

NC GROWING TOGETHER

Connecting Local Foods to Mainstream Markets

SOURCING LOCAL TOMATOES TO MINIMIZE FOOD LOSS

NC STATE Poole College of Management Supply Chain Resource Cooperative



PROJECT OVERVIEW

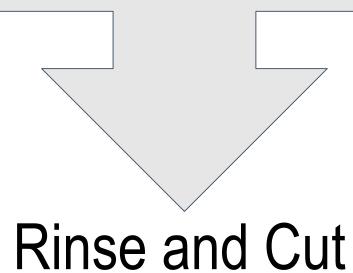
The Center for Environmental Farming Systems (CEFS) has a mission to develop local food and farming systems that support North Carolina's farmers and rural economies, reduce food insecurity, improve access to healthy food, and serve the public good. As a way of achieving that mission, CEFS partnered with AC Restaurants to achieve their vision of sourcing more North Carolina-grown Roma tomatoes. AC Restaurants owns 7 establishments in downtown Raleigh, all of which utilize a central commissary kitchen. Currently, AC Restaurants purchases Roma tomatoes from Florida suppliers when the North Carolina season (June through August) is over. Fresh Roma tomatoes are processed at the kitchen throughout the year to create sauces, soups, and other core dishes supplied to the restaurants. Our objective is to offer AC Restaurants the opportunity to purchase all of the tomatoes they process within the North Carolina season. By comparing their current method to the cost of purchasing NC-grown Roma tomatoes, processing, and storing them the whole year, AC Restaurants could see the benefits of buying locally grown tomatoes.



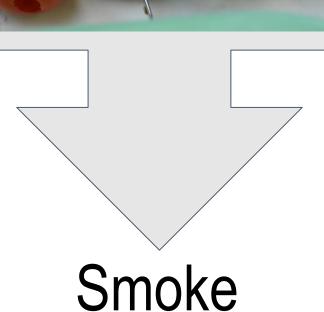
Team Members: John Evans, Randi Meyer, and Audrey Sherk Team Number: Poole 04 **BUS 479 Advisor: Betty Minton** Sponsors: CEFS – Rebecca Dunning **AC Restaurants – Juan Esparza**

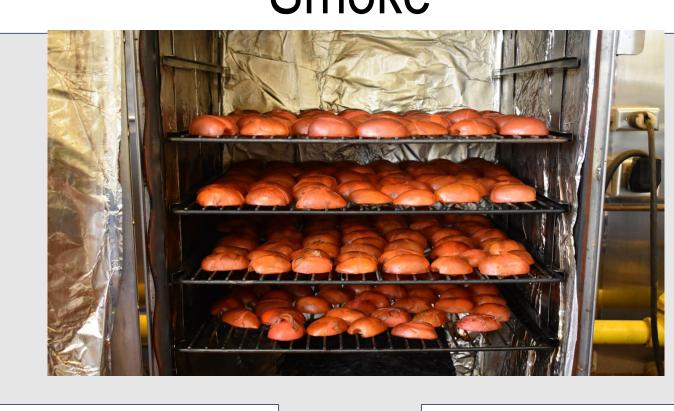
Processing Roma Tomatoes

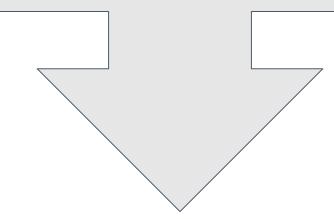
















Freeze



COST MODEL					
Item	Quantity (Cases)	Price per Unit	Discount per Unit	Total Discount	Total Cost
Tomatoes	220	\$12.00	\$2.00	\$440.00	\$2,640.00
				Total	\$2,640.00
Input	Quantity	Price per Unit	Total Cost		
Wood Chips	220	\$0.82	\$180.40		
Ziploc Bags	1540	\$0.10	\$154.00		
Storage Racks	3	\$96.50	\$289.50		
Storage Bins	27	\$20.00	\$540.00		
		Total	\$1,163.90		
Production	Time per Unit (Minutes)	Total Time (Hours)	Labor Rate per Hour	Total Cost	
Preparation	45	165	\$11.00	\$1,815.00	
Peel and Dice	40	97.53	\$11.00	\$1,072.87	
Packaging	6	22	\$11.00	\$242.00	
			Total	\$3,129.87	
				Final Total Cost	\$6,933.77

AC Restaurants is able to process and freeze 30% of the total tomatoes they purchase each year. The remainder of the tomatoes must be processed fresh. AC Restaurants currently freezes 220 cases per year. They currently pay an average of \$6,600 for 220 cases without factoring in labor or storage costs. If all cases were purchased within the North Carolina season, AC Restaurants would obtain a lower per case cost due to excess supply from farmers. This opportunity represents a 45% cost savings. An average of 20 cases would be delivered to the kitchen per week. The tomatoes would be cut, smoked, diced, bagged, and frozen to remain in good quality.

Contact

Suppliers

Format

Model

Determine

inputs

FINAL RECOMMENDATION

AC Restaurants should purchase 220 cases of Roma tomatoes from North Carolina farmers during the growing season. Since the price of cases of tomatoes are much lower in season, it is the cost effective option for AC Restaurants even considering the up-front labor and storage costs. AC Restaurants will also increase their support of North Carolina farmers and reducing food loss. If farmers have a buyer

they will not leave produce remaining in the field. Two supplier options were provided to AC Restaurants: Danan Farms and Cheney Brothers. Both have worked with the kitchen before and are capable of supplying the amount of North Carolina Roma tomatoes needed. The team also provided AC Restaurants a risk mitigation plan in case bad weather destroys crops or if tomatoes get freezer burn. Mitigation includes maintaining a positive relationship with the current Florida supplier. They could ship Roma tomatoes on short notice if problems occurred.



Research