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NC State Economist

Agricultural and Resource Economics • September/October 2000

The Emergence of Tobacco Contracts: What Should North Carolina Farmers Expect?

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For many years farmers have discussed the possibility that the auction system of selling tobacco would soon be replaced by sales via contracts with tobacco manufacturers. Recently, a number of tobacco manufacturers and leaf merchants have begun purchasing some tobacco by means of contracts. In 1999 RJ Reynolds Tobacco Company began contracting with U.S. flue-cured tobacco farmers to procure tobacco cured in bulk barns using heat exchangers to lower levels of nitrosamine (a know carcinogen). This had been preceded by talks between Philip Morris and farm organizations concerning Philip Morris' desire to begin a pilot project in 1999 to purchase tobacco through contracts. Due to the objections of the farm organizations, Philip Morris delayed contracting in the burley areas until 2000 and still has not begun contract purchases in the flue-cured areas. Most leaf merchants began to contract some tobacco in 2000. Brown and Williamson began purchasing low nitrosamine tobacco in 2000 from Star Scientific, who procures tobacco through contracts. Some cigarette makers using organically grown tobacco have been purchasing tobacco through contracts for several years.

Examples/Trends of Contracting In Agriculture

Agricultural contracts are an integral part of the production and marketing of selected livestock commodities such as broilers, turkeys, eggs, hogs and milk. Crops such as fruits, vegetables, sugar beets and cane are generally produced under contracts as well. Almost one-third of the total value of production on U.S. farms is harvested under contractual agreements (USDA-ERS, 1999). The expanding role of contracting in agricultural production is primarily the result of a more sophisticated marketplace where consumers increasingly require a more uniform product supply and standardization in quality. Contracts are one vehicle through which food processors and marketers can rapidly respond to changes in consumer preferences.

The growth in the use of contracts as a means of organizing agricultural production is staggering. In 1969 only 156,400 farms, or about 6% of all farms, used production and/or marketing contracts. The value of production under contract totaled $5.4 billion or nearly 12% of the total value of commodities sold. By 1993, the percentage of farms using production and/or marketing contracts had grown to about 11%, and the total value of production under contract arrangements had increased almost nine times to $47 billion or 32% of the total value of commodities sold. Most of the value of the contracted production was produced to fulfill marketing contracts. Only slightly over one-third of the contracted value was produced in conjunction with production contracts, where the contractor retains ownership of the commodity (USDA-ERS, 1999).

Contracting is prevalent on farms specializing in certain commodities. In 1993, nearly 89% of poultry farms reported using contracts. In comparison, less than 2% of cattle producers used contracts. Dairy farmers have long had verbal contracts with their processors or cooperatives, and most milk is produced under marketing orders. Dairy farmers report that approximately 43% of their total production value is produced under contract. The use of contracts is also

commonplace in the production of fruits and vegetables, with 36% of the farms producing more than half of the total value of production in their class using some form of contracting. Also, about 30% of the total value of cotton production was produced under contract, but only 13% of the total value of corn production.

Flue-Cured Tobacco Marketing System

The structure of tobacco farming has been influenced considerably by the federal tobacco program. Under the program, tobacco farmers agree to restrict supply via marketing/acreage allotments (or quotas) in exchange for minimum price guarantees. If tobacco companies do not bid above the predetermined price support level at regulated tobacco auctions, grower cooperatives purchase the surplus tobacco using Commodity Credit Corporation (CCC) loand. These loans are prepaid through grower assessments. National marketing quotas are set each year based upon the domestic purchase intentions, exports, and CCC loan stock levels. Only individuals owning or renting quota can legally sell tobacco through regulated auctions. The tobacco program also prevents the geographic movement of tobacco production. With the exception of Tennessee, marketing quotas cannot be sold or rented across county lines.

Tobacco sold on the auction system is not purchased directly by cigarette manufacturers, but by leaf merchants. With the exception of Export Leaf, a subsidiary of British American Tobacco (BAT, the world's second largest cigarette manufacturer), the leaf merchants are separate companies from cigarette manufacturers. In the U.S., leaf merchants purchase tobacco at auction and process it for both U.S. and foreign cigarette manufacturers. In many other countries, notably Brazil (the world's largest tobacco exporting country), leaf merchants acquire tobacco through production contracts with farmers. Besides BAT subsidiaries, three leaf merchants dominate the world leaf trade: Universal, Dimon, and Standard Commercial.

