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Value-Added & Alternative Agriculture Newsletter

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The Changing Face of NC Agriculture

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The composition of North Carolina Agriculture has changed dramatically over the past two decades. In 1983, 27 percent of cash farm receipts in North Carolina came from tobacco. In 2006, only 6 percent came from tobacco. Over the same period the proportion of the value of production from poultry and hogs changed from 34 percent to almost 60 percent. Cash receipts from the sale of Christmas trees, greenhouse and nursery products grew from 3 percent to over 12 percent of the total.

In 1983, cash receipts from farm production were \$3.8 billion which, when adjusted for inflation, are still slightly smaller than the \$8.2 billion received in 2006. Over this 23 year time frame, land in farms decreased from 11 million acres to 8.8 million acres, and the number of farms declined from 83,000 to 48,000. Average farm size increased from around 132 acres to 183 acres. The average age of farmers increased from 52 to 56 years.

Several major factors drove the change in the composition of farms. First, declines in smoking, increased international competition, and policy changes caused tobacco production to decline. Both hog and poultry production benefited from a conducive climate and tremendous innovations in confinement livestock production, much of which was developed in North Carolina.

Mechanization and other innovations, such as herbicide tolerant crops, gave economies of scale that contributed to farm consolidation. Demand created by an increasing urban population fueled increases in green house and nursery production and used up farm land.

North Carolina has the 9th fastest growing population among states. The population is projected to increase from 8.6 million in 2005 to 10.7 million in 2020. The fastest growing areas are mostly in the Piedmont along the I-85 and I-40 corridors and include Charlotte, the Triad, and the Research Triangle. Other high growth areas are along the coast. Surrounding areas are projected to have low to modest population growth. In the mountains much of the growth is in seasonal homes. Only a few counties in the northeast are projected to lose population.

Population growth and the associated influences will largely shape the future of North Carolina agriculture. Environmental concerns have already limited growth in confinement livestock operations. Development is resulting in farm land loss with land prices rising above values that can be justified for most agricultural use. Land use planning and farm land preservation are hot topics in the public policy arena.

A growing population means continued growth in demand for greenhouse and nursery products. An increasingly health conscious and affluent population is increasing the demand for specialty and locally grown produce and meats. All these factors imply that growth in North Carolina agriculture will be in high value enterprises that capitalize on demand created by close proximity to a growing population. These enterprises will be less land intensive and more management intensive requiring farmers to continually increase and change skills.

Despite the growth, the east will likely remain agriculturally intensive with the rest of the state a mix of full-time farmers catering to the urban population and part-time farmers enjoying the rural life style. As the average age of farmers increases how to transition farms to a younger generation is one of the pressing issues. These trends are continuations of current changes in North Carolina agriculture; changes that pose significant challenges, but also provide significant opportunities for a continued dynamic and vibrant agricultural economy.

Additional resources can be found at:

North Carolina State Demographics,
<http://demog.state.nc.us/>

North Carolina Department of Agriculture,
Agricultural Statistics Division,
www.ncagr.com

USDA-National Agricultural Statistics
Service, <http://www.nass.usda.gov/>

Textile Connect Weaves Together Textile Industry Threads

Stacey Frederick, Ph.D. Student, NC College of Textiles

What is *Textile Connect*?

Textile Connect is a website (www.textileconnect.com) that was created and is maintained at the **North Carolina State University College of Textiles** with initial funding from the **North Carolina Department of Commerce**. It is designed to serve as an information warehouse that “connects” global textile event, product, market, and company information from government, industry, and academic sources to the North Carolina textile complex. This project builds on the research study completed in Summer 2006 by the College of Textiles entitled, “*State of the Union of the Textile Industry in North Carolina: Improving Global Market Competitiveness with Identification and Assistance of Core Competencies*.”

County Extension Agents will be able to utilize the website to assist those interacting with the textile value chain, where there are textile locations in 90 of North Carolina’s 100 counties. If a client approaches an extension office with a question, the database of companies can be searched for supplier, partner, customer, and competitor interests within a specific region of the state. Companies may create a login and password to add their profiles to the database or edit their existing profile.

Why is *Textile Connect* Needed?

The results of the 2006 study indicated that the North Carolina textile complex still consists of over 1,340 establishments that employ over 120,000 people in 90 of North Carolina’s 100 counties. These results may seem quite surprising when the media is constantly producing headlines about another textile manufacturing plant closing. Whereas it cannot be denied that the United States has experienced an unprecedented number of job losses in textile *manufacturing* over the last decade, what the media has failed to portray is the subsequent growth in *management, new product development, design, logistics, research, and manufacturing in emerging niche product markets*. Unfortunately many of these opportunities are missed because they are not contained within the traditional ‘manufacturing’ industry codes assigned to represent the textile industries.

To further complicate this matter, the information that *does* exist on today’s textile complex is increasingly fragmented. Existing information is maintained by individual segments of the value chain, many of which require a membership to access. The textile industries lack a resource that recognizes and supports the entire textile complex.

The goal of *Textile Connect* is to build such a resource by providing vital information in a comprehensive, user-friendly format that will be available to the public free of charge. *Textile Connect* portrays today’s *global textile complex* through a holistic framework that includes the entire value chain, and not just the traditional manufacturing industries

How will *Textile Connect* be maintained?

Whereas personnel from the College of Textiles will continuously update the website, the future content of *Textile Connect* is highly dependent the members of the textile complex. The most useful websites are those that are created in collaboration

with the users themselves. If you have any information you would like to see added to the website, or suggestions for future website developments, please contact Stacey Frederick, Project Manager, sefreder@ncsu.edu.

Who is the Textile Complex?

The textile complex includes *more* than just the traditional textile manufacturing industries composed of yarn, fabric, apparel, and home furnishings producers. It also includes:

- Pre-production inputs and activities such as raw materials, fibers, research, design, development, and inbound logistics
- Production of diverse products for markets outside of the apparel and home furnishings markets such as the medical, transportation, industrial, sports, and agriculture markets
- Post-production activities including distribution, wholesale, packaging, labeling, marketing, retail, and after-sale services; and
- Supporting environment consisting of machinery, training institutions, trade associations, and regulatory bodies.

How was the *Textile Connect* textile complex value chain created?

The first step taken to develop *Textile Connect* was a redefinition of the textile industry to encompass the *entire* textile complex using all of the industries listed above and applying them to the value chain framework. To identify the specific actors that comprise each of these industries, North American Industrial Classification System (NAICS) were identified and matched to each industry based on empirical research and the compilation of several datasets and resources over the last two years.

One of the unique features of the website is the ability to traverse through the information for each stage of the value chain through the use of a visual depiction. The visualization is designed to give users a better sense of how the textile complex is connected, and to introduce new ideas on where value can be added, new markets can be served, and new resources that are available to assist in this process.

Erin Powell currently teaches in the Textiles Extension Education for Economic Development (TexED) department located on Centennial Campus at North Carolina State University. She is also a Ph.D. student at the College of Textiles in the Textile Technology Management program where she is focusing on entrepreneurship and new product development. If you have any questions or comments regarding her research, please contact her at erin_powell@ncsu.edu. The textile value chain represents the original research of Stacey Frederick, the creator of *Textile Connect*. Stacey is a Ph.D. student in the College of Textiles in the Textile Technology Management program. She has worked closely with the North Carolina Department of Commerce and the North Carolina in the Global Economy project for the last two years to develop this framework, yet it is far from complete. If you have suggestions or questions about the textile complex value chain or how it was created, please contact her at sefreder@ncsu.edu.