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Victor Melgar's Coffee Farm

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Abstract

This case study focuses on a coffee farmer in Guatemala who, given current low coffee prices, is worried about his ability to maintain the family tradition of coffee production. He wonders whether the current low prices are just another of the periodic downturns in the volatile coffee market or whether the market is experiencing structural changes that will have long-term implications. In the case, the farmer is presented with three alternatives, including continuing to produce and market commodity coffee. The other alternatives involve changes in production and/or marketing practices intended to increase profit margins.

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Victor Melgar pushed away from the computer table, leaned back in his chair, and slowly rubbed his temples. For more than thirty years Victor's family had been raising coffee in Guatemala, Central America. Through the years, the farm had been reasonably profitable. But recently it seemed harder to make ends meet. Victor began managing the farm in 1992 when his father passed away. In that same year, commodity coffee prices fell to a twenty-year low (table 1). Prices recovered somewhat between 1994 and 1998 but never reached the levels attained in the late 1970s and early 1980s. Prices fell again in 1999 and have remained low through 2001.

Victor sought out an old family friend – a retired coffee farmer who had known Victor's father well. "If coffee prices don't improve soon," Victor confided, "I will be remembered as the person who could not sustain the family tradition of coffee-production." The friend reminded him that coffee prices had always been variable and that Victor's father had endured periods of low prices when he managed the farm. "Perhaps the current low prices are just temporary – another cycle in the always volatile coffee market," Victor replied. "Maybe, I just need to hang-on for another year or two."

But Victor continued to be troubled by nagging questions. What if the current low prices were not a temporary phenomenon? What if something fundamental had changed in the coffee commodity market so that prices were unlikely to ever return to the levels realized in the late 1970s and early 1980s? If this were the case, just "hanging-on" would not be enough. Maintaining the Melgar family coffee-growing tradition would depend on his finding some way to increase profits.

Victor's nephew, Salvador, is an agribusiness student at a major university in the United States. Last Christmas, when Salvador was home for a few days, Victor shared with Salvador his concerns about the future of the family coffee business. They speculated about the future of coffee prices and discussed possible strategies for increasing profitability. Salvador volunteered to investigate alternative strategies for marketing coffee when he returned to the U.S. Late last night he sent Victor an e-mail summarizing his findings.

Coffee Production

Coffee is grown in tropical regions around the world. There are two major types of coffee: arabica and robusta. Because of quality differences, arabica beans command a price premium over robusta beans. Robusta coffees are typically used as filler in blended coffees. However, arabica coffee trees are delicate and require more care than robusta trees. Victor produces arabica coffee.

Coffee trees grow in an altitude range of around 1,000 to 5,000 feet. More acidic, "hard" or "strictly hard," beans are produced at higher altitudes. Less acidic,

Table 1: New York Spot Prices for Brazil's Arabica Coffee

<u>Year</u>	<u>Annual Average Price (cents per pound)</u>
1966	40.68
1967	37.84
1968	37.30
1969	40.89
1970	55.30
1971	44.47
1972	51.37
1973	68.02
1974	70.97
1975	82.04
1976	149.24
1977	307.66
1978	164.37
1979	178.51
1980	206.49
1981	181.54
1982	143.68
1983	142.75
1984	149.65
1985	151.76
1986	231.20
1987	106.37
1988	121.84
1989	98.76
1990	82.97
1991	72.91
1992	56.49
1993	66.58
1994	143.24
1995	145.95
1996	119.77
1997	166.80
1998	121.81
1999	88.84
2000	79.86
2001	60.09

1. Prices through 1980 New York spot Santos #4. Prices from 1981 are International Coffee Organization's quotes for New York spot market prices for Brazilian and Other Arabicas.

Note: Current year is cumulative through latest available month.

June 2001 Source: Horticultural and Tropical Products Division, FAS/USDA

“prime” beans are produced in lower altitudes. More acidic beans command a price premium over less acidic beans. Victor’s coffee farm is located in a lower altitude, coastal region of Guatemala.

Coffee trees must be well maintained throughout the year. The trees must be fertilized, kept free of weeds, irrigated, and protected from insects and disease. Coffee trees generally flower around three times each year. Thus, the fruit, which contains the coffee bean, ripens and is harvested in stages throughout the year.

On Victor’s farm, coffee is harvested by hand. There are three reasons for this. First, labor is readily available. Second, the terrain does not permit mechanization. Third, quality can be better controlled since laborers can distinguish between ripe and non-ripe fruit and harvest only those which are ripe. Victor’s farm produces an average of 37,000 lbs. of coffee beans per year.

Coffee beans can be extracted from the fruit using either a wet or dry process. In the dry process, the fruit is visually segregated by ripeness and other quality characteristics and then left to sun dry with the pulp intact. After the fruit has dried, the pulp is removed to expose the coffee bean. The dry process, which is widely used in Brazil, is generally considered less desirable than the wet process because it causes the coffee to have a fruity aroma.