Auction systems still persist in Canada and Zimbabwe. However, in both Canada and Zimbabwe all flue-cured tobacco is sold through one central auction. Leaf merchants, cigarette manufacturers, and some farmers complain that the U.S. auction system is inefficient. In 1995, BAT officials made a presentation to U.S. growers and farm leaders in which they indicated that the combined expense to growers and purchasers of selling one kilogram of U.S. flue-cured tobacco was $0.45 versus $0.16 for one kilogram of Zimbabwean tobacco. Even less costly than a central auction system such as Zimbabwe's, may be direct purchases between the buyer and farmer. Most farmers are now large enough to sell truck-load lots of tobacco that could be delivered directly to the processing plant rather than through an auction warehouse. One new leaf merchant, United Tobacco, purchases U.S. tobacco directly from the farmer instead of through the auction system. Some other types of tobacco, such as organically grown tobacco, cigar tobacco, and chewing tobacco are sold either via direct sales or contracts.

Cigarette manufacturers also complain that they are unable to purchase the tobacco separated by stalk position and of the quality they would like on the auction system. Farmers reply that if cigarette companies would pay sufficient premiums for tobacco harvested in more stalk positions, they would be glad to oblige. Harvest costs are lower if the tobacco is harvested fewer times by combining stalk positions so that more tobacco is harvested with each harvest. Further, there is some evidence that farmers may even receive a higher average price per pound for their tobacco if they combine or mix stalk positions. The fact that cigarette manufacturers do not translate their apparent wishes for separation by stalk position into financial incentives in the marketplace seems to bear little economic logic, and has not been adequately explained by either cigarette manufacturers, leaf merchants or auction operators. Farmers often complain that there is little competition among the four leaf merchants during the auction. Large cigarette manufacturers complain that they must have leaf merchants buy whatever is placed on the auction floor in order to obtain the volume of U.S. tobacco that is needed for their blends. The limited supply of tobacco due to the quota system could indeed be a factor in compression of price differentials between stalk positions and qualities of U.S. tobacco.

A Possible Form of Flue-Cured Tobacco Contract

The primary motivation for cigarette manufacturers to replace the existing production and marketing system with contracts with individual tobacco farmers is quality considerations. First, the current system for grading and auctioning tobacco does not adequately reflect the differentials in quality grades (as desired

by the customer), nor does it provide enough price differentiation among grades. Second, the use of chemicals in tobacco production cannot be directly monitored, and hence it becomes difficult to make farmers accountable for any illegal or undesirable agricultural chemicals applications. Third, the purported inefficiency of the current auction system may cause consolidation and improvement in the warehouse business or result in a move to direct purchases or contract sales. An additional incentive for the introduction of contracts may be the adoption of technological innovations. Given the uncertain future of the tobacco program and the uncertainty facing the tobacco industry as a whole, producers may be unwilling or unable to adopt new curing technologies that require substantial investment. For example, contracts may be one way cigarette manufacturers can ensure the implementation of nitrosamine reducing curing technologies.

The most likely form of contracting in the tobacco industry is some form of a marketing contract similar to the recently introduced burley tobacco contract. The most important feature of the burley tobacco contract is that it is a single year, multiple producer, marketing contract whose terms and conditions are defined within the existing federal tobacco program. The purchase of the tobacco is contracted on an *across the stalk basis*, where the term means *including all the tobacco from all the different stalk positions*.

A flue-cured tobacco contract likely will be very specific about production practices. For example, the burley tobacco contract requires that tobacco must be Type 31 burley tobacco grown from seed varieties that meet the minimum quality standards. The contract also requires production exclusively on farms under contract, and that the tobacco be transplanted, harvested, stripped and separated into at least three (preferably four) stalk positions, and cured at normal times using good agronomic and cultural practices. The percentage (by weight) of the total tobacco delivered that represents each stalk position should fall within the applicable percentage ranges set forth in the contract. The farmer must use only those pesticides, fungicides, growth regulators and herbicides that are approved by the EPA or any other governmental agency, and they must be applied in accordance with the applicable recommended rates and regulations.

