Chowan County

Agricultural Development Plan

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December 2017

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Acknowledgements

The North Carolina Department of Agriculture Development and Farmland Preservation Trust Fund (ADFP) awarded a grant to the University of Mount Olive's Lois G. Britt Agribusiness Center to create Agricultural Development Plans for Chowan, Currituck, Pasquotank, Perquimans and Wilson counties. ADFP promotes these plans as comprehensive guides for counties or governments to protect and preserve farms and forests, which contribute to the economy and quality of life in eastern North Carolina.

This plan was written by W. Stan Dixon and Ed Emory. Dr. Dixon has an Ed. D. from N.C. State University and served with N.C. Cooperative Extension in Martin, Wake and Greene counties. He retired in 2009 from N.C. Cooperative Extension as County Extension Director. Mr. Emory holds a B.S. and M.Ed. from NC State University and served with the N.C. Cooperative Extension Service in Pamlico and Duplin Counties for more than 28 years. He retired in 2009 after serving 19 years as county extension director in Duplin County.

The following agencies and individuals assisted with the development of this plan:

- North Carolina Cooperative Extension, Chowan County Center
- Chowan County Board of Commissioners
- Chowan County Manager
- North Carolina Forest Service
- Lois G. Britt Agribusiness Center, University of Mount Olive
- The citizens, farmers and agribusinesses of Chowan County

This project was funded by the North Carolina Agricultural Development and Farmland Preservation Trust Fund

Executive Summary

Chowan County has a viable agricultural sector that is an important part of the total county fabric of life. The goal of this Agricultural Development Plan is to reflect the importance of agriculture and assess the opportunities, challenges and issues that are currently facing the industry. This plan provides recommendations, based on citizen input on ways to enhance agriculture, forestry, agribusiness and agritourism.

Farmland is an irreplaceable natural resource, and the farmers who are stewards of the resource impact the economy and quality of life for all county residents. The economic impact of the agricultural sector in 2012 was 25.5 percent of the county's value added total income. The agriculture sector also accounts for 12.1 percent of Chowan County total employment[1].

Chowan County has the resources, natural and human to ensure that agriculture can prosper in the future. The impact of agriculture in Chowan County in 2012:

*Agriculture and agribusiness contributed $113,844,655 in total income[2]

*Chowan ranked 36th in the soybean production

*Chowan ranked 37rd in wheat production

*Chowan ranked 13th in cotton production

*Chowan ranked 44th in broiler production

*Chowan ranked 48th in hog and pig production

*Chowan ranked 77th in beef cattle production

*Chowan ranked 9th in peanut production

*Chowan ranked 23rd in vegetable production[3]

In total cash receipts from agriculture, Chowan County ranked 60th in the state[4]

County farmers surveyed, 50 percent, lacked sufficient land to expand or diversify their operations. Chowan County farmers reported facing other critical issues, low commodity prices; land rental rates, competition for land, available labor, affordable labor, regulatory costs and rising production input costs. Other challenges confronted by farmers were an aging farmer population, with the average age of farmers being 55.5 years old and 100 percent not having farm transition plans. These issues present opportunities to enhance agriculture through education and the support of citizens and local government.

Of the non-farm citizens surveyed, 97 percent believe that local government should take action to preserve farmland as a valuable resource. One hundred percent of non-farm citizens believe that farming enhances the scenic beauty and open spaces of the county while providing a positive impact on the environment. All non-farm respondents support farm and forest preservation efforts in the county.

At the center of the Chowan County Agricultural Development Plan are proposed recommendations based on information provided by farmers, agribusiness leaders and non-farm residents through personal interviews and surveys. The recommendations and action steps were developed to provide a guide for protecting and enhancing agriculture in Chowan County. The success of this plan depends on the collaboration between local government, agricultural organizations, farmers, agribusiness and citizens of Chowan County. The plan needs to be evaluated annually to celebrate accomplishments and add new recommendations as needed. The recommendations are:

1. **Support Measures To Protect And Promote Forest and Farmland In Chowan County.**
2. **Promote and Increase Enrollment In Voluntary Agricultural District (VAD) and Adopt and Implement Enhanced Voluntary Agricultural District (EVAD)Programs**
3. **Develop And Conduct Programs To Assist Chowan County Farm And Forest Landowners With Farm Transition Planning.**
4. **Promote Appreciation And Awareness Of The Benefits Of Agriculture To Chowan Elected Officials And Citizens.**
5. **Expand And Support Youth Agricultural Educational Programs.**
6. **Develop Technical, Business And Marketing Training For The Maintenance And Expansion Of Agriculture In Chowan County.**

The intent of this plan is neither to limit nor restrict landowners' rights and uses. The plan is intended to serve as a guide for actions to provide farmers, landowners and citizens an increased awareness of farmland preservation opportunities. Agriculture is important to Chowan County and its economy and to the well-being of family farms. However, the final decision on farmland preservation rests in the hands of the owners of farm and forests.

A Need for Action

Agriculture, consisting of food, fiber and forestry, is North Carolina's leading industry. In a 2015 report by Mike Walden, professor and extension economist at North Carolina State University, more than 16% of the state's workforce was directly involved with agriculture, an industry that contributes $83.7 billion, or 17%, to the gross state product in North Carolina[5]. In Chowan County, agriculture accounted for 12.1 percent of the county's employment in 2012. According to Walden, in 2012, agriculture and agribusiness added $113,844,655 or 25.5 percent of the county's value added total income[6].

Chowan County's leadership is cognizant of the importance of agriculture to the local economy and is supportive of an Agriculture Development Plan that addresses issues related to farm and agribusiness viability for the future. The goal of the Chowan County Agricultural Development Plan is to provide strategic actions that will guide local leaders in their efforts to preserve farms and forests, as well as market the many benefits of the agricultural industry.

Overview of Chowan County

Established in 1668, Chowan County was once part of the original Albemarle County. The name 'Chowan' comes from the Algonquin Native Americans and means 'people of the south.' The smallest county, area wise, in North Carolina, the first permanent English settlers were from Virginia. Drawn by abundant timber and fertile bottom lands combined with a good climate, the early settlers were farmers. The small streams, creeks and deep rivers of Chowan County made for easy navigation and travel for early settlers.

The county seat of Chowan County is Edenton. Incorporated in 1722, Edenton also served as the capital of the North Carolina colony until 1743. Edenton boasts the oldest courthouse in North Carolina which was constructed in the late 1760's. On October 25, 1774, 51 women organized a protest against the Tea Act. This boycott represented the first political activity organized by women in the colonies[7].

Chowan County Demographics

According to the US Census 2016 estimates, Chowan County has a population of 14,383 citizens. This figure represents a 2.8 percent decrease in population from 2010. The county is 62 percent white, 34 percent African American and 4 percent Hispanic[8].

Edenton is the only incorporated area in Chowan County. Other communities include Hancock, Vahalla, Rocky Hock, Tyner, Small's Crossroads, Ryland and Gliden.

Chowan is divided into four townships of Middle, Upper, Yeopin and Edenton.

Economy

The North Carolina Department of Commerce ranks each of the state's 100 counties into three tiers based on economic well-being of each county. Tier 1 is most distressed, and Tier 3 is least distressed. Chowan County is designated as a Tier 1 county. In 2012, the county dropped from a Tier 2 to the present Tier 1 designation. North Carolina uses these designations to encourage economic growth through incentives in distressed counties. Chowan's tier

status provides opportunities for certain grants and other incentives aimed at stimulating the county's economy[9].

In 2015, the median household income in Chowan County is $41,156.00 compared to the state figure of $46,868.00. Nineteen percent of Chowan County's population is considered below the poverty level, this is higher than the state's reported level of 16 percent[10]. Six percent or 363 working Chowan County residents work outside North Carolina. Forty-one percent or 2,267 residents work within North Carolina, but outside Chowan County. Fifty-three percent or 2,955 residents work within the county. The unemployment rate is 4.9 percent which is slightly higher than the North Carolina rate of 4.2 percent[11].

Agriculture and agribusiness provided jobs for 12.1 percent of Chowan County's working residents according to a study completed by Dr. Mike Walden in 2012[12].

Cost of Services

American Farmland Trust conducted 151 cost-of-community-services studies, including six in North Carolina, to determine the contributions made to the economy by land uses. The studies focus on three main land uses: commercial and industrial, working and open land, and residential. Agricultural and commercial land uses require fewer public services than residential land uses, saving money for the county. For each $1 of revenue received from each land use, the cost of community services study concluded that:

- Residential land cost $1.16 in public services.
- Working and open lands (including agriculture and forestry) require $0.35 for public services.
- Commercial and industrial land cost $0.29 for public services.

While similar impacts would be expected in Chowan County, a study of this nature can help local leaders and developers understand the impact and importance of planned land-use development on the county's economy[13].

Infrastructure and Transportation

Chowan County is connected to the northeastern part of North Carolina by US Highway 17 which runs east to west through the southern portion of the county. US Highway 17 is a major north-south highway that provides Chowan County with easy access to Norfolk, Virginia to the north and New Bern and Wilmington to the south. US Highway 32 provides another important access to US Highway 158 and US Highway 64.

Chowan County is served by the Norfolk Southern Railroad. This rail service provides industrial, agricultural, and manufacturing entities with effective and efficient road and rail transportation to national markets.

Chowan County is home of the Northeast Regional Airport. An important hub for FedEx and UPS, the airport also serves private aircraft traffic.

Chowan County's access to the Albemarle Sound provides maritime transportation up and down the east coast via the intracoastal waterway.

The Chowan County Water Department distributes 31,000,000 gallons of water monthly to 4,100 customers in the county[14].

Education

A majority (84%) of the population over 25 years of age have completed high school, compared to 85.8 percent of all North Carolina citizens over the age of 25. Conversely, 20 percent of Chowan County have a Bachelor's degree or higher, compared to 28.4 in North Carolina[15].

The Edenton/Chowan School System enrolls 2,200 students and employs 165 teachers, counselors and support staff. The system operates two elementary schools, one middle school, and one high school. Twenty-five percent of the teachers in the Edenton/Chowan County School System have a Master's or higher degree[16].

Chowan County is served by the Roanoke-Chowan Community College, which is part of the North Carolina Community College System.

Natural Attributes

In Chowan County, as in all areas, natural resources are paramount in agricultural production. Chowan County consists of 172.47 square miles of land and 60.82 square miles of water[17].

According to the North Carolina Natural Heritage Program, the Chowan River and the land immediately adjacent to it is considered very high quality natural areas in the northern part of Chowan County, and high quality natural areas along the eastern boundary of the county. There are several state-owned managed areas in Chowan County. These areas are the Gallberry Pocosin and the Rocky Hock Swamp Forest Preserve[18].

Both land and water are irreplaceable resources. A combination of best management practices and wise conservation must be employed to keep the resources in good condition.

Soils

Soils are classified into different associations which help determine a soil's suitability for different uses. Soil uses include growing crops, growing trees and resident and commercial construction. The Soils Survey completed by USDA Soil Conservation Service for Perquimans and Chowan Counties has eight major soil associations which are:

1. Roanoke-Tomotley-Perquimans soils are nearly level, poorly drained soils that have a loamy surface layer with loamy or clayey subsoil. Most suited for crop land, this association is poorly suited for urban and recreational uses. Found in broad flats and in depressions, this association accounts for 37 percent of the soils in Perquimans and Chowan Counties.
2. Conetoe-Wando-Seabrook soils are nearly level, gently sloping; well-drained that has a sandy surface layer and a loam or sandy subsoil. Found on ridges and flats among small streams that flow into the Albemarle Sound and Chowan River. This association makes up 7 percent of the survey area. These soils are best suited for woodland and cropland.

3. Tomahawk-Echaw-Valhalla are nearly level and gently sloping, moderately well-drained, somewhat poorly drained and well-drained soils that have sandy surface layer and a loamy or sandy subsoil. Making up 6 percent of the survey area, these soils are best suited for cropland and woodland, with the Valhalla soils suited for most urban uses. This association is found on smooth and slightly rounded ridges along the Suffolk Scarp.
4. Dogue-Augusta-State soils are nearly level and gently sloping, moderately well-drained, somewhat poorly drained, and well-drained soils that have a sandy or loamy surface layer and a loamy or clayey subsoil. Making up 11 percent of the survey area, these soils are best suited for crops and woodlands. This association is found on smooth ridges along small streams that flow into the Albemarle Sound, the Chowan River and the Perquimans River.
5. Portsmouth-Arapahoe-Cape Fear soils are nearly level, very poorly drained soils that have a loamy surface layer and loamy or clayey subsoil. Making up 23 percent of the survey area, this association is used mainly for cropland and woodland. This association is found on broad flats and in depressions.
6. Chapanoke-Yeopim soils are nearly level and gently sloping, somewhat poorly drained and moderately well-drained soils that have a loamy surface layer and loamy subsoil. Making up 4 percent of the survey area, theses soils are well suited for croplands and woodlands. This association is found on smooth ridges and flats along small streams that flow into the Albemarle Sound and Perquimans River.
7. Chowan-Dorovan soils are nearly level, very poorly drained soils that are loamy and underlying by muck and soils that are muck throughout. Making up 9 percent of the survey area, these soils are found on the flood plains of the Chowan River, Perquimans River and the Albemarle River. The soils are poorly suited for crops, woodland and most urban uses.
8. Scuppernong soils are nearly level, very poorly drained and they have a surface layer of muck and mucky and loamy underlying material. This association makes up 3 percent of the county and is found in oval-

shaped depressions and in the northern part of Perquimans County in the Dismal Swamp. If drained, the soils are suited to use for crops and woodland[19].

