially, economically, and environmentally. Sustainable practices include:</p> <ul style="list-style-type: none"> <li>• New/improved technologies</li> <li>• New/improved practices <ul style="list-style-type: none"> <li>○ Nutrient management</li> <li>○ Integrated Pest Management</li> <li>○ Weed management</li> <li>○ Integrated Crop Management <ul style="list-style-type: none"> <li>▪ Cover cropping</li> <li>▪ Crop rotations</li> <li>▪</li> </ul> </li> <li>○ Crop/product diversification</li> <li>○ Pasture management</li> <li>○ Composting/ag waste and manure management</li> </ul> </li> <li>• Sound agricultural structures</li> <li>• Risk Management <ul style="list-style-type: none"> <li>○ Tax planning</li> <li>○ Whole Farm Planning</li> <li>○ Intergenerational transfer of assets</li> <li>○ Crop Insurance, CSA</li> </ul> </li> </ul> <p>Agricultural producers are implementing actions that increase their physical and emotional well being.</p> <p>Agricultural organizations are active and capable of offering support to agricultural communities.</p>	<p><b>New Hampshire has a healthy agricultural industry and community.</b></p>

<p>See above</p> <p>Yearly Ag statistics</p> <p>Ag census information</p> <p>Soft ware to procure and/or analyze information. (See Charlie French for details)</p> <p>Communication skills</p> <ul style="list-style-type: none"> <li>▪ Peg Boyles' talents</li> <li>▪ Holly Young's talents</li> <li>▪ Faye Cragins' talents</li> <li>▪ Steve Judd's talents.</li> </ul> <p>Data Mining skills</p> <ul style="list-style-type: none"> <li>▪ Charlie French's talents</li> </ul>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people.</i></p> <p>Data collection and analysis to achieve the outcomes listed to the right. This might include factual packets, research results featuring cost comparisons, etc.</p>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people.</i></p>	<p>Agricultural professionals and agricultural support groups (e.g. UNHCE, USDA Agencies, The NH Coalition for Sustaining Ag, Master Gardeners, etc) learn how to effectively communicate with a variety of different audiences. (Peg and Faye and Steve Judd, etc).</p> <p>UNHCE Administration and ag staff are transferring information on the value of agriculture to members of the state legislature (Paul BK, COAs, ag staff, etc.)</p> <p>UNHCE staff and support staff to these individuals learn how to use databases to extract and present data to a variety of audiences.</p>	<p>Agricultural professionals and agricultural support groups (e.g. UNHCE, USDA Agencies, The NH Coalition for Sustaining Ag, Master Gardeners, etc) are disseminating factual information to citizens and decision makers at levels throughout the state. And...</p> <p>Television, radio and other media outlets are featuring programs that convey how agriculture is critical to the state's economic, social and environmental well being. And...</p> <p>Regular communication is taking place with members of policy setting bodies. Resulting in...</p> <p>Boards, commissions and other public decision makers are implementing actions and policies that enhance agriculture's viability. And...</p> <p>NH's citizens are supporting their state and local ag communities.</p>	<p><b>New Hampshire has a healthy agricultural industry and community con't.</b></p>
--	---	--	--	---	--

See above	See above	See above	<p>Decision makers at both the local and state level increase their knowledge of “farm friendly” legislation, policies, and physical infrastructure that sustain agriculture and preserve natural resources.</p> <p>UNHCE ag staff learns processes to collect information that identifies critical farm friendly legislation, policies, and physical infrastructure that enhance are necessary to sustain agriculture and preserve natural resource.</p>	<p>.</p> <p>Processes are implemented that identify legislative policies and physical infrastructures to sustain agriculture and preserve natural resources.</p> <p>Information generated by UNHCE ag staff is used by collaborating groups to communicate with decision makers.</p> <p>Decision Makers use their increased knowledge to implement “farm friendly” legislation.</p>	<p>New Hampshire has a healthy agricultural industry and community con't.</p>
-----------	-----------	-----------	---	---	---