Victor has a wet processing plant on his farm that enables him to process his coffee beans right up to the *pergamino* stage. *Pergamino* is the Spanish word for parchment. In coffee production it means that the coffee beans are dry but still contain a thin dry skin (much like the skin of a peanut) that conceals the coffee bean’s green color. With the wet process, the fruit is poured into a receiving tank full of water. This tank empties into a machine that removes the pulp, to expose the bean. Coffee beans are then kept overnight in holding tanks full of water. In these tanks fermentation will remove all the remaining pulp from the coffee beans. The following day the beans will be washed and submitted to a sorting canal. In the sorting canal, beans will travel by water and be sorted by a system of dams placed along the canal. Only the lighter weight beans float over the dams. The heaviest and best beans will sink to the bottom early, the second best will not pass the second dam, and the third grade beans will be filtered out at the end of the sorting canal. Once the beans have been graded they are moved to patios where they are spread and allowed to dry in the sun. An employee constantly stirs the beans with a rake so that they dry evenly. Once the beans reach a 13% moisture level, they are ready to be bagged, stored, and sold to the export house.

In Guatemala, the common practice is to take coffee beans in the *pergamino* stage to an export house. Once the beans are delivered to the export house, the farmer can either demand to be paid immediately or wait to see if prices improve.

The export house removes the final parchment from the coffee beans. Once the parchment has been removed the beans are referred to as “green.” Computers are then used to further sort and grade the beans. The beans are then sacked so that they can be exported all over the world.

The Coffee Market

Coffee production and disappearance (exports plus domestic use) have been approximately equal in every year since 1997. As a result, ending stocks of coffee have remained relatively stable (table 2). While ending stocks have recently been below historical levels, coffee prices have been extremely low.

Coffee accounts for a larger dollar volume of world trade than any commodity other than petroleum. Currently, only Columbia, Brazil, and Mexico export more Arabica coffee than Guatemala (table 3). Guatemala’s most important export market is the United States. In recent years the United States has purchased between 40 and 50 percent of the Guatemalan coffee crop (Foreign Agricultural Service). While over 80 percent of adults in the United States are at least occasional coffee drinkers (McMahon), coffee consumption in the United States is now considerably lower than in the 1960s and 1970s (tables 4 and 5). However, consumption of specialty (or gourmet) coffees has increased in recent years. Specialty coffees are those that have been carefully selected by origin, custom roasted, custom ground, and specially brewed. Specialty coffees are marketed to discriminating coffee consumers who are willing to pay a price premium for higher quality coffee.

Commodity coffee prices in Guatemala are derived from the New York spot market (table 1), which, in turn, are derived from prices on the New York Board of Trade. The exporter’s profit, shipping costs, taxes, and other miscellaneous fees are deducted from the New York spot market price to calculate a local Guatemalan price. While factors such as shipping costs can vary over time, Guatemalan prices are typically about \$0.15 per pound lower than the New York spot market price. Victor’s cost of production is about \$0.90 per pound – which is typical for Guatemalan coffee producers. Thus, the New York spot market price needs to be about \$1.05 per pound for Victor to break even.

**Table 2: Coffee Supply and Distribution for Producing Countries
(measured in thousands of 60-kilogram bags)**

<u>Crop Year</u>	<u>Beginning Stocks</u>	<u>Total Production</u>	<u>Total Imports</u>	<u>Total Supply</u>	<u>Total Exports</u>	<u>Domestic Use</u>	<u>Ending Stocks</u>
1980/81	25,523	86,174	675	112,372	60,955	20,438	30,979
1981/82	30,979	98,023	755	129,757	65,359	20,556	43,842
1982/83	43,842	81,904	733	126,479	66,059	20,221	40,199
1983/84	40,199	88,801	606	129,606	68,191	20,577	40,838
1984/85	40,838	90,362	456	131,656	72,322	21,968	37,366
1985/86	37,366	95,750	397	133,513	70,478	21,220	41,815
1986/87	41,815	79,394	262	121,471	66,982	21,202	33,287
1987/88	33,287	103,170	296	136,753	67,504	21,075	48,174
1988/89	48,174	94,165	415	142,754	71,371	21,190	50,193
1989/90	50,193	96,958	258	147,409	83,402	20,995	43,012
1990/91	43,012	100,181	331	143,524	76,163	22,265	45,096
1991/92	45,096	104,064	291	149,451	80,887	22,266	46,298
1992/93	46,298	92,959	713	139,970	77,869	21,579	40,522
1993/94	40,522	92,406	585	133,513	76,284	22,928	34,301
1994/95	34,301	97,042	1,070	132,413	68,672	22,526	41,215
1995/96	41,215	88,946	1,079	131,240	74,103	24,049	33,088
1996/97	33,088	103,788	1,091	137,967	84,509	24,326	29,132
1997/98	29,132	97,413	1,220	127,765	77,945	25,119	24,701
1998/99	24,701	108,432	1,435	134,568	84,766	25,533	24,269
1999/00	24,269	113,723	1,275	139,267	92,338	25,457	21,472
2000/01	21,472	117,001	1,470	139,943	87,502	26,100	26,341
2001/02	26,341	117,739	1,458	145,538	93,095	26,627	25,816