Water and Drainage Issues

Hurricane Matthew and other severe storms have created drainage issues in the rivers and streams of Chowan County. Downed trees and brush have clogged these waterways. Efforts are underway to clear the debris and open up the rivers and streams to allow natural drainage of all Chowan County's land[20].

Forestry

Chowan County forestland totals 50,808 acres, with almost all owned by private landowners. According to North Carolina Cooperative Extension Forestry, the value of harvested timber in 2012 was $2,200,000 in Chowan County. The total forest industry economic impact to Chowan County was $10.7 million. Ninety-five people are employed in Chowan County's forest industry resulting in a payroll of $4.7 million[21].

Chowan County: the State of Agriculture

Agriculture accounted for 12.1% of Chowan County's employment in 2012. According to Walden, in 2012, agriculture and agribusiness added $113,844,655.00 or 25.5 percent of the county's value-added income[22].

The number of farms in Chowan County decreased from 173 in 2002 to 141 in 2012. This represents a 26 percent decrease. The amount of land in farmland in Chowan County, 59,890 acres in 2002 to 58,146 acres in 2012, showed a 2.9 percent decrease. The average farm size increased from 346 in 2002 to 412 in 2012 for a 16 percent increase[23].

According to the 2012 US Census of Agriculture, Chowan County had 34 farms that grew fruits and vegetables resulting in $4,920,000.00 in sales[24]. Chowan County farmers produce watermelons, cantaloupe, sweet corn, potatoes, cucumbers, cabbage, tomatoes and other fruits and vegetables.

Chowan County, in 2012, had 14 poultry farms with a value in product of $9,182,000, and six hog farms with a value in product of $3,588,000. Cattle in 2012 had a value of $383,000[25].

The horse industry is a vital part of Chowan County's agricultural economy and cultural heritage. In 2009, Chowan was home to 830 horses with a value of $5,035,000[26].

Chowan County has one crawfish farm. This aquaculture enterprise resulted in $1,700 income in 2017. The producer plans to double his production in 2018, according to Steve Gabel, Area Specialized Agent, Agriculture-Aquaculture, with NC Cooperative Extension.

Agriculture is an important element of Chowan County's economy and impacts the state's economy and agricultural production. In 2015, Chowan County was ranked in North Carolina as follows:

- 9th in peanut production
- 13th in cotton production
- 36th in soybean production

- 37th in wheat production
- 23rd in vegetable production
- 44th in broiler production
- 48th in hog and pig production
- 77th in cattle production[27]

Crops

During 2012, Chowan County, reported one-hundred forty-one farms harvested crops from 58,146 acres. Receipts from crop sales totaled $35,911,977.00 in 2015[28]. Production of major crops in Chowan County in 2015 includes:

- Peanuts, 3,300 acres
- Cotton, 11,100 acres
- Soybeans, 14,800 acres
- Wheat, 3,800 acres
- Vegetables, 2,265 acres[29]

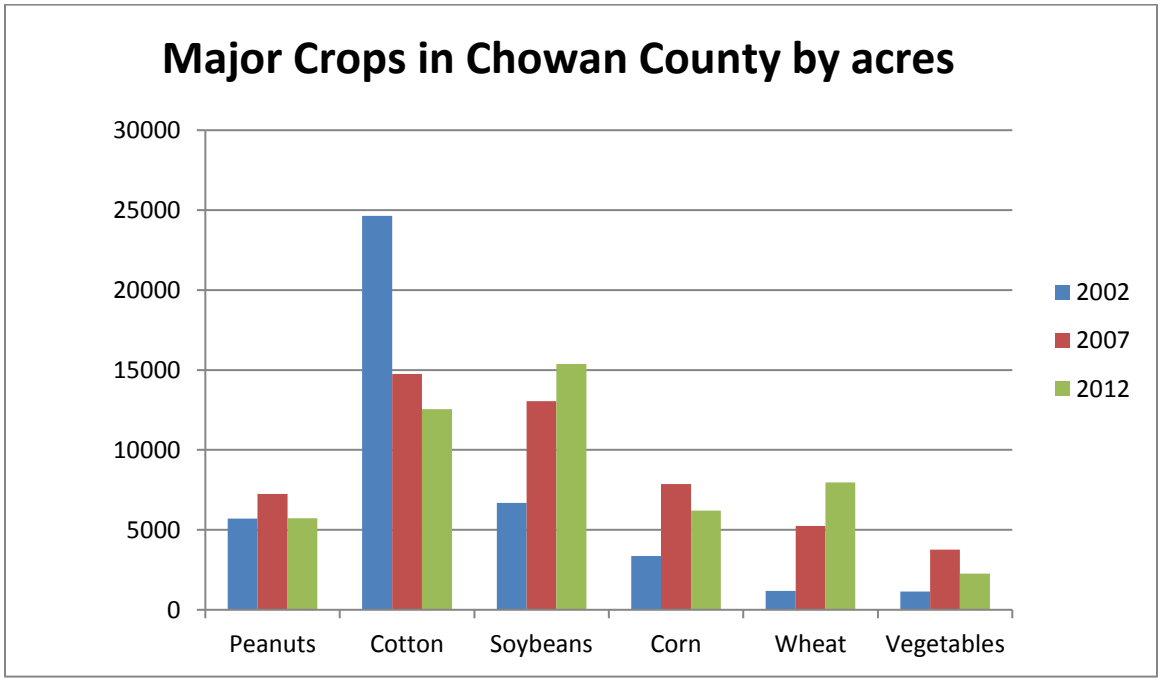

Figure 1. Major Crops in Chowan County by acres. Source: US Census of Agriculture, 2002, 2007, 2012.

Livestock and Poultry

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Forestry

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Farmer Demographics

The number of full-time farmers from 2002 to 2012 showed a decrease of 13.4 percent. The number of part-time farmers showed a decrease of 29.6 percent. The average age of farmers in Chowan County was 55.5 years of age in 2012. Principal operators by gender were 134 males and 7 females. Farmers by race in Chowan County are 197 white and 8 African-American.

Figure 2 represents principal farm operators' primary occupation—full-time or part-time. Data is shown for 2002, 2007 and 2012[32].

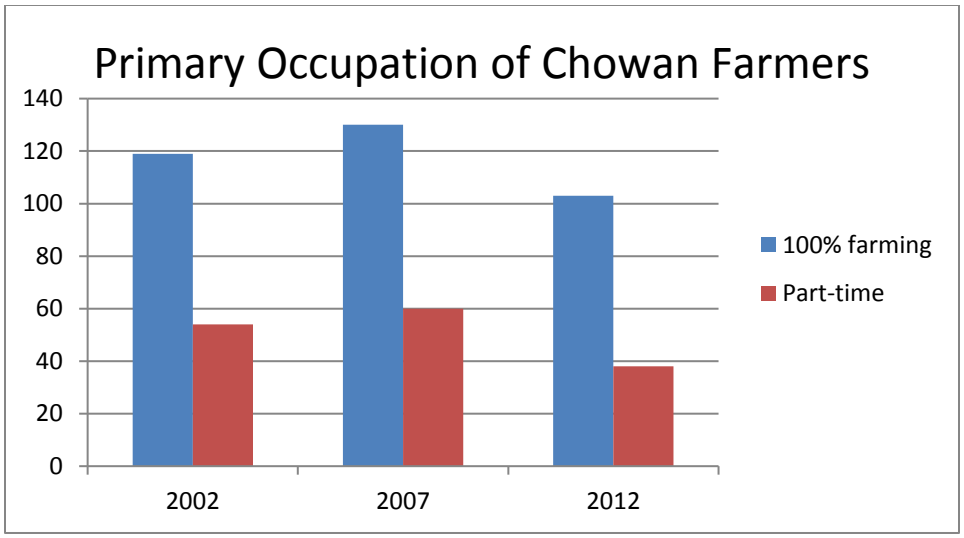

Figure 2. Primary Occupation of Chowan Farmers. Source: US Census of Agriculture, 2012

Farm and Forest Protection Programs

(Compiled by John Bonham, 2009)

Present-Use Value Tax Program

Present-Use Value, or PUV, is a program established by N.C.G.S. §§ 105-277.2 to .7 and administered by the county assessor through which qualifying property can be assessed, for property tax purposes, based on its use as agricultural, horticultural or forest land. The present use value is the value of the land based solely on its ability to produce income. Qualifying property is assessed at its present-use value rather than its market value. The tax office also maintains a market value for the land, and the difference between the market value and the present-use value is maintained in the tax records as deferred taxes. When land becomes disqualified from the program, the deferred taxes for the current and three previous years, with interest, will usually become payable and due.

Basic Requirements

Minimum acreage of production land:

- 10 acres for agricultural use
- Five acres for horticulture use
- 20 acres for forest use

Production must follow a sound management plan.

Agricultural and horticultural land must have at least one qualifying tract that has produced an average gross income of at least $1,000 for the three years preceding the application year.

Forest land must be following a forest management plan.

Benefits

Protection from increasing land values that are based on development potential and the potential increase in property taxes

More information can be found at
http://www.dor.state.nc.us/publications/property.html.

Voluntary Agricultural Districts (VAD)

Established by N.C.G.S. §§ 106-737 to 743 and administered at the county level, Voluntary Agricultural Districts are designated areas where commercial agriculture will be encouraged and protected. The purposes of the districts are to increase identity and pride in the agricultural community and to increase protection from nuisance suits and other negative impacts on properly managed farms.

Requirements

Land must be enrolled in the Present-Use Value program or otherwise be determined to meet the qualifications of the program.

The landowner must enter into a revocable agreement to limit development for a 10-year period.

Benefits

• Notification to buyers of nearby property that they're moving into an agricultural area

• Abeyance of water and sewer assessments

• Public hearings on the condemnation of farmland

• Stronger protection from nuisance suits

• Representation by an appointed board regarding concerns on threats to the agricultural sector

Enhanced Voluntary Agricultural Districts (EVAD)

Established by N.C.G.S §§ 106-743.1 to .5, an Enhanced Voluntary Agricultural District is a VAD formed of one or more farms that are subject to an IRREVOCABLE 10-year agreement to limit development. In return for the condition of irrevocability, the landowner receives the added benefits of being able to receive 25 percent of gross revenue from the sale of non-farm

products and still qualify as a bona fide farm, and being eligible to receive up to 90 percent cost-share assistance from the Agricultural Cost-Share Program.

Conservation Easements

A conservation easement is a written agreement between a landowner and a qualified conservation organization or public agency under which the landowner agrees to keep the land available for agriculture and to restrict subdivision, non-farm development and other uses that are incompatible with commercial agriculture.

Basic Requirements

Permanently foregoing the right to subdivide or develop the land being conserved. There will be other limitations on activities to preserve the land's productivity, environmental values and rural character. Cash payments in the range of $20,000 to $40,000 are needed to cover the costs of the transaction. These costs are for legal services, a survey, an appraisal, long-term stewardship services provided by the conservation partner and other miscellaneous activities. In some cases, grant funds will cover these costs.

Other Information

A portion of the property can be left out of the easement, thereby providing an area for future homes and other non-farm activities.

Agricultural activities, including forestry, are allowed under the agreement.

Despite the term "easement," access to the public is not provided by the agreement.

The value of a conservation easement is determined by a licensed land appraiser and is typically between 25 percent and 75 percent of the land's market value.

A periodic inspection of the property is required to ensure that development does not occur. This provision will be included in the agreement.

The agreement is recorded on the county's land records and runs with the title. All future landowners must comply with the terms and conditions of the agreement.

Financial Benefits

If the conservation easement is donated, then the landowner will likely qualify for a federal income tax deduction and a state income tax credit. The value of these benefits depends on the appraised value of the easement and the income tax situation of the landowner.

A conservation easement also can be sold by the landowner through a transaction commonly referred to as a Purchase of Development Rights (PDR) or Purchase of Agricultural Conservation Easement (PACE). Funds to purchase a conservation easement can be raised from private and government sources. North Carolina and the federal government have programs to purchase agricultural conservation easements. Funding through these programs is very competitive and will generally amount to a percentage of the easement's value. The tax benefits described above can be claimed for any of the easement's value above the purchase price.

Term Conservation Easements

Also called Agricultural Agreements, these agreements are similar to conservation easements but apply for a finite period of time agreed to by the landowner and conservation partner.

Transfer of Development Rights

A program set up by local units of government that utilizes conservation easements to preserve farmland by providing incentives to increase development density in a designated area. The program identifies the "sending area" where conservation is being encouraged and the "receiving area" where development is preferred. A landowner in the receiving area can purchase a conservation easement on a property in the sending area and receive additional density allowances. In North Carolina, counties must receive authorization from the General Assembly to develop and implement a TDR program.

Farm Transition Planning

Making careful plans for the transfer of ownership of farm property and assets from the current owner to the next can be enough to preserve a farm for decades. Many options are available when planning an estate or land transfer. Farm owners can increase the likelihood of a successful transition that maintains the viability of the farm by obtaining professional assistance early in the process.

Right-to-Farm Law

North Carolina has a state right-to-farm law (N.C.G.S. §§ 106-700 to 701(2006)) that protects farm and forestry operations from being declared a nuisance as long as they have been in operation for at least one year and are operated properly and without negligence.

N.C. Agricultural Development and Farmland Preservation Trust Fund

N.C.G.S. § 106-744(c) established a trust fund to be administered by the Commissioner of Agriculture. The purpose of the trust fund is to provide monies to purchase agricultural conservation easements and to fund programs that promote the development and sustainability of farming, and the transition of existing farms to new farm families. Counties and nonprofit conservation organizations can apply for grants for these purposes.

