Hurting NC’s Local Food Harvest

The Unintended Consequences of Federal Food Safety Legislation on North Carolina’s Small Agricultural Enterprises

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Carolina Farm Stewardship Association

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Executive Summary

1. North Carolina has experienced significant growth in small-scale value-added agriculture over the last decade, thanks in part to significant support from state government. Through its tobacco Master Settlement Agreement funds and other programs, North Carolina has invested at least $42 million since 2000 in small farms and new food businesses.

2. The local food economy will be hurt by the current versions of new food safety bills in Congress, even though it is not the source of the nation’s food safety crisis. S.510, The Food Safety Modernization Act, clearly increases FDA authority over small-scale value-added agriculture businesses. The potential impact of that oversight may be considerable, even though those businesses are not the source of the vast majority of illnesses that S.510 targets. Costs to comply for North Carolina small businesses could include 150 hours in labor and $9,500 in consulting and testing expenses per year. These and other costs for complying with one-size-fits-all food safety rules could force many small farms and food businesses to abandon value-added markets. The significant likelihood of unintended consequences from this FDA regulation means that many jobs and farms stand to be lost.

3. To avoid this outcome for NC agriculture and rural communities, it is vital for the legislation to include sensible protections for these value-added businesses. Those protections must include: (a) requirements for FDA to develop safety-related rules specifically tailored to small farms and food businesses that reflect the lower safety risk of those operations; (b) and creation of a USDA training program for those lower risk businesses to enhance their capacity to protect customers.
Part I: NC’s $42 Million Investment in Value-Added Agriculture

North Carolina’s small farms and small food processing businesses—creameries, bakeries, canneries, coffee roasters, etc.—make up the state’s value-added agriculture industry. Value-added ag enterprises are businesses that enhance agricultural incomes, whether the business is run by a farm owner or by an independent entrepreneur. They create opportunities for the grower to capture more of the income from the final sale of an agricultural product to the consumer.

North Carolina’s culture of small and medium-sized farms remained strong when tobacco was the state’s dominant crop, as the high prices the golden leaf fetched gave any size operation a reliable opportunity to make a profit. The decline of the tobacco industry has lead to rapid losses of farmland¹ and contributed to lower income levels in rural communities.² Fortunately, our state’s leaders have recognized this threat to the quality of life of so many North Carolina families.

Our institutions have been actively investing in value-added agriculture to help farmers and rural communities maintain and regain vitality. The opportunity for higher farm incomes from value-added agriculture is a natural fit for communities that still have a wealth of agricultural resources.

Since 2000, North Carolina’s two tobacco Master Settlement Agreement funds have invested $34 million into local, regional, and statewide value-added agriculture enterprises and programs. These awards have also been leveraged to attract federal and private funding to support these and other projects.

- The Golden Leaf Foundation has awarded $21 million in grants for 157 agriculture and food enterprise development programs since 2000.³
- The Tobacco Trust Fund has awarded $12.9 million to value-added ag enterprises since 2002.⁴
- The Department of Agriculture and Consumer Services has complemented those investments with $2.7 million in agricultural economic development grants over 2 grant cycles.⁵
- The University of North Carolina system has attracted significant national funding for value-added agricultural enterprises in recent years as well, including over $3.2 million from the Kellogg Foundation for local food system work at North Carolina State and North Carolina A&T State Universities⁶, and approximately $2 million from the USDA for organic plant breeding at North Carolina State.

See Appendix I for a partial list of the some of the nearly 200 the value-added ag enterprises supported by North Carolina’s tobacco Master Settlement Agreement funds

North Carolina has made expanding this sector a policy priority. In 2009, the state Legislature established a Sustainable Local Food Advisory Council⁷ to promote value-added agriculture and food entrepreneurship. The Council is chaired by Agriculture Commissioner Steve Troxler, and the vice-chair is Dr. Nancy Creamer of North Carolina State University. One of the Council’s legislative mandates is to identify regulatory barriers to the growth of value-added agriculture and recommend changes in the law. The state’s Fresh Produce Safety Task Force⁸ focuses its research and training on produce safety for the small farm sector.

