University of Guam

Market Demand and Supply (part 1-Demand)

GUAM COOPERATIVE EXTENSION

FARM MANAGEMENT & MARKETING PUBLICATION

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The market demand for a product is the amount that people want to buy at a certain price. It is derived from the wants, needs and income of the people who participate in the market for the product. This is a fairly simple statement, but it takes a bit of explanation to understand it in a way that allows one to understand why diamonds are expensive and water is cheap.

A product or goods and services are simply anything that is bought and sold in the market. It can be a bunch of bananas, a visit to the doctor or a used car. Generally, we define the product in a way that is useful in answering a question in which we are interested. If we are interested in looking at the market for local cucumbers on Guam, then we may define the product as a pound of good quality cucumbers.

Consumers (people who may buy the product) have certain wants or needs which are often called their tastes and preferences. The consumer who enters the store has a certain amount of money to spend (her income) and needs to feed her family. She knows whether or not they like cucumbers or other foods, then she looks at the prices of the different foods in the store including the prices of those that can used as **substitutes** for cucumbers, and finally she buys a basket of goods.

If the price of cucumbers is sixty cents a

pound, and the store sells 150 pounds a week of cucumbers, then we can say that the demand for cucumbers at that store is 150 pounds a week at sixty cents a pound. If there are 10 stores in the area and each store sells 150 pound a week at sixty cents a pound, then we can say that the quantity demanded in this market is 1,500 pounds per week at sixty cents per pound.

If the price of cucumbers goes up to eighty cents a pound and nothing else changes, then we would expect that the amount of cucumbers that the consumers will buy will go down. Lets say that each store now sells 120 pounds a week. Then the quantity demanded is 1,200 pounds a week at eighty cents per pound. Normally, we expect that as price goes up the quantity demanded will decrease.

When one speaks of the **demand curve** or demand schedule for a product, they are talking about something that shows the relationship between all of the different prices for a product and the quantity demanded in the market at each of these prices. If the relationship is shown in a table, the table is called a demand schedule, and if the relationship is shown as a line on graph, it is called a demand curve.

The demand schedule for a product only shows the relationship between the price of the product and the quantity demand of the product. If anything other than the price of cucumbers changes then we have to adjust our demand curve. The quantity demanded at any single price will change. This called a **shift in demand**. There are two things that we normally worry about shifting demand. The first is the prices of other related products in the

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market. If it they are potential substitutes for the product, and their price goes down then the quantity demanded of the product will decrease. For example, if our consumers enter the different stores in the market the next week and find that the price of carrots are much lower, then they are likely to buy fewer cucumbers. The second is a change in income. If our consumers have just received a raise, then normally we would expect them to buy more cucumbers when they go to the store.

Another example of a demand curve would be one that showed the relationship between the number of tourists coming to a island each month and the cost of the vacation. If the costs of competing locations were to decrease, then the numbers arriving for each price would decrease. If the economy of the tourist home country were to falter, then again then the numbers arriving for each price would decrease.

It should be noted that a demand curve or demand schedule is for a given product, in a specific market and that the units of product and the time period must be specified.

Please refer to the examples on the following page...



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Price of Cucumbers	Fran Cruz	Stan Miller	Anne Mendiola	Mike Akibono	Market Demand Total
1.00	0.5	0.7	1.5	1.0	3.7
0.80	1.0	0.9	2.0	1.2	5.1
0.60	1.2	1.1	2.5	1.4	6.2
0.40	1.5	1.5	3.0	1.6	7.6
0.20	2.0	3.0	3.5	1.8	10.3
0	3.0	4.0	4.0	2.0	13.0

Pounds of cucumbers supplied per week

Example 1. A supply schedule for cucumbers with four farmers producing them.





Pounds of cucumbers demanded per week

Price of Cucmbers	Pounds demanded when carrots are \$0.50 per pound	Pounds demanded when carrots are \$1.00 per pound	Pounds demanded when carrots are \$1.50 per pound
\$0.80	1,000	1,200	1,500
\$0.60	1,300	1,500	1,800
\$0.40	1,600	1,800	2,000

Example 3. Shifts in the supply schedule due to changes in input prices.