Challenges, Opportunities and Trends: Survey and Interview Results

The methodology employed to access information, perceptions and attitudes related to agriculture and agribusiness in Chowan County consisted of written surveys and interviews with three target audiences—agriculture producers, agribusiness owners and non-farm residents of Chowan County. Surveys were distributed by the Chowan County Center of the North Carolina Cooperative Extension Service.

In addition, key leaders in Chowan County from all three targeted groups were interviewed to better identify challenges and opportunities that exist in the county's agricultural segment. All descriptive statistics presented in this document were calculated using data obtained from these processes. Survey and interview information revealed pertinent information on the state of agriculture in Chowan County from the perspectives of farmers, agribusinesses, and non-farm residents as well as from data sources such as USDA and NCDA.

The results identify specific challenges and opportunities affecting the future of agriculture in the county.

Agricultural Producer Analysis

A review of the 2012 Census of Agriculture revealed that there were 141 farms in the county being cultivated by 134 male and 7 female operators. Chowan County farmers are predominately white with 197 white and 8 African American operators. The average age of Chowan farmers was reported as 55.5 years of age in 2012[33]. Farmers providing information for the Chowan County Agricultural Development Plan represented operations from across the county. The average age of survey respondents was 50 years old.

According to the survey, 50 percent of the respondents operations were defined as farm production only, and 50 percent as primarily farm production with some timber production.

One-hundred percent of Chowan County farmers surveyed indicated that they had been in operation more than 20 years.

All responding farmers indicated that their operations provided the majority of their household income. Of the farmers responding, none have expanded their operations during the last five years. Those that indicated a desire to expand, but did not listed the following reasons:

- Lack of available land to rent
- Lack of available land to purchase
- Market volatility
- Personal or other reasons

Fifty percent of Chowan County respondents indicated that they were satisfied with the current size of their operations.

Farmers who participated in the surveys identified the most critical issues expected to influence future farming operations as commodity prices, competition for available land, regulatory costs, available labor, affordable labor, land rental rates, and production input costs noted in Figure 3.

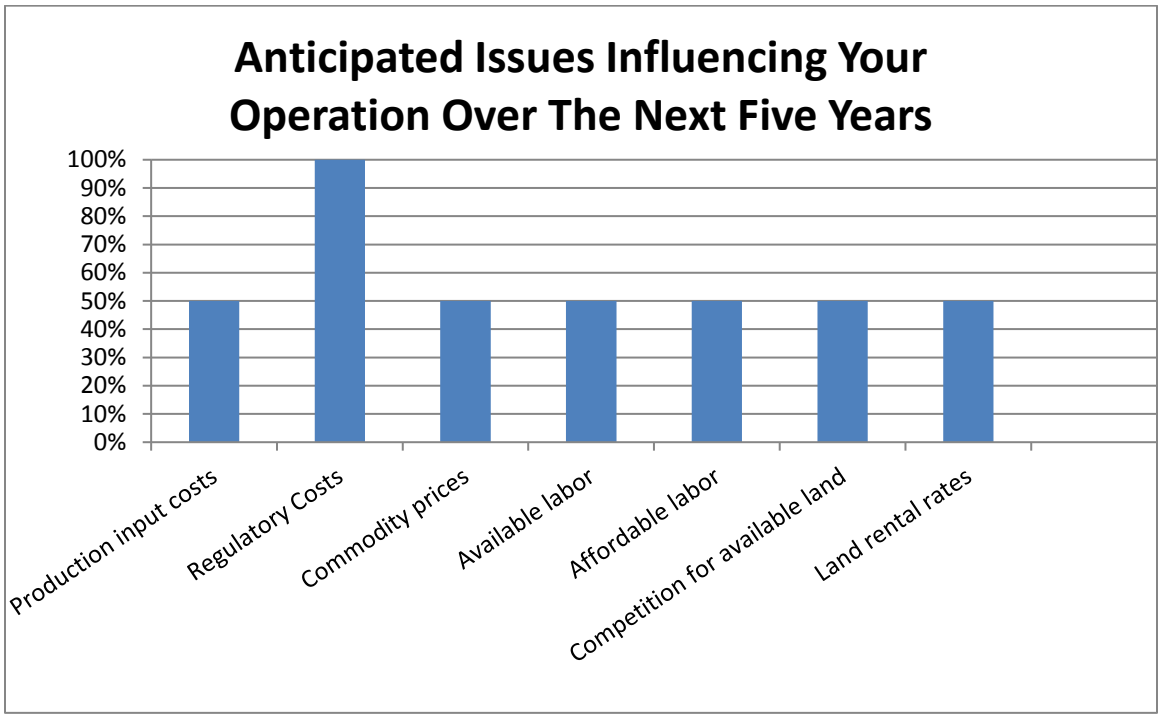

Figure 3. Source: Chowan Producer Survey 2017

Of the farmers surveyed, all want to pass their farms to family for farming. However, none have farm transition plans. This indicates the need for training for farm owners on developing effective farm transition plans. Family farms are the backbone of agriculture in North Carolina, educating farmers on how to pass their farms on to heirs or another generation of farmers is essential to the future of agriculture.

Chowan County offers a deferred tax program beneficial to farmers and landowners designated as the Present Use Value Taxation program (PUV). This program offers owners of forest land and those operating legitimate farms a deferred tax program based upon their present use in agriculture, horticulture, or forest land. One hundred percent of survey respondents answered that they were enrolled in the PUV program. However, not all farmland is enrolled in the PUV program. While an increased knowledge of this program could result in additional land enrolled in the program and, in turn, reduce tax revenues, the cost of community services for agricultural land versus residential land shows that the revenue outcome still provides a net gain to the county coffers.

When Chowan County farmers were asked to identify taxes that were impediments to their profitability, 100 percent listed federal self-employment taxes, 100 percent listed local property tax on buildings and equipment, 50 percent noted Federal Social Security and Medicaid taxes for employees and 50 percent cited estate tax illustrated in Figure 4.

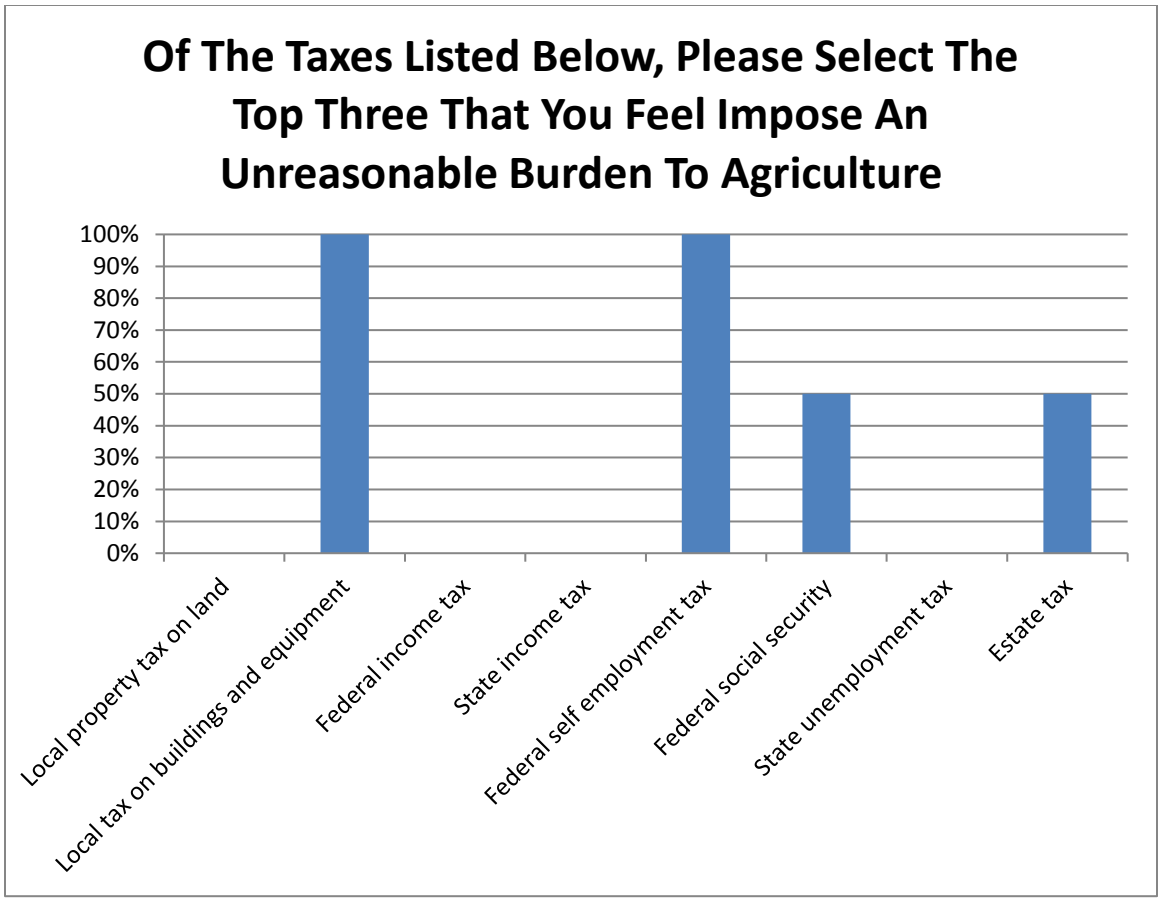

Figure 4. Outlook on Taxes and Agriculture. Source: Chowan Producer Survey 2017

In 2012, almost all of forestland in Chowan County was privately owned[34]. Fifty percent of survey respondents had a forest management plans while the other 50 percent responded that they had no such plans. A forest management plan is a valuable tool for farmers and landowners to use this resource for greater sustainability and profitability. Management plans are required for forest landowners to enroll properties in the county's Present Use Value program. The survey data indicates the need for the development of an educational program to inform and train landowners on the benefits of a formal forest management plan.

None of the survey respondents reported problems with neighbors regarding their farming operations.

Chowan County leaders enacted a Voluntary Agricultural District Program in 2009. To date, 26 farms have enrolled in the VAD program representing 8,539 acres[35]. One hundred percent of farmers responding to the survey were aware of the Voluntary Agricultural District program. All respondents had acreage in the VAD program. The county has not adopted an Enhanced Voluntary Agricultural District program.

Additionally, farmers expressed a need for management, technical and marketing training on the following topics to enhance their operations:

- Forward pricing and hedging 50%
- Direct to consumer marketing of products 50%
- Identifying and managing risks 100%
- Timber management 50%
- Development of forest management plan 50%
- Pine straw sales 50%
- Estate planning/Farm transition 100%
- Diversifying through agritourism 50%

There are multiple opportunities for training and education. This information should serve as a continuing guide for agencies and institutions involved in education within the county to develop plans for short-term and long-term training to serve the agricultural community.

Chowan County farmers who were surveyed and interviewed recognized the value of educating the non-farm public to the benefits of agriculture to the county. One-hundred percent of farmers were in favor of a program to increase non-farm residents' knowledge of the social and economic benefits of agriculture.

Chowan County farmers and operators who responded to the survey stated that there is a definite need for agricultural education in public schools, 4-H and youth development, community colleges and other colleges and

universities. Figure 5 shows the strong support for such programs, which illustrates the need to train youth in the importance of agriculture and the diverse agricultural career opportunities.

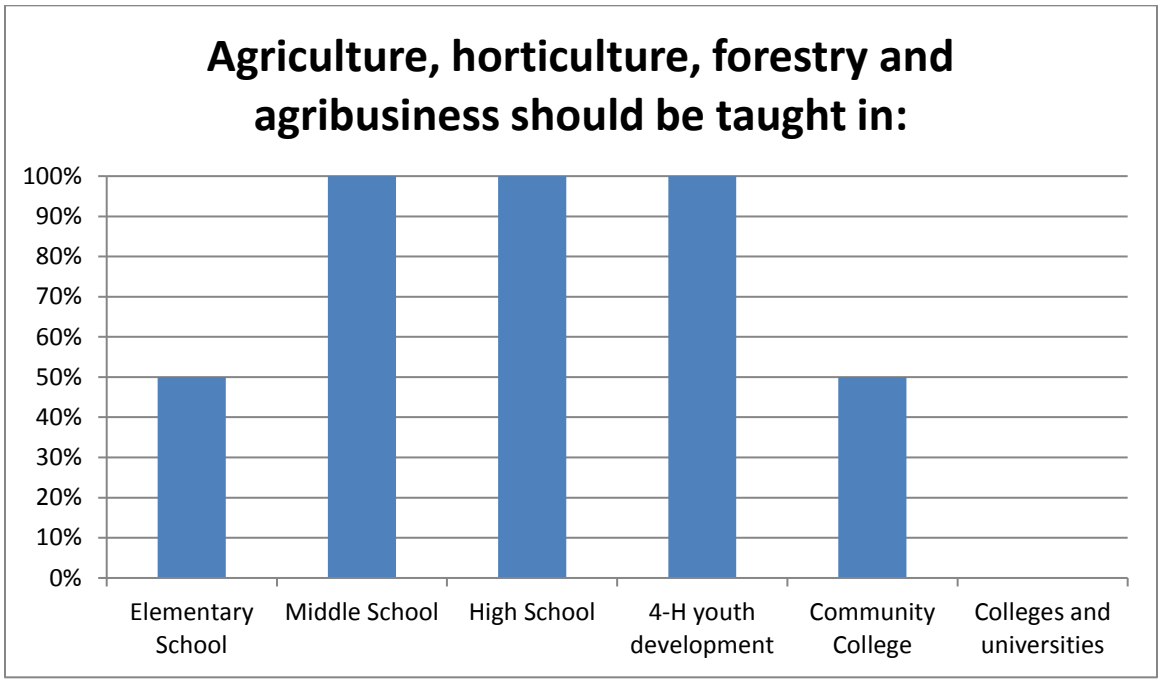

Figure 5. Source: Chowan County Producer Survey 2017

Surveyed farmers (100%) in Chowan County were in favor of government funds to support agriculture and agricultural economic development in the county.