<ul style="list-style-type: none"> <li>▪ A staff consisting of individuals who have different specialized proficiencies and skills working together as a team to meet the evolving needs of the state's agricultural community.</li> <li>▪ Financial resources including: <ul style="list-style-type: none"> <li>○ SARE grants</li> <li>○ NH Dept of Ag grants</li> <li>○ IR4 money</li> <li>○ Etc...</li> </ul> </li> <li>▪ Specialists in critical positions (<i>*Focused needs assessment needed here</i>)</li> <li>▪ Expertise from UNH System</li> <li>▪ Regional Expertise</li> <li>▪ Etc.</li> </ul>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people</i></p>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people</i></p>	<p>Agricultural producers and other NH citizens learn the necessary information that allows them to implement the outcomes in the next column and increase their awareness about resources to support these implementation efforts.</p> <p><i>(* Focused needs assessment is necessary to identify current level of producers knowledge and to develop appropriate educational materials that will succeed in building their skill level to the point that they can implement this knowledge base. Also important is data on how producers will best learn this information)</i></p> <p>Testing/monitoring practices are taught to schools, conservation commissions, watershed groups, conservation districts, Master Gardeners, Lake Associations, etc. to evaluate soil and water quality.</p> <p>NH citizens increase their knowledge of practices that protect shorelines.</p>	<p>Agricultural producers and other public and private land owners/ managers are using production methods that will sustain the farm economically and environmentally. Sustainable practices include:</p> <ul style="list-style-type: none"> <li>• New/improved technologies</li> <li>• New/improved practices <ul style="list-style-type: none"> <li>○ Nutrient management</li> <li>○ Integrated Pest Management</li> <li>○ Integrated Crop Management <ul style="list-style-type: none"> <li>▪ Crop strips</li> <li>▪ Cover cropping</li> <li>▪ Crop rotations</li> <li>▪ Weed management</li> </ul> </li> <li>○ Crop/product diversification</li> <li>○ Pasture management</li> <li>○ Composting/ag waste and manure management</li> </ul> </li> <li>• Sound agricultural structures</li> <li>• Shore land buffer zones</li> </ul> <p>Soil and water quality testing and monitoring is done to generate data showing the quality of the resource and/or the impact of an action on the soil and water quality.</p> <p>NH citizens who live &amp;/or work near water bodies are implementing practices that protect shorelines.</p>	<p>There will be an increased number of sustainable practices implemented on farms and other public and private lands that result in improved soil, air and water quality</p>
---	---	---	---	---	---

<p>Open and active communication system with USDA Agencies, NH Dept of Ag staff and other agricultural support organizations.</p>	<p>A systematic communication system is developed to identify and effectively communicate with USDA Agencies, NH Dept of Ag staff and other agricultural support organizations</p>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people</i></p>	<p>USDA Agencies, NH Dept of Ag staff and other agricultural support organizations will increase their awareness and knowledge about the resources UNHCE has to bring to a collaborative effort.</p>	<p>USDA Agencies, NH Dept of Ag staff and other agricultural support organizations rely on UNHCE for educational materials, educational methods and expertise that help them fulfill their mission of supporting and strengthening NH's agriculture.</p>	<p>There is strong collaboration and cooperation between UNHCE, NHDAMF, USDA and other agricultural support organizations and UNHCE is recognized by them as the critical educational resource for NH's agriculture.</p>
<p>See above</p>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people</i></p>	<p><i>*To be identified by ag staff using processes that captures their knowledge base and the knowledge of stakeholders, program participants, and other relevant people</i></p>	<p>Agricultural producers learn the necessary information that allows them to implement the outcomes in the next column and increase their awareness about resources to support these implementation efforts.  <i>(* Focused needs assessment is necessary to identify current level of producers knowledge and to develop appropriate educational materials that will succeed in building their skill level to the point that they can implement this knowledge base. Also important is data on how producers will best learn this information)</i></p>	<p>Agricultural producers are reducing stress and anxiety by using management strategies including:</p> <ul style="list-style-type: none"> <li>• Increase labor efficiency</li> <li>• Enhance decision making</li> <li>• Generate and use pertinent data</li> <li>• Markets products/services in ways that increase profits</li> <li>• Tax planning</li> <li>• Whole Farm Planning</li> <li>• Intergenerational transfer of assets</li> <li>• Crop Insurance, CSA</li> <li>• Product Diversification</li> </ul> <p>Agricultural producers are implementing actions that increase their physical and emotional well being (e.g. regular exercise, vacation/rest, etc).</p> <p>Agricultural organizations are active and capable of offering " quality of life" support to agricultural producers.</p>	<p>Agricultural producers have an improved quality of life.</p>

**Explanation: The different fonts correlate with the different terminal outcomes.**