¹ NC leads the nation in farm loss, with 1.6 million acres lost since 1990, and 6,000 farms lost since 2002. www.ncadfp.org
² North Carolina Rural Economic Development Center, Rural Data Bank, www.ncruralcenter.org
⁷ www.ncagr.gov/localfood/
⁸ www.ncmarketready.org/ncfreshproduc safet y/taskforce.html.
Expansion of Value-Added Processing Facilities for Micro-Enterprises

The establishment of shared-use commercial kitchen facilities in North Carolina has been one of the most prominent means of support for local food entrepreneurship because of their potential to “provide a means to retain economically viable, thriving farms.” These facilities provide access to equipment and services that farmers and food entrepreneurs use to make locally-produced foods. By making available government-inspected cooking and food storage facilities, these institutions create the opportunity to increase farm and food production income without increasing capital investment.

The number of these facilities is growing. At present, North Carolina has four such publicly-funded kitchens in operation, located in Anson, Buncombe, Graham, and Rockingham Counties. Additionally, three more such facilities are in development: One is scheduled to open in Orange County in November of 2010, while those in Duplin and Warren Counties have been approved for establishment by community agencies. County governments estimate that the gross profits for farmers using the Orange County facility will reach $2.65 million per year.

These facilities can bring millions of dollars into local economies. Blue Ridge Food Ventures in Candler is an 11,000 sq. ft. shared-use food processing facility and was the first of one these facilities to open. The facility provides services to those wishing to start or grow small businesses in the food industry and to local farmers who want to add value to their products through processing in an FDA-inspected kitchen. Since its start in 2005, western North Carolina farmers and entrepreneurs have sold more than $3 million in products processed at the facility. Currently, 60 businesses operate out of the facility on regular or seasonal schedules.

Small farms are big winners. Blue Ridge Food Ventures helps preserve and support local farms through its Farm Outreach Program. “We’ve helped farmers develop ways to process their highly perishable largess into products that they can put in a jar or the freezer – products they can sell throughout the year to the increasing number people who appreciate the importance of knowing the folks who grow their food,” says facility director Mary Lou Surgi. One farm operator uses the facility to produce 15,000 jars of jams and jellies per year, which are distributed in retail stores in western North Carolina; this has allowed the farm to unlock significant value from fruit production that does not meet fresh market standards.

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9 Durham Board of County Commissioners, Resolution to Support a Piedmont Regional Shared Use, Value Added, Food and Agricultural Processing Center, Monday, adopted May 12, 2008.
Value-Added Ag Driving Growth in NC’s Economy

Production of food crops that fall within FDA’s jurisdiction is a major source of income for North Carolina’s small farm sector. USDA 2007 Census of Agriculture data shows that:

- **NC has 45,000 small farms**, and 91% of the state’s farms gross under $50,000/year.
- Farmgate sales of fruits, vegetables and other FDA-regulated crops were **$1.1 billion in 2007**.
- The number of **farms growing fruits and vegetables increased 11%** from 2002 to 2007.
- **North Carolina farmers sold over $52 million worth of organic produce** in 2008.
- **1,429 North Carolina farms are subject to registration with FDA** as on-farm food processing operations. The total number nationally is over 78,000.

A current survey gives more info about small farms subject to FDA regulation. The North Carolina Farm Bureau conducted a series of small farmer listening sessions for produce growers held at 13 locations throughout the state in February and March, 2010 to identify food safety concerns for these growers. The growers’ number one food safety issue across all sessions was concern about unnecessary and redundant regulation.