Interviews were conducted with a cross-section of farmers to obtain their opinions on the issues, challenges and opportunities impacting agriculture in Chowan County. The following were stated as issues that impacted family farms as well as the perpetuity and profitability of these operations:

- Over-Regulation From Federal Government Agencies
- Depressed Commodity Prices
- High Input Costs
- Expensive New Technology

- Lack Of Estate Planning And Farm Transition
- Lack Of Understanding Among Non-Farm Residents About The Importance Of Agriculture And Agribusiness
- Need For Continued Education of Local Officials On The Complexity Of Today's Agricultural Production
- Drainage Issues Caused By Hurricane Matthew

Agribusiness Survey and Interview Analysis

Agribusinesses provide essential resources and services vital to the success and profitability of agriculture production services. Agribusinesses, just as any other business, provide jobs and employment, which stimulate the local economy. Examples of agribusinesses include feed dealers, seed processors, agricultural lenders, agricultural and crop consultants, produce marketers, and agritourism services.

Agribusinesses surveyed (100%) recognized that 75-100 percent of their business was generated from the farm community. Though these agribusinesses offer agricultural services, many also provide services and products that meet the needs of non-farm residents and industries. In the last five years, 100 percent of agribusinesses surveyed have increased the size of their operations. One-hundred percent reported an increase of agricultural inventories and sales. As non-farm populations continue to grow, agribusinesses will continue to seek ways to service non-farm residents, which will provide additional support for these agribusinesses.

Agribusiness owners also noted trends in agricultural production that could have impacts on their operations including, but not limited to, a shift to more sophisticated farm operations, fewer small farms, more specialty and direct market operations, and more farm diversification.

Following is a list of challenges and opportunities expressed by the respondents that are perceived to have an effect on agriculture in the future.

- One hundred percent of agribusiness respondents identified farm transition and estate planning as a major issue in Chowan County. They also expressed the need for professional assistance and training in transition and estate planning.
- One hundred percent of agribusiness respondents noted the importance of education of Chowan County citizens as to the impact of agriculture and agribusiness on the county's economic viability.
- One hundred percent of agribusiness respondents have problems with labor issues, especially lack of qualified, trained labor.
- All of those questioned said that youth education in the field of agriculture is of great importance, and continued support of these programs in secondary and post-secondary schools is essential to the future of agriculture.

When asked what would provide additional assurance of success in their business, 100 percent needed succession planning training and education on new technologies in farming as illustrated in Figure 6.

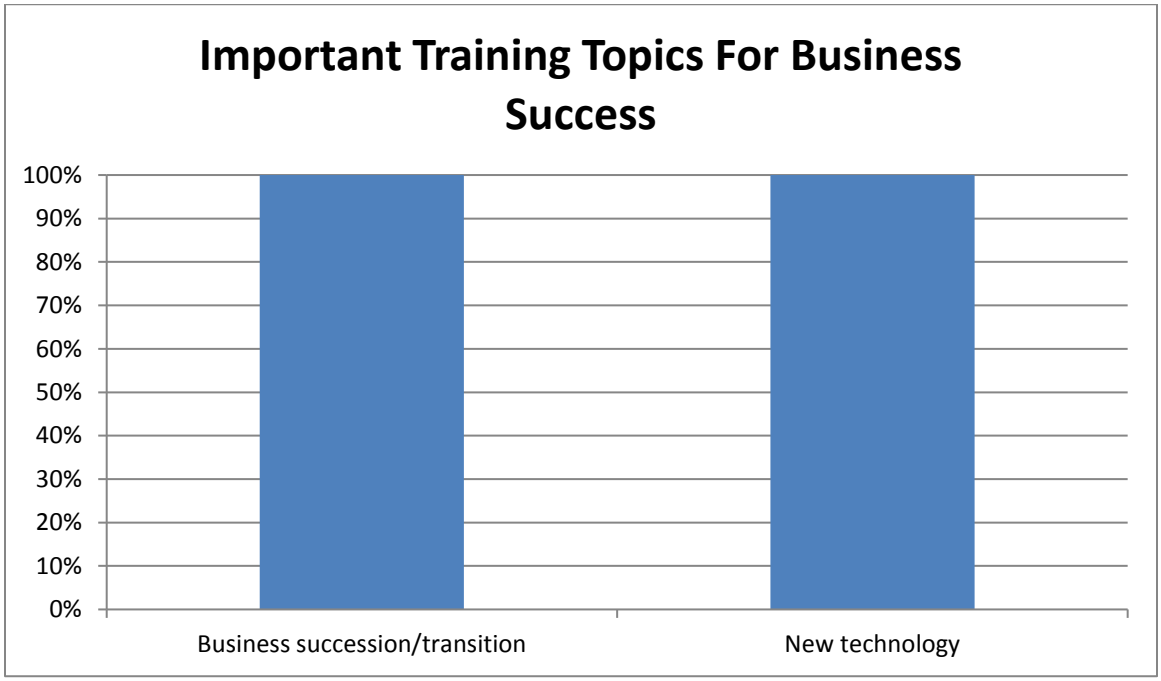

Figure 6. Source: Chowan Agribusiness Survey 2017

Chowan County agribusiness leaders also identified several threats and opportunities for farms and forests:

- Increased Food Safety Regulations
- Low Commodity Prices
- Lack Of Qualified Labor To Operate And Maintain New Technology
- Value-Added Food Processing Jobs

Non-Farm Residents Survey and Interview Analysis

Chowan County is home to people of diverse backgrounds. Some have lived in the county their whole lives, others have chosen to relocate or retire to the rural county, and some have been drawn to the history of Edenton and the lure of being close to the water. Still others have moved to Chowan County from urban areas, choosing to commute from a rural area with lower taxes. The majority of survey respondents (81%) have lived in Chowan County for 20 years or more. Seventy-two percent of the respondents have lived near a farm or forest operation, with 75% living within one-quarter mile of a farm or timber operation. A positive result of this close relationship with agriculture is that 85% percent stated that farmers are good neighbors.

When asked about the state of agriculture as a viable industry in Chowan County, 67 percent of the respondents felt that farming is holding its own and has some potential for future growth. Six percent said that agriculture has no potential for future growth, while another 27 percent felt that agriculture is an expanding industry with significant future growth potential. (Figure 7)

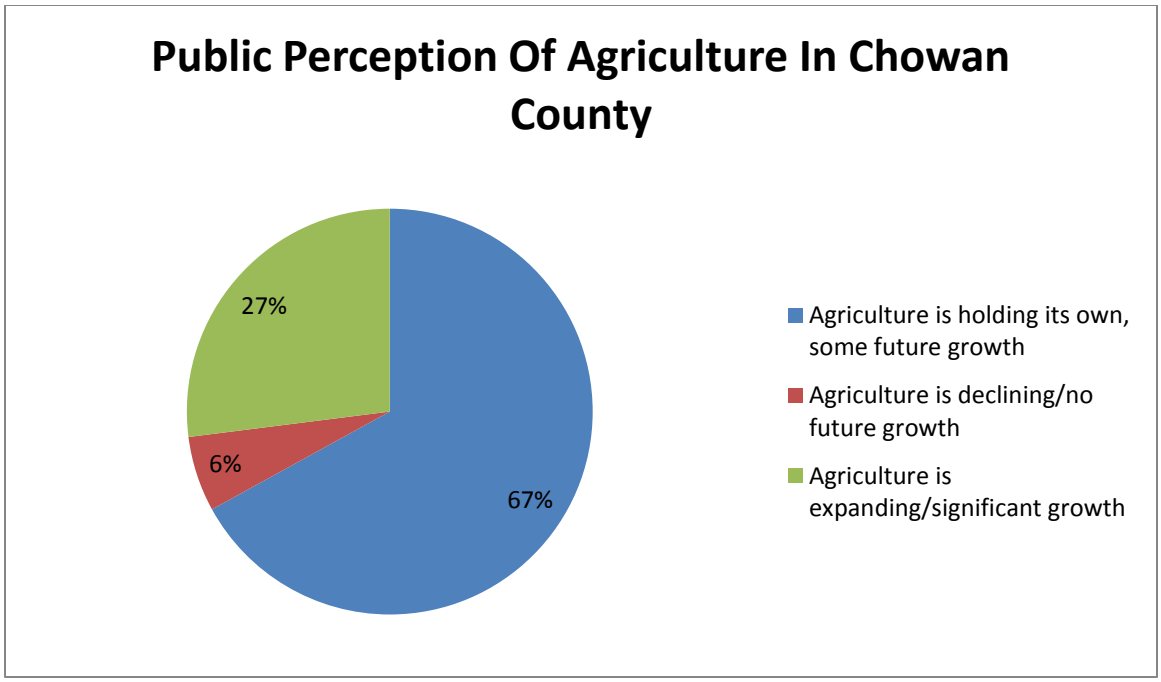

Figure 7. Source: Chowan Non-Farm Resident Survey

Chowan County non-farm residents have a good understanding of the economic impact of the entire agricultural sector on the county's economy. The value of agricultural industry in 2012 provided a total economic impact of $113,844,655 to Chowan County[36].

Ninety-seven percent of surveyed non-farm residents felt that Chowan County should take steps to help preserve farms and forests. One hundred percent of respondents reported that they supported local farming by purchasing local produce from farmers markets; pick-your- own operations, and road side stands. Eighty-one percent of non-farm residents say that they purchase plants from local greenhouses and nurseries. Twenty-two percent have participated in agritourism activities such as corn mazes, pumpkin patches and hayrides. Six percent of respondents lease land for hunting.

Figure 8 illustrates how Chowan County residents look for local food options with 80% indicating that they know the farmer that has produced the product they are purchasing. Fifty percent indicated they would ask where the product

was produced. This data indicates an interest for consumers to know where there food comes from and a desire to create a relationship with the producer.

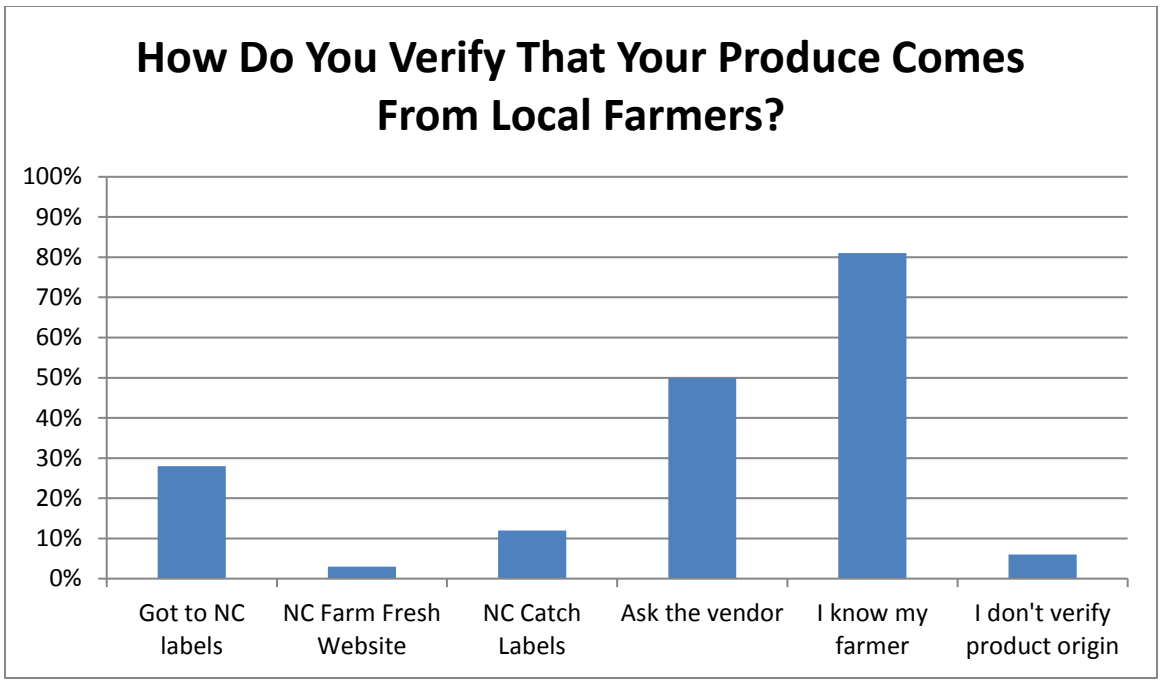

Figure 8. Source: Chowan Non-Farm Resident Survey 2017

The statistics below reveal the agreement or disagreement of non-farm residents with statements about agriculture in Chowan County:

- 100 percent agreed farms and forests enhance scenic beauty and open space
- 97 percent agreed farmers are good neighbors
- 100 percent agreed that local farmers deliver high quality products
- 90 percent agreed that farming has a positive impact on the environment
- 74 percent stated that farming and agribusiness are high technology businesses
- 60 percent agreed farming presents a good career for enterprising people
- 89 percent agreed that agriculture and forestry are viable career opportunities

- 90 percent stated that tax breaks for farmers are important
- 100 percent would support farm and forest preservation efforts in the county
- 75 percent would support the use of government funds for farm and forest development

These statements clearly illustrate that non-farm residents surveyed have a positive image of agriculture in the county.

When asked if they had experienced problems with neighboring farms, respondents noted the following:

- Noise
- Odors
- Smoke/Dust
- Manure application
- Slow moving vehicles
- Drainage issues
- Pesticide use
- Boundary/ trespass
- Cotton defoliation
- Soil erosion

Sixty-two percent of respondents reported that after they discussed complaints with farmers, they gained a better understanding of the purpose of the practice.