As is being done through an industry-wide effort, flue-cured tobacco farmers will be required to upgrade existing curing barns with new technology that reduces nitrosamine levels in flue-cured tobacco. Prices paid to the growers would be based on stalk positions and other quality characteristics such that upper stalk leaves would command higher price per pound than lower stalk leaves. For example, burley tobacco contract allows for 16 different stalk positions/grades (four grades within each of the four stalk positions) ranging in price from $207/cwt for grade 1 tips to $92/cwt for all grade 4 tobacco regardless of the stalk position. The contract is very precise when it comes to stipulations about weighing, inspection, grading, rejection and revocation.

Economic Impact of Contracting at the Farm Level

Many people have always assumed that the initiation of contracts in the farm sale of tobacco would quickly lead to the demise of the tobacco program. It is not necessarily true that a tobacco program could not function in the presence of contracts. The U.S. peanut program is a supply restriction program similar to the U.S. tobacco program (actually it is more complicated). However, peanuts have always been sold from farms either using direct sales to processors or via marketing contracts. In fact, peanuts sold for export must be sold by means of a special marketing contract. If tobacco is to be sold through contracts, new means must be developed for collecting program assessments and verifying that the tobacco sold is only sold against quota. Under the auction system, the warehouses act as the agent that collects assessments and verifies that tobacco is sold against quota. While contracting will add stress to the program, other factors will likely be more important in leading to its demise.

The advent of contracts has several potential effects on prices and quantities. First, if the auction system is more expensive than a system of contracts, then contracting will result in a cost reduction. Who will benefit from this cost reduction? Under the tobacco program, the supply of flue-cured tobacco is perfectly inelastic in the short run since a national marketing quota determines the supply for a given year. Currently farmers pay warehouse fees to sell their tobacco. A cost reduction to farmers selling tobacco will reduce their marginal cost of production. If this reduction in marginal cost is anticipated, then the reduction in selling cost will accrue to the quota in the form of increased quota rent or increased income from quota, benefiting the quota owner. If quota owners do not anticipate the

reduction, then the reduction in selling costs will benefit the grower.

If contracting results in improved quality or in buyers having lower purchase costs (e.g. fewer employees required to purchase the tobacco), then demand for the tobacco will shift out. In the short run where quota is fixed, this should result in higher prices paid for tobacco, again benefiting either the grower or quota owner. In the long run, increased demand for tobacco will translate into increased purchases by domestic cigarette manufacturers and increased exports, thus increasing the national quota. In the absence of a tobacco program, supply would likely be very elastic in the long run, so that increased demand also results in larger quantities of tobacco being sold. Without a tobacco program, cost savings to the grower would likely pass through to buyers, but would result in larger quantities of tobacco being sold. In the absence of a tobacco program, downward shifts in the supply due to savings at the farm level could also increase the quantity sold due to a movement along the demand curve. Finally, massive introduction of contracts may reduce the transparency of the market thereby making the price discovery process for the remaining independent farmers more difficult.

With regard to the effect of contracting on structural change, a move to contracting and direct sales of tobacco could accelerate consolidation of tobacco farms. Increased labor costs and regulation, and subsequent substitution of capital for labor, have tended to cause consolidation of small tobacco farms into larger units. A move to contracting or direct sales could favor farms large enough to sell truck-load lots of tobacco adding momentum to current trends in consolidation. However, the effects of contracting on consolidation could be limited by the ability of large operations to institute and successfully manage more stringent quality standards required by contracts.

Finally, the effect of contracting and direct sales on farm structure would be minor compared to the effects of elimination of the tobacco program. The current tobacco program tends to inhibit consolidation because of geographical restrictions on quota movement. Removal of these restrictions would lead to consolidation of farms and a large net exit of tobacco farms due to geographical relocation of tobacco production.

Reference

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Agricultural and Resource Economics
Box 8109
Raleigh, North Carolina 27695-8109

N.C. State Economist

Published bi-monthly by the Department of Agriculture and Resource Economics and the Cooperative Extension Service. Address correspondence to:

The Editor, N.C. State Economist
Box 8109, N.C. State University
Raleigh, NC 27695-8109

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