One-hundred-ninety farm operators completed a survey at those forums, and 85 percent of the farms represented had less than 40 acres in produce cultivation. This cross-section of the state’s small farm sector adds significant data about the economic characteristics and innovative practices of these produce farms:

- **Total employment, full-time and seasonal, for the 190 farms was 1,116.**
- **31% of farms performed on-farm food processing**, as defined by FDA. The products include herbal teas, canned goods, baked goods, frozen goods, frozen fruits/berries, shucked corn, shelled beans, dehydrated goods, pickles, jams & jellies, relishes, molasses, vinegars, honey, sorghum syrup, maple syrup, salad mix, sauté mix, apple butter, cider, grape juice, and sliced fruit.
- **The 58 farms with processing activities employed 344 people.**
- **55% of survey respondents sold some portion of their produce wholesale.**
- **48% raised livestock in addition to produce.**
- **57% relied on raw manure as a fertilizer.** 32% use composted manure.
- **Most small produce farmers raise multiple crops and varieties.** Some listening session participants reported growing over 60 vegetable varieties per year.

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10 Survey data from first 13 farmer listening sessions compiled by Roland McReynolds, Esq., Executive Director, Carolina Farm Stewardship Association.
Part II: S. 510’s Risks for NC’s Investment in Small Farms and Local Food

S.510 greatly increases FDA power over the American food supply, most importantly by granting the agency mandatory food recall authority. These significant consumer protection powers also include the ability to totally shut down a private business’ operations.

The legislation dramatically expands the range of offenses for which FDA can apply these new powers. There are two sections of S.510 of major significance for North Carolina’s small farms and food producers, Sec. 103, Hazard Analysis and Risk-Based Preventive Controls, and Sec. 105, Standards for Produce Safety.

Section 103, Hazard Analysis and Risk-Based Preventive Controls: The bill amends the Food, Drug and Cosmetic Act, and the Bioterrorism Act of 2002 by requiring every business or farm that manufactures food in some way to establish a detailed program for responding to any sort of hazard to the safety of that food. The bill does not distinguish between large, medium and small facilities, and treats some farms that process food as equivalent to industrial food manufacturing plants. For example, a small farm milking goats to supply an on-farm creamery would have to develop, implement, monitor, document and revise a plan for addressing the risk of a terrorist attack on the farm.

The existing law defines food manufacturing broadly, and captures the activities of tens of thousands of farms and small businesses. Although under certain circumstances food processing on a farm is exempt from the current law, those existing FDA regulations are arbitrary and make it very difficult for a farm to expand its markets or respond to changing economic conditions.

This is especially true when the Hazard Analysis and Risk-Based Preventive Controls (HARPC) plan requirement of S. 510 is applied to small farm processing activities. Chris Hardin, P.E., operator of Rivendell Farm in north Mecklenburg County, and an environmental engineer, studied the costs and time required for a small farm to establish a HARPC plan. The analysis shows that a typical small farm doing on-farm processing would need 150 hours to create, implement and monitor the plan, and spend $9,500 per year on consulting and testing costs. If the farm hired a consultant to create the plan, the first year costs zooms to $20,000.

These findings are consistent with the concerns of local and organic farming advocates across the country. One California farm that produces farmstead cheese, vegetables and eggs, Pug’ Leap Farm, has estimated that it would cost their operation 100 hours to develop and implement a HARPC plan, plus two hours per day to maintain it, and $15,000 in annual testing fees. The farm’s annual gross sales are around $100,000 per year.

Section 105, Standards for Produce Safety: The bill takes the unprecedented step of authorizing FDA to enforce rules on how to grow fruits and vegetables at every farm in the nation, no matter how small. Regulators and lobbyists in Washington, DC assert that it is vital for public safety that FDA have this control, but the vast majority of produce-related illness outbreaks are traced to processing facilities, not farms.