The following statement from non-farm respondents in Chowan County revealed the following threats:

- Solar Farms And Wind Turbines Take Up Valuable Farmland
- Housing Developments Threaten Farmland
- Farmers Don’t Have Heirs Interested In Continuing Family Farms

- Small Farms Are Disappearing, While Big Farms Are Getting Bigger
- Corporate Farms Are Unsustainable In Chowan County
- Overuse Of Pesticides And Chemicals
- Lack Of Price Supports For Small Farmers
- Industrial Farms Threaten Small Farmers
- Taxes
- Cost Of Regulations
- Over Harvest Of Forests, Trees Not Replanted
- Limited Interest In Farming
- Unable To Hire And Keep Good Workers
- Algae Bloom And Flooding
- Global Warming And Adverse Weather
- High Cost Of Start-Up Prevents Young People From Entering Farming Profession

Potential opportunities as seen by non-farm residents:

- Unique Crops/Orchards
- Promote Farm To Table Environment
- Environmental Resources—Bees And Birds
- Small Niche Crops
- Appreciation Of Locally Grown Organic Produce For Taste And Health Benefits
- Efficiencies From Technology
- New Uses For Crops
- Organic Produce
- Grapes For Wine Production
- Farmers Markets/Seafood Market
- Hunting Businesses
- Consulting Opportunities
- Reasonable Cost Of Land
- Progressive Thinking Farmers
- Voluntary Ag Districts And Enhanced Voluntary Ag Districts

Non-farm citizens value Chowan County agriculture, but education is needed to help citizens understand the true picture of today's agriculture. The non-farm residents surveyed however did want to embrace agriculture and see it expand as noted in the opportunities listed by this target audience.

One respondent stated that 'farming is an essential way of life in Chowan County, and part of our culture and heritage.'

Recommendations

The major result of the Chowan County Agricultural Development Plan is a set of recommendations with actions steps that, when implemented, will bring about desired change. These steps are based on input from the citizens affected by the plan as well as from other agricultural sources. The following recommendations are extrapolated from the data obtained through interviews and surveys of Chowan County farmers, agribusinesses and citizens and data from USDA and NCDA&CS.

For this plan to be effective, Chowan County citizen leaders, agencies and organizations must follow through with support and collaboration of these recommendations. This plan needs to be evaluated annually to keep it up to date and viable. The annual update will ensure that recommendations are being accomplished and new ones added as needed. Following are recommendations that can be used to maintain and enhance agriculture in Chowan County.

Recommendation One:
Support Measures To Protect And Promote Forest And Farmland In Chowan County.

Endorsement, certification and advocacy of the Chowan County Agricultural Development Plan are critical to protecting and enhancing agriculture in the county. Once the plan is endorsed by the Chowan County Board of Commissioners and certified by the North Carolina Department of Agriculture and Consumer Services, the county will receive priority status for funding from the NCDA&CS's Agricultural Development and Farmland Preservation Trust Fund for agricultural projects. Though residents largely support agriculture, added education and understanding is needed. County officials should be informed of agricultural information affecting Chowan County.

Action Steps

- Present the Chowan County Agricultural Development Plan to the Board of Commissioners for endorsement and submit to NCDA&CS for certification.
- Appoint a Chowan County Agriculture Advisory Board to oversee and manage the plan for the benefit of agriculture in the county.
- Annually review the plan for progress and addition of any needed new recommendations.
- Utilize all available media outlets to inform county leadership and the public about the plan's progress and success.
- Develop and implement an educational program for farmers and landowners regarding available farmland preservation tools and incentives suited for Chowan County.
- Educate landowners and farmers of the benefits of Present Value Taxation that will encourage enrollment.
- Encourage local government, economic developers, land developers, planners, the North Carolina Division of Coastal Management and the North Carolina Department of Transportation to work with the Chowan County Agricultural Advisory Board to informing and engaging them in county projects that will impact agricultural production.

Timeline:

County Commissioners should endorse the Chowan County Agricultural Development Plan by March 2018. Efforts to increase agricultural awareness and representation should begin in mid-2018.

Responsible Parties:

Chowan County Agricultural Advisory Board, Chowan County Cooperative Extension, Albemarle Soil and Water Conservation District, North Carolina Forest Service, Chowan County Economic Development, Chowan County Planning and Inspections Department, and Chowan County Board of Commissioners.

Recommendation Two:

Promote And Increase Enrollment In Voluntary Agricultural District (VAD) And Adopt And Implement Enhanced Voluntary Agricultural District (EVAD) Programs

Chowan County has Voluntary Agricultural District ordinance that was adopted in 2009. To date, 26 farms have enrolled 8,539 acres. However, more farmers need to be aware of the benefits of enrollment in VAD and EVAD.

Action Steps:

- The Chowan County Agricultural Advisory Board will provide leadership in promoting the Chowan VAD ordinance.
- The Chowan County Commissioners will investigate the benefits of adopting an Enhanced VAD ordinance.
- Design and implement a marketing plan using all available media to educate farmers, landowners, developers and realtors on the benefits of VAD ordinance.
- Have appropriate agency staff encourage and assist landowners with understanding and enrollment in VAD.

Timeline:

Targeted promotion of VAD and the investigation of the benefits of EVAD should begin during the second quarter of 2018.

Responsible Parties:

Chowan Agricultural Development Advisory Board, in conjunction with Chowan County Cooperative Extension, will lead the process of creating the EVAD ordinance. The following agencies will cooperate: Chowan Farm Bureau Board, Albemarle Soil and Water Conservation District, USDA Farm Service Agency and Natural Resource Conservation Service, Chowan County Tax Office, Chowan County Register of Deeds, Chowan County Economic Development, Chowan County Planning and Inspections Department and Chowan County Board of Commissioners.

Recommendation Three:

Develop And Conduct Programs To Assist Chowan County Farm And Forest Landowners With Farm Transition Planning.

The average age of farmers in Chowan County was 55.5 years in 2012. According to surveyed farmers, none have formal farm transition plans. Additionally, interviews with farm lending authorities showed lack of farm transition planning as a leading concern about the future of agriculture in the area.

Action Steps:

- Plan and conduct a series of workshops that uses a variety of specialists and agencies to provide information on farm transition and estate planning.
- Develop an apprenticeship program in which young farmers work with experienced producers to learn more about agricultural production and gain more knowledge about transition opportunities.
- Identify farmers willing to investigate innovative strategies for farm transition with beginning farmers.

Timeline:

Farm transition workshops should start in the fall of 2018 and repeated yearly. In the spring of 2019, a study should be conducted on the feasibility and interest in a farm apprenticeship/mentoring program.

Responsible Parties:

Chowan County Agricultural Advisory Board, Chowan County Cooperative Extension, Chowan County Farm Bureau, Ag Carolina/Farm Credit, University of Mount Olive Lois G. Britt Agribusiness Center, local attorneys and agricultural economic specialists.

Recommendation Four:

Promote Appreciation And Awareness Of The Benefits Of Agriculture To Chowan Elected Officials And Citizens.

Today, the majority of the general population is removed from farming and agribusiness. The public needs to understand the importance of agriculture to the local economy. Additionally, non-farm residents need to appreciate where food and fiber is produced. Understanding agriculture will provide stronger relationships between producers and consumers as well as additional support local farms.

Action Steps:

- Develop a comprehensive agriculture awareness plan and determine all feasible delivery presence such as social media, speakers' bureau, print and broadcast media.
- Conduct annual farm tour to promote Chowan diverse agricultural operations including forestry, row crop farming, roadside markets, specialty crops and agritourism.
- Develop presentations that show the role of agriculture in Chowan County to be shared with civic, school and religious organizations.
- Expand and promote events that highlight the local foods movement.
- Involve 4-H and FFA members in the promotion of agriculture.

Timeline:

Efforts should begin after the adoption of the Chowan County Agricultural Development Plan in 2018.

Responsible Parties:

Chowan County Agricultural Advisory Board, Chowan County Cooperative Extension, Chowan County Farm Bureau Board of Directors, North Carolina Department of Agriculture and Consumer Services, University of Mount Olive Lois G. Britt Agribusiness Center, USDA Farm Service Agency, Albemarle Soil and Water Conservation District, and Edenton-Chowan Public Schools.

Recommendation Five:
Expand and Support Youth Agricultural Educational Programs.

Agribusiness leaders, farmers and non-farm residents were all in favor of youth agricultural education as an important to the future of agriculture in Chowan County.

Action Steps:

- Encourage youth to actively participate in all agricultural organizations such as FFA and 4-H in order to develop leadership skills and agricultural experiences.
- Support teacher training for the expansion of the NC Farm Bureau Ag in the Classroom curriculum for primary and elementary students.
- Work with funders, both public and private, to provide needed resources for 4-H and FFA programs.
- Promote agriculture as part of the STEM (Science, Technology, Engineering and Math) initiative in the public school system.
- Coordinate and promote summer high school and college internships with agricultural enterprises.

Timeline:

Coordinated programming efforts will begin in the spring of 2018 and continue as planned throughout the year.

Responsible Parties:

Chowan County Cooperative Extension, Edenton-Chowan Public Schools, regional colleges and universities, Chowan County Farm Bureau, Chowan County farmers and agribusiness owners.

Recommendation Six:
Develop Technical, Business and Marketing Training for the Maintenance and Expansion of Agriculture in Chowan County.

Chowan County farmers expressed a need for training in numerous areas relating to changes, growth and opportunities in agriculture.

Action Steps:

- Develop an information network of support agencies and people who can assist new and existing farmers with training and knowledge as they plan and begin new enterprises.
- Conduct training on business planning that will enhance farmer knowledge about forward pricing and hedging, identifying and managing risks, and direct to consumer marketing of products
- Offer training experiences in timber management, development of a forestry management plan, and pine straw sales.
- Educate farmers on the new revenue opportunities for food product sales and agricultural services to the growing population centers near Chowan County.

Timeline:

Programming efforts will begin in late 2018. Schedules for trainings, workshops and conferences will be developed by members of the implementation team.

Responsible parties:

Chowan County Cooperative Extension, University of Mount Olive Lois G. Britt Agribusiness Center, NC Forest Service, NCDA&CS, USDA Natural Resources Conservation District, and the Chowan County Farm Bureau Board of Directors.

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Appendixes

Chowan County Voluntary Agricultural District Ordinance

CHOWAN COUNTY
VOLUNTARY AGRICULTURAL DISTRICT ORDINANCE

ARTICLE I
TITLE

An ordinance of the Board of County Commissioners of Chowan County, North Carolina, entitled, "VOLUNTARY AGRICULTURAL DISTRICT ORDINANCE."

ARTICLE II
AUTHORITY

The articles and sections of this program are adopted pursuant to authority conferred by the N.C.G.S. Sections 106-735 through 106-743, Chapter 153A, and other applicable law.

ARTICLE III
PURPOSE

The purpose of this ordinance is to promote the preservation of farmland in Chowan County so that development and growth will be accompanied by protection of farms from non-farm development and other negative impacts on properly managed farms, recognizing the importance of agriculture to the economic and cultural life of the county.

This ordinance establishes a Voluntary Agricultural District Program that has the following benefits for participating farms and other county residents:

The program preserves and maintains agricultural areas within the county.

The program informs non-farming neighbors and potential land purchasers that the participating farm may emit noise, dust, smells, etc. This may help avoid conflicts between neighbors.

Landowner participation in the program is voluntary and the landowner may terminate his/her participation at any time.

The program conserves green space and natural resources as the county's population and development expands.

The program maintains opportunities to produce locally grown food and fiber.

ARTICLE IV
DEFINITIONS

The following are defined for purposes of this ordinance:

Advisory Board: Chowan County Agricultural Advisory Board.

Chairperson: Chairperson of the Chowan County Agricultural Advisory Board.

District: Voluntary Agricultural District as established by this ordinance.

Board of Commissioners: Chowan County Board of Commissioners.

ARTICLE V
AGRICULTURAL ADVISORY BOARD

A. Creation
The Board of Commissioners hereby establishes the Chowan County Agricultural Advisory Board to implement the provisions of this ordinance.

B. Appointments and Memberships
The Advisory Board shall consist of no less than seven (7) members appointed by the Board of Commissioners.

Requirements

1. Each Advisory Board member shall be a Chowan County resident or landowner.
2. At least six (6) of the members shall be actively engaged in farming or own qualifying farmland in Chowan County.
3. The members actively engaged in farming, as well as other members, shall be selected for appointment by the Board of Commissioners from the names of individuals submitted to the Board of Commissioners by the Chowan County Soil and Water Conservation District, the county office of the North Carolina Cooperative Extension Service, the U.S. Farm Service Agency, Chowan County Farm Bureau, and any other agricultural-related individual or group.
4. Each of the four (4) districts established in Article VI shall be represented on the Board by a person owning farmland in the district.
5. The remaining three (3) members of the Board shall be appointed at-large by the Board of Commissioners to represent a broad range of agricultural interests. One (1) of these members shall be a member of the Board of Commissioners.

C. Tenure

1. The initial board is to consist of two (2) appointees for terms of one year; two (2) appointees for terms of two years; and three (3) appointees for terms of three years. Thereafter, all appointments are to be for terms of three (3) years, with reappointment permitted.

2. Terms of appointment shall be staggered so that no more than three (3) members' appointments expire annually.

3. Following the initial staggered appointments, all members shall be eligible to serve a maximum of two (2) consecutive terms. Former members may be reappointed.

4. Individuals initially appointed to terms of less than three (3) years in establishment of the staggered term rotation shall be eligible for reappointment so as to serve two full terms in addition to the initial term of less than three (3) years.

D. Vacancies

Any vacancy on the Advisory Board is to be filled, from recommendations of the groups referenced in Article V, Section B, by the Board of Commissioners for the remainder of the unexpired term.

E. Removal

Any member of the Advisory Board may be removed by a unanimous vote of the Board of Commissioners for the remainder of the unexpired term.

F. Funding

The Board of Commissioners shall fix the per diem compensation, if any, of the members of the Advisory Board and funds shall be appropriated to the Advisory Board to perform its duties.

G. Advisory Board Procedure

1. Advisory Board Year

   The Advisory Board shall use the Chowan County fiscal year as its meeting year.

2. Officers

   The Advisory Board shall elect a Chairperson and Vice-Chairperson each year at its first meeting of the fiscal year. The Chairperson shall preside over all regular or special meetings of the Advisory Board. In the absence or disability of the Chairperson, the Vice-Chairman shall preside and

exercise all powers of the Chairperson. Additional officers may be elected as needed.

3. Jurisdiction
   The Advisory Board may adopt rules of procedure not inconsistent with this ordinance or with other provisions of State law.

4. Meetings
   Meetings of the Advisory Board shall be held at least annually and otherwise at the call of the Chairperson and at such other times as the Advisory Board may specify in its rules of procedure or upon the request of at least a majority of the Advisory Board membership. Notice of all meetings shall be made to the members in writing, unless otherwise agreed to by all Advisory Board members. Meetings shall be open to the public. Meeting dates and times shall be advertised according to the requirements of the North Carolina law for open meetings. All meetings shall be conducted in accord with the current Roberts Rules of Order.

5. Majority Vote
   All issues shall be decided by a majority vote of the members of the Advisory Board present, except as otherwise stated herein. A quorum is defined as at least two-thirds of the members in attendance. No business may be conducted by the Advisory Board without a quorum present.

6. Records
   The Advisory Board shall keep minutes of the proceedings showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact and shall keep records of its examinations and other official actions, all of which shall be filed in the office of the Advisory Board and shall be public record.

7. Administrative
   The Advisory Board shall work through the Chowan County office of the North Carolina Cooperative Extension Service for record keeping, correspondence, application procedures under this ordinance, and whatever service the Board needs to complete its duties.

H. Duties

The Advisory Board shall:

1. Review and approve or disapprove applications of landowners for enrollment of qualified farmland, horticultural land or forestland in voluntary agricultural districts;
2. Make recommendations concerning the establishment and modification of agricultural districts;
3. Conduct public hearings;
4. Advise the Board of Commissioners on projects, programs, or issues affecting the agricultural economy and agricultural, horticultural or forestry activities within the county that will affect agricultural districts:
5. Review and make recommendations concerning any ordinance amendment adopted or proposed for adoption under this ordinance;
6. Prepare a draft of the report required by G.S. 106-743 giving the status, progress and activities of the county's farmland preservation program;
7. Perform other agricultural, horticultural or forestry-related tasks or duties assigned by the Board of Commissioners or applicable law.
8. Study additional methods of protection for farming, horticulture, forestry and the attendant land base, and make recommendations to the Board of Commissioners; and
9. Develop a draft countywide farmland protection plan as defined in N.C.G.S. 106-744 (e) for presentation to the Board of Commissioners.

ARTICLE VI
CREATION OF VOLUNTARY AGRICULTURAL DISTRICTS

A. Districts

Four (4) districts are hereby established based on County townships:

1. Edenton
2. Rocky Hock
3. Wardville
4. Yeopim

B. Creation

An agricultural district created pursuant to this Ordinance may contain qualifying farms:

1. Consisting of agricultural, forest, or horticultural land consistent with G.S.105-277.2 through 105-277.7 OR
2. All enrolled land within one (1) of the districts established in A, above, shall be part of a single district.
3. If a qualifying farm falls into two (2) or more districts, it shall participate in the district in the region where the majority of acreage falls.

C. Education

The County may take such action as it deems appropriate through the Advisory Board or other entities or individuals to encourage the formation of the Districts

and to further their purposes and objectives, including the implementation of public information programs to reasonably inform landowners of the agricultural district program.

ARTICLE VII
CERTIFICATION AND QUALIFICATION OF FARMLAND

In order for farmland to qualify under this Article, it must be real property that:

A. Is participating in the farm present-use-value taxation program established by G.S. 105-277.2 through 105-277.7, or is otherwise determined by the county to meet all the qualifications of this program set forth in G.S. 105-277.3; and

B. Must be managed, if highly erodible land exists on the farm, in accordance with the Natural Resource Conservation Service defined erosion-control practices that are addressed to said highly-erodible land; and

C. Be the subject of a conservation agreement, as defined in G.S. 121-35, between Chowan County and the owner of such land that prohibits non-farm use or development of such land for a period of at least ten (10) years, except for the creation of not more than four (4) lots that meet applicable Chowan County zoning and subdivision regulations. The property owner may voluntarily revoke this conservation agreement by submitting a written request to the Board in accordance with Article IX; and

D. Be located in the unincorporated area of Chowan County.

ARTICLE VIII
APPLICATION, APPROVAL, AND APPEAL PROCEDURE

A. Application Procedure

A landowner may apply to participate in the program by making application to the Advisory Board or the Chowan County office of the North Carolina Cooperative Extension Service. The application shall be on forms provided by the Board. For a farmland owner to receive the benefits provided by this ordinance, the farm must be certified as qualifying farmland by the Advisory Board and complete all procedures outlined in Article VIII, Section B.

B. Approval Process

1. Upon receipt of an application, the Chowan County office of the North Carolina Cooperative Extension Service and the Soil and Water Conservation District will review each application for completeness.

2. The Chowan County office of the North Carolina Cooperative Extension Service or the Soil and Water Conservation District shall forward the application to Advisory Board.
3. Within sixty (60) days, the Advisory Board will meet and render approval or disapproval of the application. If the Agricultural Advisory Board cannot meet together, they may render approval of the application by teleconference. Applicant shall be notified of the board's decision by letter within fifteen (15) days.
4. Upon approval, Applicant may execute the Conservation Agreement and record it at the Chowan County Register of Deeds; otherwise the agreement will be kept with the Cooperative Extension Service or the Soil and Water Conservation District.
5. The Extension Office or Soil and Water Office will forward approved applications to the Chowan County Tax Department/Land Records office for inclusion on maps.

C. Appeal

If an application is denied by the Advisory Board, the landowner may, within ten (10) days of notification of disapproval of the application, request in writing that the Advisory Board reconsider its decision. The request for reconsideration shall state the reason(s) therefore. Upon either an initial denial, if no request for reconsideration was made, or denial after reconsideration, the landowner shall have thirty (30) days from the date of notification to appeal the decision to the Board of Commissioners. Such appeal shall be presented in writing. The decision of the Board of Commissioners is final.

D. The Agricultural Advisory Board may make exceptions on an individual farm basis for a farm that does not meet the requirements of present use valuation, due to ownership being a publicly held corporation, based on the farms importance in maintaining agriculture production in Chowan County.

ARTICLE IX
REVOCATION, ENFORCEMENT AND RENEWAL OF CONSERVATION AGREEMENT

A. Revocation and Enforcement

1. By providing thirty (30) days advance written notice to the Advisory Board, a landowner of qualifying farmland within a Voluntary Agricultural District may revoke the Conservation Agreement. The Advisory Board may revoke the same Conservation Agreement based on noncompliance by the landowner, subject to the same provisions as contained in Article VIII(C) for appeal of denials. Such revocation shall result in loss of qualifying farm status and loss of eligibility to participate in a district. Absent noncompliance by the landowner, neither the Advisory Board nor the Board of Commissioners shall revoke any Conservation Agreement prior to its expiration. If the Advisory Board shall revoke this Conservation Agreement for cause, the landowner shall have the appeal rights set forth in Article VIII(C).

2. Transfers of land in a Voluntary Agricultural District due to death of the landowner, sale or gift shall not revoke the Conservation Agreement unless the land no longer qualifies for the present-use-value taxation program or, in the event that there are water or sewer assessments held in abeyance, the new owner(s) fails to agree in writing to accept liability for those assessments in the event that the land is withdrawn either voluntarily or involuntarily from the district.

3. Enforcement of the terms of a Conservation Agreement for land enrolled in a Voluntary Agricultural District shall be limited to revocation of the Conservation Agreement and the benefits derived there from.

B. Renewal

1. A Conservation Agreement for land within a Voluntary Agricultural District shall be automatically renewed after the ten year Conservation Agreement has expired unless the landowner provides 30 day written notice to the Advisory Board of intent not to renew. Absent noncompliance by the landowner, neither the Advisory Board nor the Board of Commissioners shall fail to renew any Conservation Agreement unless this Ordinance or its authorizing legislation has been repealed.

ARTICLE X
NOTIFICATION

A. Record Notice of Proximity to Voluntary Agricultural District

1. Maps
   Upon establishment, Voluntary Agricultural Districts will be marked on official maps maintained by the Advisory Board and displayed for public view in the following county offices:
   a. Register of Deeds
   b. Planning/Inspections Department
   c. Natural Resource Conservation Service/ Soil and Water Conservation
   d. North Carolina Cooperative Extension
   e. Any other office deemed necessary by the Advisory Board

2. Posting of Notice
   The following notice, of a size and form suitable for posting, shall be posted in the office of the Register of Deeds, Planning Department, and any other office or agency the Advisory Board necessary:

"Notice to Real Estate Purchasers in Chowan County"
"Chowan County has established agricultural districts to protect and preserve agricultural lands and activities. These districts have been developed and mapped by the county to inform all purchasers of real property that certain agricultural and

forestry activities, including but not limited to pesticide spraying, manure spreading, machinery and truck operations, livestock operations, sawing, and other common farming activities may occur in these districts any time during the day or night. Maps and information on the location and establishment of these districts can be obtained from North Carolina Cooperative Extension, the county Planning/Inspections Department, Register of Deeds, or Natural Resource Conservation Service office."

3. Computerized Land Records
   Upon certification of qualifying farmland and designation of real property as a District, the Chowan County Tax Office/Land Records, in cooperation with the Register of Deeds, shall provide some form of notice reasonably calculated to alert a person researching the title (including outstanding taxes and assessments) of a particular tract that such tract is located within one mile of a qualifying farm.

4. Building Permit Registration
   Persons applying for a building permit shall be required to sign the following statement, which shall be maintained at the office of the Advisory Board:
   "I have reviewed the most current Chowan County Agriculture Districting map found in the Building Inspection office. I understand that activities such as pesticide spraying, manure spreading, machinery operation, livestock operations, logging, and other common farming and forestry activities may occur at any time in these areas."
   These statements shall be on file in the office of the Advisory Board.

5. Limit of Liability
   In no event shall the County or ay of its officers, employees, members of the Advisory Board, or agents be held liable in damages for any misfeasance, malfeasance, or nonfeasance occurring in good faith in connection with the duties or obligations imposed by this ordinance.

6. No Cause of Action
   In no event shall any cause of action arise out of the failure of a person researching the title of a particular tract to report to any person the proximity of the tract to a qualifying farm or Voluntary Agricultural District as defined in this ordinance.

7. Signage
   Signs identifying approved Voluntary Agricultural Districts may be placed along the rights-of-way of major roads that pass through or next to those districts. There shall also be at least one sign approved by the Advisory Board posted on each qualifying farm. Placement of signs will be coordinated with the North Carolina Department of Transportation.

B. Subdivision Ordinance and Zoning Ordinance Review

Developers of major subdivisions or planned unit developments, as defined by the Chowan County subdivision ordinance, shall enter on the face of the preliminary and final plat a certification attesting to their understanding that the subdivision is located within a Voluntary Agricultural District. If adjoining property is enrolled in the VAD program, it should be designated so in the property description on the plat.

ARTICLE XI
WAIVER OF WATER AND SEWER ASSESSMENTS

A. No Connection Required
A landowner belonging to the District shall not be assessed for or be required to connect Chowan County water and/or sewer systems.

B. Abeyance
Water and sewer assessments will be held in abeyance, without interest, for qualifying farms in a District, until improvements on such property are connected to the water or sewer system for which the assessment was made.

C. Termination of Abeyance
When the period of abeyance ends, the assessment is payable in accordance with the terms set out in the assessment resolution.

D. Suspension of Statute of Limitations
Statutes of limitations are suspended during the time that any assessment is held in abeyance without interest. The landowner may be required to sign and acknowledgement of the abeyance of the statute of limitations upon collecting water and sewer assessments, or other utility assessments.

E. Other Statutory Abeyance Procedures
Nothing in this section is intended to diminish the authority of the County to hold assessments in abeyance under G.S. 153A-201 or other applicable law.

F. Conflict with Water and/or Sewer System Construction and Improvements Grants
To the extent that this section conflicts with the terms of federal, state, or other grants under which county water and/or sewer systems are constructed this section shall not apply. This section shall not apply to utilities that are not owned by the county unless the County has entered into an agreement with the entity(ies) owning the utilities and that agreement provides that this Ordinance shall apply.

ARTICLE XII
PUBLIC HEARINGS

A. Purpose

Pursuant to N.C.G.S. §106-740, which provides that no state or local public agency or governmental unit may formally initiate any action to condemn any interest in qualifying farmland within a District until such agency or unit has requested the Advisory Board to hold a public hearing on the proposed condemnation.

B. Procedure

1. Upon receiving a request from a condemning agency, the Advisory Board shall publish, at the agency's expense, notice describing the proposed action in the appropriate newspapers of Chowan County within seven (7) business days of the request, and will in the same notice notify the public of a public hearing on the proposed condemnation, to be held within ten (10) days of receipt of the request.