11 frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:s510rs.txt.pdf, p. 208, Sec. 207.
12 21 CFR 1.227. The regulations define food processing as “cutting, peeling, trimming, washing, waxing, eviscerating, rendering, cooking, baking, freezing, cooling, pasteurizing, homogenizing, mixing, formulating, bottling, milling, grinding, extracting juice, distilling, labeling, or packaging.”
14 See Appendix II, HARPC Cost Estimate for Rivendell Farms of Huntersville, NC.
FDA already publishes guidelines for fruit and vegetable production, called Good Agricultural Practices (GAPs). Small scale and organic farms report that the application of these guidelines often compromise their ability to operate sustainably.16

Potential Impacts of FDA On-Farm Regulation on Small Farm Viability

The small farm sector in North Carolina will be significantly impacted by the expansion of FDA authority to regulate agricultural production, even though this sector has not had a history of producing major outbreaks of food borne illness. Not only will FDA rules impact how these farmers grow produce, but it will impact their ability to maintain diversified farm income, and impact their ability to manage input costs.

FDA’s existing Good Agricultural Practices (GAPs) guidelines for growing produce treat manure and compost as a major threat to food safety. Use of manure and compost is a well-established practice in agriculture, and is effective in enhancing the health and productivity of soils and crops. While it is known that wild animal and livestock manure can contain pathogenic bacteria, scientists have not shown that there is an actual significant risk that these pathogens can be transferred from manure-treated soil to produce crops.17 GAPs also are based on large-scale monocultural production of fruits and vegetables, such as the biggest produce operations in Arizona, California, Florida, Georgia and other states. This regulatory focus and framework create three threats to small farms’ economic viability:

1. **Loss of livestock as an additional value-added product:** Small farmers often maximize income from their land by integrating livestock production into their operations. Farm Bureau listening session surveys showed that 48% of the participating farms raise livestock in addition to produce, and 21% incorporated livestock into their crop rotation cycle to enhance soil health and pest resistance. **Unreasonable exclusion of these animals for safety purposes will harm farms without increasing the safety of the food supply.**

2. **Loss of organic soil options:** The listening session surveys also showed that manure is an important source of fertilizer for small farms, with 57% using raw manure and 32% composted manure. These fertilizers tend to be less expensive than chemical fertilizers, and scientists and farmers have shown that manures are beneficial for long-term soil improvement. **Burdensome unproven requirements for manure composting will drive up farmers’ costs without improving safety.**

3. **Loss of crop diversity:** A successful risk management strategy for small produce farms is cultivation of multiple crops and varieties. Some listening session participants reported growing 60 different varieties per year or more. **Replicating GAP paperwork for 10, 30 or 60 different crops will create an unreasonable burden because there is no evidence that diversified crop systems are a significant risk for food borne illness outbreaks.**

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16 “Bridging the GAPs: Strategies to Improve Produce Safety, Preserve Farm Diversity and Strengthen Local Food Systems,” Elanor Starmer, Food & Water Watch, and Marie Kulick, Institute for Agriculture and Trade Policy, Sept. 2009.

17 “Safe and Sustainable: Co-Managing for Food Safety and Ecological Health in California’s Central Coast Region,” Dr. Karen Lowell and Dr. Jeff Langholz, Feb. 2010, presented at Produce Safety Project’s Stakeholder Discussion Series, April 2010.
Potential Impacts of FDA HARPC Authority on Farm-Based Processing

Granting FDA power to require HARPC plans for any food facility will have a significant impact on the large number of small farms that have diversified into food processing with the support and encouragement of North Carolina government. It will also act as a deterrent to other farms that might otherwise seek to take advantage of the extensive support network North Carolina has established for small-scale value-added agricultural processing.

1. **Reduced access to wholesale markets.** Under current provisions of S.510, farms engaged in some kind of processing will fall under the HARPC requirement if half or more of their farm income comes from wholesale markets. Thus, our state’s small farms will often be forced to choose what income options to pursue based on the regulatory burdens a particular line of business will trigger, instead of being responsive to market conditions.