2. The Advisory Board shall meet to review:

   a. Whether the need for the project has been satisfactorily established by the agency or unit of government involved, including a review of any fiscal impact analysis conducted by the agency involved; and

   b. Whether there are alternatives to the proposed action that have less impact and are less disruptive to the agricultural activities of the District within which the proposed action is to take place.

3. The Advisory Board shall consult with the County Agricultural Extension Agent, the Natural Resources Conservation Service District Conservationist, and any other individuals, agencies, or organizations deemed by the Advisory Board to be necessary for its review of the proposed action.

4. Within five (5) days after the hearing, the Advisory Board shall make a report containing its findings and recommendations regarding the proposed action. The report shall be made available to the public prior to its being conveyed to the decision-making body of the agency proposing the acquisition.

5. There will be a period of ten (10) days allowed for public comment on the report of the Advisory Board.

6. After the ten (10) day period for public comment has expired, the Advisory Board shall submit a final report containing all of its findings and recommendations regarding the proposed action to the decision making body of the agency proposing the acquisition.

7. The total time period, from the day that a request for a hearing has been received to the day that a final report is issued to the decision making body

of the agency proposing the acquisition shall not exceed thirty (30) days. If the agency agrees to an extension, the agency and the Advisory Board shall mutually agree upon a schedule to be set forth in writing and made available to the public.

8. Pursuant to N.C.G.S. §106-740, the Board of Commissioners shall not permit any formal initiation of condemnation by local agencies while the proposed condemnation is properly before the Advisory Board.

ARTICLE XIII
COUNTY LAND-USE PLANNING

A. Duty of the Advisory Board
It shall be the duty of the Advisory Board to advise the Board of Commissioners or that agency or office to which the Board of Commissioners delegates authority to oversee county land use planning, on the status, progress, and activities of the county's agricultural district program, and to also coordinate the formation and maintenance of Voluntary Agricultural Districts with the county's land use planning activities and the county's land use plan if one currently exists at the time this ordinance is enacted or when one is formed.

B. Growth Corridors
At such time as the county might establish designated growth corridors agricultural districts shall not be permitted in the designated growth corridors, as delineated on the official county zoning map, without the approval of the Board of Commissioners. Districts located in growth corridors designated after the effective date of this program may remain, but shall not be expanded within the growth corridor area without the approval of the Board of Commissioners.

ARTICLE XIV
CONSULTATION AUTHORITY

The Advisory Board may consult the North Carolina Cooperative Extension Service, the Natural Resource Conservation Service, the North Carolina Department of Agriculture and Consumer Services, and with any other individual, agency, or organization the Advisory Board deems necessary to properly conduct its business.

Article XV

NORTH CAROLINA AGENCY NOTIFICATION

An official copy of this ordinance shall be sent to the office of the North Carolina Commissioner of Agriculture and Consumer Services, the Board of Commissioners, the county office of the North Carolina Cooperative Extension Service, the Chowan County Soil and Water Conservation District, and any other individual, agency, or organization the Advisory Board deems necessary to properly conduct its business. At least once per year, the Advisory Board shall submit a written report to the Commissioner of Agriculture and Consumer Services on the county's agricultural district program, including the following information:

1. Number of landowners enrolled;
2. Number of acres enrolled;
3. Number acres applied for;
4. Numbers of acres certified during the reporting period;
5. Number of acres denied during the reporting period;
6. Copies of any amendments to the ordinance; and
7. Any other information the Advisory Board deems useful.

ARTICLE XVI
LEGAL PROVISIONS

A. Severability

If any article, section, subsection, clause, phrase, or portion of this ordinance is for any reason found invalid or unconstitutional by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of this ordinance.

B. Conflict with other Ordinances and Statutes

Whenever the provisions of this ordinance conflict with other ordinances of Chowan County, this ordinance shall govern. Whenever the provisions of any federal or state statute require more restrictive provisions than are required by this ordinance, the provisions of such statute shall govern.

C. Amendments

This ordinance may be amended from time to time by the Board of Commissioners.

ARTICLE XVII
ENACTMENT

The Chowan County Board of Commissioners hereby adopts and enacts the preceding articles and sections of this ordinance.

Adopted this the 7th day of April, 2014.

Motion for adoption by Commissioner Smith

Chowan County Board of Commissioners

Chairperson

ATTEST:

Clerk to Board of Commissioners

Chowan County Producer Survey

Chowan County Agricultural Producer Survey

1. Introduction

Your input is needed to create an Agricultural Development Plan for Chowan County. This plan will show the current state of agriculture and forestry, outline the challenges and opportunities for agriculture and forestry that exist, and develop recommendations to help maintain family farms and forests in Chowan County. The general public, agribusinesses, producers and landowners are targeted audiences for this survey. If the comprehensive strategies are to be meaningful, they need to be shaped by the input of the farm and forest producers. Your responses will help us to understand the needs of agriculture.

The University of Mount Olive received a grant from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund to create agricultural development plans for Chowan, Currituck, Pasquotank and Perquimans Counties. The Lois G. Britt Agribusiness Center at Mount Olive College is directing the project.

Many challenges face agriculture such as a heightened awareness of the relationships between farm uses and other land uses. Farms and forests, when located adjacent to industries, military installations and communities, are considered "compatible use partners" and provide numerous benefits to the county and its residents. A comprehensive strategy will assist with the county's agriculture and land use policies and programs as well as develop these compatible partnerships. The Chowan County Agricultural Development Plan will provide that strategy.

The intent of this plan is neither to limit nor restrict landowners' rights and uses. The plan will increase awareness of agricultural development opportunities and appreciation of agriculture and forestry. The preservation of agriculture is important to the well being of family farms as well as to county and its economy. However, the ultimate decision of agricultural development rests in the hands of the landowners of farms and forests.

Please note that all information will be strictly confidential. Responses to the surveys will remain anonymous and are not identifiable. Your participation in this study is strictly voluntary.

Thank you for your interest and participation. If you have additional concerns or questions please contact semory@umo.edu or 910-290-1002.

2. AGRICULTURAL PRODUCER SURVEY

You should complete this survey ONLY IF you have income in excess of $1000 from the production of crops, livestock, or aquaculture OR if you own timberland OR if you receive income from renting farm acreage.

All information is STRICTLY CONFIDENTIAL as referenced on introduction page.

Chowan County Agricultural Producer Survey

3. CURRENT STATE OF AGRICULTURE

Please tell us the type and the size of your farm/forest enterprise(s) in the following categories.

1. Please answer each item as appropriate for your operation:

How many total acres of land do you farm within Chowan?

Of this total acreage farmed, how many acres do you rent?

If you are a landowner who rents your land to farmers, how many acres do you rent?

How many total acres of timberland do you own within Chowan County?

Of this total, how many acres are managed for timber production?

How many acres of farm and/or forestland do you manage outside of Chowan County?

2. Help us understand more about your operations. Please select the statement that best describes your operation:

- ◯ Timber production only
- ◯ Farm production only
- ◯ Primarily timber production with some farm production
- ◯ Primarily farm production with some timber production

3. How long has your farm/forest been in operation?

- ◯ 0 to 9 years
- ◯ 10 to 20 years
- ◯ 20+ years

4. What is your age?

5. Is farming/forestry your primary occupation?

- ◯ Yes
- ◯ No

6. What percentage of your household income comes from your farm or forest operation?

- ◯ 0-24%
- ◯ 25-49%
- ◯ 50-74%
- ◯ 75-100%

7. Have you, in the past 5 years, expanded your farm or forest operations?

- ◯ Yes
- ◯ No

8. If you did not expand, what were the primary reasons?
(Check ALL that apply)

- ☐ Satisfied with current size
- ☐ Age of owner/operator
- ☐ High cost of equipment
- ☐ Lack of available equipment
- ☐ Inability to obtain needed financing
- ☐ Low profit margin
- ☐ Market volatility and excessive risk
- ☐ Lack of available land to be purchased
- ☐ Lack of available land to rent
- ☐ Land is available, but too close to development to farm or manage
- ☐ Lack of available labor
- ☐ High cost of additional labor
- ☐ Personal or others reasons
- ☐ Environmental or other governmental restrictions
- ☐ Other (please specify)

9. Do you currently own sufficient property to expand or diversify your farm/forest operation?

- ◯ Yes
- ◯ No

10. How much longer do you plan to operate your farm/forest?

- ◯ Less than 5 years
- ◯ 5 to 9 years
- ◯ 10 to 19 years
- ◯ More than 20 years

11. Of the issues listed below which do you anticipate to most influence your operation in the next five years: (Check ALL that apply)

- ☐ Production input costs
- ☐ Marketing costs
- ☐ Regulatory costs
- ☐ Commodity prices
- ☐ Available labor
- ☐ Affordable labor
- ☐ Market competition
- ☐ Competition for available land
- ☐ Development pressure
- ☐ Export demand for products
- ☐ Local demand for products
- ☐ Land rental rates

12. When you retire, what do you expect to do with your farm/forestland?

- ◯ Sell to other farmers
- ◯ Transfer to family for farming
- ◯ Sell to non-farmers
- ◯ Transfer to family for non-farm use

13. Do you currently have a farm transition plan/estate plan?

- ◯ Yes
- ◯ No

14. Have you shared your thoughts of farm transition with your family members?

- ◯ Yes
- ◯ No

15. If you have forestland, do you have a written forestry management plan to follow?

- ◯ Yes
- ◯ No

16. Is your farm or forest enrolled in Chowan County's deferred present use value tax program?

- ◯ Yes
- ◯ No
- ◯ Don't know

17. If your operation is involved in the production of produce, have you obtained Good Agricultural Practices (GAP) certification for your farm to assure food safety?

- ◯ Yes
- ◯ No
- ◯ Do not grow produce

18. If you are a landowner, do you currently lease any of your property for:
(Check ALL that apply)

- ☐ Farming
- ☐ Military Training Operations
- ☐ Cell Towers
- ☐ Solar Farm
- ☐ Mining/Quarry
- ☐ Hunting/Fishing
- ☐ Do Not Lease
- ☐ Other (please specify):

19. If you do lease land, how many acres do you lease?

20. Have you had neighbor problems concerning your farming or forestry operation?

- ◯ Yes
- ◯ No

21. If you answered yes to the previous question, what was the nature of the complaint? (Check ALL that apply)

- [ ] Manure application complaint
- [ ] Boundary or trespassing conflict
- [ ] Drainage issue
- [ ] Dumping/littering issue
- [ ] Impact of farming on wildlife
- [ ] Smoke or dust
- [ ] Noise complaint
- [ ] Slow-moving vehicle complaint
- [ ] Chemical use or application issues
- [ ] Adverse environmental impact of farming
- [ ] Other (please specify)

22. Please answer each question presented below:

	Yes	No
Are you aware of the Voluntary Agricultural District (VAD) program?	○	○
Do you have acreage enrolled in the VAD Program?	○	○

Chowan County Agricultural Producer Survey

4. FUTURE OF AGRICULTURE

Please answer the following questions about the future of agriculture and opportunities for agriculture.

1. Do you think local government funding should support agricultural development?

- ◯ Yes
- ◯ No

2. The military presence in northeastern NC is important to the economy of the state as is agriculture. Do you feel there is opportunity for market-based compatible use incentives to be arranged between the military and farm and forest landowners?

- ◯ Yes
- ◯ No

3. Do you think educating non-farming citizens about the economic and social contributions of farming/forestry will increase community support for farms/forests and improve your operating conditions?

- ◯ Yes
- ◯ No

4. Of the taxes listed below, please select the top three that you feel impose an unreasonable burden to agriculture/agribusiness.

- ☐ Local property tax on land
- ☐ Local property tax on buildings and equipment
- ☐ Federal income tax
- ☐ State income tax
- ☐ Federal self employment tax
- ☐ Federal social security and Medicaid taxes for employees (payroll taxes)
- ☐ State unemployment tax
- ☐ Estate tax

5. Do you see agritourism as an expansion/diversification opportunity for agriculture and agribusiness in Chowan County?

- ◯ Yes
- ◯ No

6. Is it important to promote agriculture and forestry as career opportunities?

- ◯ Yes
- ◯ No

7. Agriculture, horticulture, forestry and agribusiness should be taught in: (Check ALL that apply.)

- ☐ Elementary school
- ☐ Middle school
- ☐ High school
- ☐ 4-H Youth Development
- ☐ Community college
- ☐ Colleges and Universities

8. Would you consider training an intern/young farmer within your farming operation to encourage the next generation to enter production agriculture?

- ◯ Yes
- ◯ No
- ◯ Only if monetary incentives were provided.

5. TRAINING AND BUSINESS DEVELOPMENT

Please answer the following questions about training and business development opportunities to maintain the viability of your farm or forest.

1. Select which of these potential trainings you would attend: (Check ALL that apply)

- [ ] Timber management
- [ ] Pine Straw Sales
- [ ] Longleaf Pine Production
- [ ] Development of a Forestry Management Plan
- [ ] Selecting Consulting Foresters
- [ ] None of the above

2. Would you attend training on business planning such as these: (Check ALL that apply)

- [ ] Direct to Consumer Marketing of Products
- [ ] Business Website Development
- [ ] Regional Product Branding
- [ ] Identifying and Managing Risk
- [ ] Diversifying through Agritourism
- [ ] Marketing and Sales Promotions
- [ ] Forward Pricing and Hedging
- [ ] Organizing Buyer/Seller Groups

Other (please specify)

3. Would you attend training on Estate Planning and Farm/Forest Transition?

- ( ) Yes
- ( ) No

4. Would you attend training on how to apply for federal and state contracts for your products?

- ◯ Yes
- ◯ No

5. Both opportunities and threats exist for agriculture and agribusiness in Chowan County.

Please list two threats you perceive to agriculture/forestry/agribusiness in Chowan County.