For instance, 55% of the farms responding to the NC Farm Bureau listening session surveys sold some FDA-regulated food products wholesale. In any given year, depending on market and growing conditions, a farm serving wholesale markets might find itself on the wrong side of the 50 percent line, and at risk of violating FDA HARPC mandates for any processed foods it produces. Small farmers need to be nimble and take advantage all markets when the opportunities present themselves without worrying if they would be thrown into new regulatory territory.

2. **Reduced job growth due to outsized regulatory requirements.** The Farm Bureau listening sessions also revealed that 31% of respondent small farms currently engage in food processing activities as defined by FDA, and so potentially have exposure to S.510’s HARPC plan requirements. Those 58 farms alone provide 344 seasonal and full-time jobs. This suggests that 8,475 jobs in North Carolina would be affected by S.510’s expansion of FDA power on the 1,429 farms that are currently subject to registration as food facilities.

As referenced above, Chris Hardin, P.E., operator of Rivendell Farm in north Mecklenburg County, and an environmental engineer, studied the costs and time required for a small farm to establish a HARPC plan. The analysis shows that a typical small farm doing on-farm processing would need 150 hours to create, implement and monitor the plan, and spend $9,500 per year on consulting and testing costs. If the farm hired a consultant to create the plan, the first year costs zooms to $20,000. These findings are consistent with the experience of small farms in other states.

**Under these conditions, unintended consequences are likely.** Given FDA’s lack of experience in regulating the huge number of farms in this country that are implicated by any legislation expanding FDA’s HARPC plan power, the threat that a significant number of North Carolina small farms will be negatively impacted is great. Those consequences will include farm closures, job losses and reduced use of the shared-use processing facilities and other value-added production opportunities in which North Carolinians have invested in over $42 million in the last decade.

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18 Examples of on-farm processing included herbal teas, canned goods, baked goods, frozen goods, frozen fruits/berries, shucked corn, shelled beans, dehydrated goods, pickles, jams & jellies, relishes, molasses, vinegars, honey, sorghum syrup, maple syrup, salad mix, sauté mix, apple butter, cider, grape juice, and sliced fruit.

19 See Appendix II, HARPC Cost Estimate for Rivendell Farms of Huntersville, NC.

20 One California farm that produces farmstead cheese, Pug’ Leap Farm, has estimated that it would cost the operation 100 hours to develop and implement a HARPC plan, and $15,000 in annual testing fees. “Small Food Producers Question Greater FDA Powers,” Business Week, Sept. 2 2009, by David Gumpert.
Potential Impacts of Mandatory HARPC Plans on NC’s Food Entrepreneurs

As in the case of on-farm processing, granting FDA power to require a HARPC plan for any food facility will have a significant impact on the small food production businesses that the state of North Carolina has spent the last decade promoting. It will also deter new entrepreneurs that might otherwise take advantage of the extensive support network North Carolina has established for small-scale food production.

NC’s investments in shared-use processing facilities are at risk. Blue Ridge Food Ventures services include cutting, peeling, trimming, washing, cooking, baking, freezing, cooling, pasteurizing, mixing, formulating, bottling, milling, grinding, extracting juice, distilling, labeling, and packaging food, all of which are activities defined by FDA as food processing.

According to the facility director, Mary Lou Surgi, most small businesses using the facility are one to two person operations in the start-up phase of their businesses, typically grossing $50,000 per year or less. Approximately 75 percent of facility users sell more than 50 percent of their products wholesale, and each of those individual producers would be required to have HARPC and food defense plans under S.510’s current language.

Blue Ridge Food Ventures clients would be devastated by mandatory HARPC plan mandate, says Surgi. “They would have to attend HACCP training, and/or hire someone who has, pay them to prepare the plan, and have someone monitor it and keep up with the paperwork. For these 1-2 person operations, having a separate HACCP plan would be so onerous as to put many out of business and keep many others from even trying to start a businesses,” she reports.