Please list two opportunities that exist for agriculture/forestry/agribusiness in Chowan County.

6. Please add any additional comments you may have about agriculture and forestry in Currituck County.

6. THANK YOU!

Your time and effort on this survey will help create an Agricultural Development Plan for Chowan County. This plan will provide recommendations for both short and long-term strategies to support agriculture and forestry in Chowan County. Once the plan is written, it will be presented to the county commissioners for endorsement. Once it is endorsed, it will be sent to NC Department of Agriculture for certification. When the plan is certified, the county will receive priority status for funding from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund.

If you have any questions or would like more details, please contact Ed Emory at semory@umo.edu or at 910-290-1002.

Chowan County Agribusiness Survey

Chowan Agricultural Business Survey

1. Introduction

Your input is needed to create an Agricultural Development Plan for Chowan County. This plan will contain the current state of agriculture and forestry, outline the challenges and opportunities for agriculture and forestry that exist, and develop recommendations to help maintain family farms and forests in Chowan County. The general public, agribusinesses, producers and landowners are targeted audiences for this survey. Many of Chowan County's agribusinesses are individual, independent operations with unique interests, needs and concerns. If the Chowan County Agricultural Development Plan is to be meaningful, it needs to be shaped by the input of agribusiness owners.

The University of Mount Olive received a grant from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund to create agricultural development plans for Chowan, Currituck, Pasquotank, and Perquimans Counties. The Lois G. Britt Agribusiness Center at Mount Olive College is directing the project.

Many challenges face agriculture such as a heightened awareness of the relationships between farm uses and other land uses. Farms and forests, when located adjacent to industries, military installations and communities, are considered "compatible use partners" and provide numerous benefits to the county and its residents. A comprehensive strategy will assist with the county's agriculture and land use policies and programs as well as develop these compatible partnerships. The Chowan County Agricultural Development Plan will provide that strategy.

The intent of this plan is neither to limit nor restrict landowners' rights and uses. The plan will increase awareness of agricultural development opportunities and appreciation of agriculture and forestry. The preservation of agriculture is important to the well being of family farms as well as to county and its economy. However, the ultimate decision of agricultural development rests in the hands of the landowners of farms and forests.

Please note that all information will be strictly confidential. Responses to the surveys will remain anonymous and are not identifiable.

Your participation in this study is strictly voluntary. Thank you for your interest and participation. If you have additional concerns or questions please contact Ed Emory at semory@umo.edu or 910-290-1002.

Chowan Agricultural Business Survey

2. AGRICULTURAL BUSINESS SURVEY

Please complete this survey ONLY if you own a business that is tied to agriculture, aquaculture and/or forestry through services, trainings, products, manufacturing, processing, etc.

All information is STRICTLY CONFIDENTIAL as referenced on introduction page.

1. What type of agribusiness do you operate?
(Check ALL that apply)

- [ ] Feed dealer
- [ ] Equipment dealer
- [ ] Equipment repair
- [ ] Ag consultant
- [ ] Farm supply store
- [ ] Seed/fertilizer/lime/agri-chemical
- [ ] Nursery/greenhouse
- [ ] Other (please specify)
- [ ] Processor/distributor
- [ ] Veterinarian
- [ ] Logger or forester
- [ ] Dairy or other ag processor
- [ ] Landscape/horticulture
- [ ] Financial/insurance

2. How many people do you employ in Chowan County? (Please provide number of employees)

Full-time

Part-time

3. How long has this business been in operation?

- ◯ 0-4 years
- ◯ 5-9 years
- ◯ 10-20 years
- ◯ 20+ years

4. Approximately what percentage of your business comes from the farm/forest community?

- ◯ 0 to 24%
- ◯ 25 to 49%
- ◯ 50 to 74%
- ◯ 75 to 100%

Chowan Agricultural Business Survey

3. OVERVIEW OF LAST FIVE YEARS

Please help us understand what has occurred in your business in the LAST five years.

1. Have you increased your operation size in the last five years?

- ◯ Yes
- ◯ No

2. Have you added service area to hold or expand your market share in the last five years?

- ◯ Yes
- ◯ No

3. Have you increased agricultural inventories and sales in the last five years?

- ◯ Yes
- ◯ No

4. If you have NOT expanded in the last 5 years what are the primary reasons?
(Check ALL that apply)

- ☐ Satisfied with current size
- ☐ Loss of market share
- ☐ Lack of labor supply
- ☐ Age of owner
- ☐ Lack of financial capital
- ☐ Low profit margins
- ☐ Declining agricultural sales
- ☐ Lack of room to expand
- ☐ Regulatory obstacles
- ☐ Receivables collection problems
- ☐ Other (please specify)

4. OVERVIEW OF NEXT FIVE YEARS

Please help us understand what you foresee for your business in the NEXT five years.

1. Do you expect to increase your operation size in the next five years?

- ◯ Yes
- ◯ No

2. Do you expect to increase the number of employees at your place of business in the next five years?

- ◯ Yes
- ◯ No

3. Do you expect to add new product lines or services for farm/forestry operators in the next five years?

- ◯ Yes
- ◯ No

4. Do you expect to add new product lines or services for non farmers in the next five years?

- ◯ Yes
- ◯ No

Chowan Agricultural Business Survey

5. TRENDS IN AGRICULTURE

1. What agricultural trends have you observed in Chowan County?
(Check ALL that apply)

- [ ] A change to new types of farms
- [ ] More small farms
- [ ] Fewer small farms
- [ ] More large farms
- [ ] Fewer large farms
- [ ] Other (please specify)
- [ ] A shift to more sophisticated farm operations
- [ ] More part-time farms
- [ ] More specialty and direct market operations
- [ ] More diversification
- [ ] No significant changes

2. Based on what you have observed, will you modify your business to adapt to these trends?

- ( ) Yes
- ( ) No

3. If yes, what modifications will you make?

Chowan Agricultural Business Survey

6. THE FUTURE OF AGRICULTURE

1. Is transition/estate planning an issue facing agribusinesses in Chowan County?

- ◯ Yes
- ◯ No

2. Do agribusiness owners need assistance with transition/estate planning?

- ◯ Yes
- ◯ No

3. Is it important that agriculture and agribusinesses be promoted as career opportunities?

- ◯ Yes
- ◯ No

4. Is it important to have neighbor and/or community education about the importance of agriculture and agribusiness in Chowan County?

- ◯ Yes
- ◯ No

5. Do you have labor issues at your business?

- ◯ Yes
- ◯ No

6. If you answered yes to the above question, what issues do you face? (Check all that apply)

- ☐ Lack of qualified staff
- ☐ Lack of training opportunities for staff
- ☐ Lack of capital to hire staff
- ☐ Unable to provide required benefits such as health insurance, employment taxes, etc.
- ☐ Other (please specify)

7. Is there a need for consumer education on the economic impact of buying "local" in Chowan County?

- ◯ Yes
- ◯ No

8. Is there a need for youth agriculture education to be taught in the schools of Chowan County?

- ◯ Yes
- ◯ No

9. Do you see agritourism as an expansion/diversification opportunity for agriculture/agribusiness in Chowan County?

- ◯ Yes
- ◯ No

10. For your business to succeed, what topics are most important to you?
(Check ALL that apply)

- ☐ Ability to receive adequate financing to maintain/expand business
- ☐ Succession/transition of the business to interested parties
- ☐ Training and education on new technologies that are being developed for agriculture/forestry
- ☐ Other (please specify)

11. Would you support county government funding of agricultural development?

- ◯ Yes
- ◯ No

12. Both opportunities and threats exist for agriculture and agribusiness in Chowan County.

Please list two threats to agriculture/forestry/agribusiness.

Please list two opportunities that exist for agriculture/forestry/agribusiness.

13. Please add any additional comments you may have about agriculture and forestry in Chowan County.

7. THANK YOU!

Your time and effort on this survey will help create an Agricultural Development Plan for Chowan County. This plan will provide recommendations for both short and long-term strategies to support agriculture and forestry in Chowan County. Once the plan is written, it will be presented to the county commissioners for endorsement. Once it is endorsed, it will be sent to NC Department of Agriculture for certification. When the plan is certified, the county will receive priority status for funding from NC Department of Agriculture's Agricultural Development and Farmland Preservation Trust Fund.

If you have any questions or would like more details, please contact Ed Emory at semory@umo.edu or at 910-290-1002.

Chowan County Non-farm Resident Survey

Chowan County Non-Farm Resident Survey

1. Introduction

Your help is needed to create an Agricultural Development Plan for Chowan County. This plan will contain the current state of agriculture and forestry, outline the challenges and opportunities for agriculture and forestry that exist, and develop recommendations to help maintain family farms and forests in Chowan County. The general public, agribusinesses, producers and landowners are targeted audiences for this survey. Non-farm resident participation is essential to ensure that views on open space, values placed on farms and forests, and impacts of development are part of the plan.

The word "agriculture" in this survey refers to farms (row crops, livestock, fruits/vegetables, flowers/plants, aquaculture) and forests.

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Thank you for your interest and participation. If you have additional concerns or questions please contact semory@umo.edu or 9190-290-1002.

Chowan County Non-Farm Resident Survey

2. Non-Farm Resident Survey

Please DO NOT complete this survey if you are a farmer/timberland owner OR if you receive income from renting land for farming OR if you own a business primarily dependent on farm and timber customers. These individuals will be surveyed separately.

All information is STRICTLY CONFIDENTIAL as referenced in the introduction.

1. Please tell us, by town and/or community, where you live in Chowan County:

2. How long have you lived in Chowan County?

◯ <5 years ◯ 5 to 9 years ◯ 10 to 14 years ◯ 15 to 19 years ◯ 20+ years

3. Please answer each question below:

	Yes	No
Have you ever lived near a farm or timber operation?	◯	◯
Have you ever owned or operated a farm or timber operation?	◯	◯
Do you live near (within 1/4 mile) of a farm or timber operation?	◯	◯
If yes, is that farmer or land owner a good neighbor?	◯	◯

4. When was the last time that you visited a farm or timber operation?

◯ Within the last year
◯ Within last 2 to 9 years
◯ More than 10 years ago
◯ Never

5. Which statement best represents your view of Chowan County agriculture?

◯ Agriculture is a declining industry with no future growth potential
◯ Agriculture is holding its own as an industry and may have some future growth potential
◯ Agriculture is an expanding industry with significant future growth potential

6. Can you estimate the size of Chowan County's agricultural industry?

◯ Less than $10 million
◯ $10 million to $99 million
◯ $100 million to $300 million
◯ Over $300 million

7. Do you feel that Chowan County should take steps to help preserve farms and forests?

◯ Yes ◯ No ◯ Not sure

8. How do you support the agricultural economy of Chowan County? (Check ALL that apply)

- ☐ I buy local produce at Farmers Markets, Pick-Your-Own farms, roadside stands, etc.
- ☐ I buy plants from local nurseries and greenhouses.
- ☐ I participate in agritourism activities such as corn mazes, pumpkin patches, hay rides, etc.
- ☐ I lease farmland and forest land for hunting and fishing
- ☐ Other (please specify)

9. How do you verify that the produce you purchase comes from local farmers? (Check ALL that apply)

- ☐ I look for the "Got to Be NC" labels
- ☐ I search on line at the "NC Farm Fresh" website
- ☐ I look for "NC Catch" labels
- ☐ I ask the vendor
- ☐ I know my farmer/producer and see where the products come from
- ☐ I don't verify product origin

10. Have you ever experienced problems with a farm or forest neighbor regarding any of the following? (Check ALL that apply)

- ☐ No problem
- ☐ Noise
- ☐ Odors
- ☐ Smoke/Dust
- ☐ Manure application
- ☐ Slow-moving vehicles
- ☐ Drainage issues
- ☐ Pesticide use
- ☐ Timber Harvest
- ☐ Irrigation
- ☐ Boundary/trespass issues
- ☐ Fencing/cattle loose
- ☐ Crop dusting
- ☐ Other problems such as dogs, personal, etc. (please specify)

11. If you had problems with a farm or forest neighbor, how did you resolve them?

- [ ] Called authorities
- [ ] Contacted the producer/landowner
- [ ] Mediation
- [ ] Nothing

12. When you dealt with the above issues, how did you feel about the resolution?

- [ ] I gained a better understanding of why the landowner/producer did the activities that upset me initially.
- [ ] The issue was not resolved
- [ ] Litigation was pursued
- [ ] I still do not understand why that activity is necessary

13. Please tell us whether you agree or disagree with the following statements: (PLEASE SELECT A RESPONSE FOR EACH ITEM PRESENTED).

	Agree	Disagree	Not Sure
Farms and forests enhance the scenic beauty and open space of Chowan County	○	○	○
Farmers are good neighbors	○	○	○
Local farmers deliver generally high-quality products	○	○	○
Farming is positive for the environment	○	○	○
Tax breaks for farmers are important	○	○	○
Agriculture and farming are high-technology industries	○	○	○
The price of most farm food commodities is relatively low	○	○	○
Farming presents a good career for enterprising persons	○	○	○
Agriculture and forestry should be promoted as viable career opportunities	○	○	○

14. Would you support farm and forest preservation efforts in Chowan County?

- ○ Yes
- ○ No

15. Would you support the use of county government funds for farm and forest development?

- ○ Yes
- ○ No

16. Both opportunities and threats exist for agriculture and agribusiness in Chowan County.

What are two threats to agriculture/forestry/agribusiness that you see in Chowan County?

What are two opportunities that exist for agriculture/forestry/agribusiness in Chowan County?

17. Please add any additional comments you may have about agriculture and forestry in Chowan County.

Chowan County Non-Farm Resident Survey

3. Thank you!

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