As a result, not only will North Carolina have to mothball major investments that state and local agencies have made in shared-use facilities, but $3 million in annual local food sales in Asheville alone will disappear.

Small businesses are not a significant food safety risk. In North Carolina, we have a strong system of enforcement for existing FDA and state food safety law, which has performed well in protecting public health without stifling entrepreneurship. Nationally, food processing operations with fewer than 20 employees make up 69% of all operations but account for just 4% of the value of processed food shipments; 77% of the value of shipments comes from the 12% of plants with over 100 employees.21

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21 USDA Economic Research Service reports
Part III: Legislative Alternatives to Protect NC’s Investment in Value-Added Agriculture

Political wits often quip that the “Law of Unintended Consequences” will never be repealed. While FDA staff expressly assert that they do not intend to put anyone out of business through new food safety regulation, the breadth and scope of the new FDA powers under S. 510 will inevitably lead to unforeseen negative impacts on value-added agriculture in North Carolina. The state’s huge investments in this sector, and the jobs at stake, are at risk from excessive and arbitrary regulation.

It makes sense for Congress to include protections for farms and small food businesses to reduce the impact of S510 on these entities, the people they employ, and economic growth. While no legal framework will be perfect in design or application, certain improvements in the statutory language would provide better protection for value-added agriculture without compromising public safety.

Reduce the regulatory burden on low-risk small farms and food businesses. FDA should identify actual risks in food production and processing systems and activities before writing risk-control regulations. This is essential to avoiding one-size-fits-all regulation that burdens small farms and businesses with the same expensive compliance and paperwork requirements as the largest farms and food factories. There are several necessary revisions to S. 510 to achieve this goal:

1. Congress must make FDA identify low-risk processing activities at small farms and food businesses, and exempt those low-risk entities from HARPC requirements. Congress should consider exempting entities with annual revenues or gross profits below $500,000, or those with a 20 or fewer full-time equivalent employees, from compliance with Sec. 103 of S.510. Existing state and federal regulations already police food processing in North Carolina.

2. Congress must allow for commonsense recordkeeping. Food safety legislation must exclude products sold directly by farmers to consumers, restaurants and retailers from cumbersome systems of nationwide produce traceability such as bar coding schemes. Any product marketed based on the identity of the farm where it was grown or manufactured (identity-preserved farm marketing) should also be excluded. No business or farm should be required to keep records beyond what is necessary in the ordinary course of its successful operation.

3. Congress must require scientific evidence to support any FDA standards for growing produce. The state of the science of pathogen transfer points most heavily at large-scale processing and distribution as the primary risk area for contamination, not farms. FDA should not: limit the ability of family farms to use manure or compost; reduce those farms’ ability to have working animals and livestock; require them to have expensive and unreliable testing programs; or impose costly and fallible wildlife control measures, without proving such measures will in fact reduce the risk of pathogen contamination of the food supply.

Establish and fund safety education for farmers and entrepreneurs. Small farms and food businesses want to take the best possible care of their customers. Indeed, because the marketing of value-added agricultural products is relationship-dependent, these operations have more to lose from being linked to an outbreak of food borne illness than large food manufacturers.

Small farms and food entrepreneurs seek out sources of information, including Cooperative Extension, industry associations and conferences, on how to improve their practices. Empowering these businesses with the most up-to-date, accurate scientific information on pathogen control allows them to take that information and apply it to the unique conditions of their own operations.
To build on this effective market mechanism, federal food safety legislation should include the creation of a U.S. Department of Agriculture training program for those lower risk businesses, to enhance their capacity to protect their customers and the public. Sen. Stabenow of Michigan has proposed S. 2758, the Growing Safe Food Act, which establishes such a program and allocates $50 million in funding annually. This is a small investment to make in a safer food system. Adding $2 million-worth of annual federal support for food safety training in North Carolina would safeguard the state’s $42 million in investments in value-added agriculture so far.
Part IV: Conclusion

North Carolina’s citizens, farmers and leaders have made a commitment to growing our state’s economy through small scale and value-added agriculture and food production. After a decade of investments, the state is experiencing job growth and innovation in the local and sustainable food sector, and this growth helps preserve farmland, protect the environment, and provide healthy food to families. The state is a trendsetter in the creation of healthy local agricultural economies.

Federal food safety legislation can either promote or hinder that success story. There have been horrible abuses in large scale industrial food processing that have caused widespread outbreaks of food borne illness, and it makes sense for the FDA to crack down on these abuses. But without the commonsense amendments identified in this paper, new federal law will capture healthy, low-risk local farms and food providers in its net.

New and arbitrary regulatory hurdles for local food systems would bring a halt to the sector’s growth, and cause losses of jobs and farmland. They would ultimately reduce food safety by making us more reliant on highly centralized corporate processing and distribution systems, the very systems that are the cause of most incidents of food borne illness.

North Carolina is leading the way in growing vibrant healthy communities through value-added agriculture. The growth of this kind of food and farming is possible because of the huge demand among consumers for locally-grown, locally prepared, healthy foods. Our leaders should protect the state’s $42 million investment in its food, its economy and its people and support protections for small farms and food entrepreneurs in federal food safety legislation.
APPENDIX I

Examples of Value-Added Ag Investments by NC’s Tobacco Master Settlement Agreement Funds

Below is a list of examples of the nearly 200 the value-added ag enterprises supported by North Carolina’s tobacco Master Settlement Agreement funds.

- Agribusiness Center at Mount Olive College
- Agriculture Entrepreneurship Workshop Series at Elizabeth City State University
- Alternative Markets for North Carolina Grain Growers, NC Agricultural Foundation
- Black Farmers Economic Enhancement Project
- Buy Haywood Market Development Project, Haywood County
- Columbus County’s Joint Initiative to Expand Agriculture Markets
- Dillsboro Alternative Agriculture and Native Botanical Product Development Facility
- East Carolina Agriculture and Education Center in Edgecombe County
- Eastern Carolina Organics in Chatham County
- Edible Mushroom Farming: A Cash Crop for the Future, NC A&T State University
- Farmers Fresh Market Program, Foothills Connect Business and Technology Center
- Food Bank and Farmer Joint Planning Initiative
- Goat Milk Cheese Processing Cooperative, Johnston County Cooperative Extension
- Growing Sustainable Agricultural Enterprises in Rural North Carolina, Natural Capital Investment Fund
- Harnett Area Agriculture Exhibition & Food Processing Center
- NC Specialty Crops Program, NC State University
- Oxford Wholesale Produce Auction in Granville County
- Tobacco Communities Reinvestment Project, Rural Advancement Foundation International
APPENDIX II

HARPC Cost Estimate for NC Small Farms

Note: To prepare this report, Chris Hardin, PE, analyzed the Hazard Analysis and Critical Control Points Principles (HACCP) and Applications Guidelines as prepared by the National Advisory Committee on Microbiological Criteria For Foods. Because this HACCP guidance is substantially similar to the Hazard Analysis and Risk-based Preventive Controls (HARPC) plan that will be required under any new federal food safety legislation, Mr. Hardin’s time and expense calculations for a HACCP program are applicable to pending HARPC programs.
April 12, 2010

Ms. Kate Fitzgerald
National Sustainable Agriculture Coalition
110 Maryland Avenue NE, Suite 209
Washington, DC 20002

Dear Ms. Fitzgerald:

As requested, I have reviewed the Hazard Analysis and Critical Control Points Principles and Applications Guidelines as prepared by the National Advisory Committee on Microbiological Criteria For Foods. It is a 57 page “summary” document that has numerous testing, recordkeeping and measurement requirements – most of which are beyond the capabilities of small farmers using sustainable methods.

Since this estimate may be reviewed by others, some background information about my professional expertise as a farmer and environmental engineer may be helpful. My family has been using sustainable farming methods for approximately 12 years. We started as sharecroppers living in a neighborhood in response to health issues in my wife and children and a desire to have healthier food. I am a full time environmental engineer and a part time farmer of grass-fed beef, range-fed chickens, fresh ground wheat bread, and organic/natural vegetables. My wife is a full time farmer, and part time teacher of autistic children. We have four children who help out extensively with the farm chores and selling the excess from our family operation. We run a community supported agriculture (CSA) operation and sell/rent several shares in our farm operation every year. I have been tracking the development of new regulations for small farmers and small, state certified food processing operations to see how this would impact our small, but growing operation. We appreciate North Carolinas hands-on and practical approach to training and regulation, but do not need another layer of regulation from the Federal government. Another layer of regulation, which is more appropriate for large industrial farming and food processing operations, would put our small farm operation out of business and do almost nothing to add to the food safety of most people in North Carolina.

**Estimated Time and Cost of HACCP Preparation**

To develop the cost estimate for a HACCP plan for our farm we carefully read the guidelines and developed a list of activities that would be required to meet the requirements for each part of our small, but diversified farm and local food processing operation. A few observations and assumptions:
• The HACCP plan relies extensively on testing to document a problem with food contamination after it has occurred and/or comparing it to baseline testing that does not exist for most of the industrial food system.

• Small farmers rely on prevention and avoidance of problems because the systems are much smaller and traceability is inherent in the sustainable farm movement. North Carolina and many states already provide training in food safety without the need for extensive documentation more applicable to large corporations.

• It requires a HACCP team and several meetings to document and develop flow charts of the food harvest, processing and transportation system.

• The HACCP include development of extensive recordkeeping system to monitor and document how food is processed and transported.

• The HACCP approach requires development and documentation of potential contamination of food by E-coli and Salmonella by the regulated entity. This is definitely beyond the scope all small farmers and small food processing operations like farmers markets, and local farm canneries. North Carolina and other states already have programs to manage the food safety in these small farm operations.

**Breakdown of Hours and Costs – for Rivendell Farms**

1. Development of HACCP team and brainstorming of issues. 6 hours

2. Develop list of hazards for each operation (beef, veggies, chickens) 32 hours

3. Documentation of hazards and written plan 16 hours

4. Develop recordkeeping system – for each operation 6 hours

5. Baseline testing – outside subcontract laboratory $ 7,000

6. Plan for baseline testing as it pertains to HACCP 10 hours

7. List and documentation of Critical Control Points (CCPs) 16 hours

8. Literature search and outside experts for critical limits of the CCPs $ 1,500

9. Written Corrective Action Plan for each CCP 24 hours

10. Continuous/monthly monitoring and documentation – each process 24 hours
11. Outside review by independent or North Carolina inspector $1,000

12. Annual report of HACCP records and corrective actions 16 hours

Based on the breakdown of hours and tasks provided above the annual total for the HACCP preparation, monitoring and report is 150 hours. This is contingent upon the work being performed by a professional who has knowledge of HACCP plans and small farming operations. Most if not all small farmers would send out these plans to be developed and documented by a third party HACCP consulting firm. A review of typical firms and hourly rates indicated an average rate of $100 per hour for new or non-standard plans. This consulting fee is in addition to the cost of the baseline testing and independent review. The following summary estimate is provided.

**Estimated Hours if prepared by an experienced small farmer, 150 hours**

**Outside Consulting/Lab Testing Fee for farmer prepared plan:** $9,500

**Estimated Cost if prepared by experienced HACCP consultant:** $20,000

Estimate 130 hours @ $100/hour, plus $7,000 for baseline testing

Hopefully this breakdown of costs is helpful. Please call me at (704) 962 – 8040 if you have any questions.

Sincerely,

Christopher D. Hardin

Rivendell Farms