1. One bag = 132.276 pounds. Green Bean Equivalent.

F--Forecast

June 2001

Source: Horticultural and Tropical Products Division, FAS/USDA

Table 3: Coffee Exports By International Coffee Organization Exporting Members To All Destinations, October-September (thousands of 60-kilogram bags)

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>	<u>1999/00 2/</u>
<u>Arabicas:</u>					
Colombian Milds					
Colombia	10,785	11,176	10,911	10,288	9,036
Kenya	1,895	1,389	806	1,095	1,179
Tanzania	932	698	671	683	747
Other Milds					
Costa Rica	2,481	2,065	2,158	2,092	1,984
Ecuador	1,607	1,099	1,146	900	834
El Salvador	2,256	2,838	1,885	1,812	2,490
Guatemala	3,713	4,224	3,890	4,592	4,901
Honduras	2,054	1,825	2,299	2,086	2,857
India	3,572	2,476	3,689	3,426	4,500
Mexico	4,579	4,384	3,883	4,136	5,164
Nicaragua	898	702	956	955	1,300
Papua New Guinea	1,140	1,085	1,200	1,374	1,050
Peru	1,987	1,670	1,785	2,204	2,280
All Others	2,348	1,872	1,868	2,116	1,706
Brazil/Other Arabicas					
Brazil	12,728	18,619	16,336	22,929	18,816
Ethiopia	1,777	1,853	2,090	1,757	2,005
Paraguay	21	8	8	10	9
Total Arabicas	54,773	57,983	55,581	62,455	60,858
<u>Robustas:</u>					
Cameroon	505	1,376	787	1,027	1,272
Cote d'Ivoire	2,900	3,574	4,567	2,315	5,412
Indonesia	6,098	6,364	5,411	5,430	5,015
Uganda	4,214	4,237	3,032	3,648	2,917
Vietnam	3,679	5,422	6,615	6,664	10,914
All Others	2,864	3,120	2,569	2,307	2,191
Total Robustas	20,260	24,093	22,981	21,391	27,721
Grand Total	75,033	82,076	78,562	83,846	88,579

1. One bag = 132.276 pounds. Green Bean Equivalent.

2. Preliminary.

June 2001

Horticultural and Tropical Products Division, FAS/USDA

Table 4: U.S. Coffee Consumption (cups per capita per day)

<u>Year</u>	<u>Regular</u>	<u>Soluble</u>	<u>Decaffeinated 1/</u>	<u>Gourmet</u>	<u>Total</u>	
1960	2.21	0.56	0.08		2.77	
1961	2.33	0.64	0.08		2.97	
1962	2.45	0.67	0.10		3.12	
1963	2.36	0.65	0.09		3.01	
1964	2.29	0.61	0.12		2.90	
1965	2.21	0.58	0.10		2.79	
1966	2.23	0.63	0.13		2.86	
1967	2.19	0.65	0.16		2.84	
1968	2.08	0.64	0.14		2.72	
1969	1.99	0.69	0.17		2.68	
1970	1.91	0.66	0.15		2.57	
1971	1.83	0.67	0.16		2.50	
1972	1.67	0.68	0.17		2.35	
1973	1.61	0.69	0.23		2.30	
1974	1.50	0.75	0.27		2.25	
1975	1.52	0.68	0.31		2.20	
1976	1.48	0.63	0.30		2.11	
1977	1.30	0.64	0.27		1.94	
1978	1.30	0.67	0.26		1.97	
1979	1.44	0.62	0.33		2.06	
1980	1.40	0.62	0.34		2.02	
1981	1.38	0.54	0.33		1.92	
1982	1.33	0.56	0.38		1.90	
1983	1.31	0.53	0.39		1.85	
1984	1.44	0.54	0.44		1.99	
1985	1.39	0.42	0.42		1.83	
1986	1.37	0.36	0.41		1.74	
1987	1.37	0.37	0.43		1.76	
1988	1.31	0.34	0.38		1.67	
1989	1.43	0.32	0.40		1.75	
1990	1.42	0.29	0.36		1.73	
1991	1.46	0.27	0.32		1.75	
1992	2/	2/	2/		2/	
1993	1.61	0.25	0.28		1.87	
1994	2/	2/	2/		2/	
1995	1.38	0.27	0.23		1.67	
1996	1.52	0.17	0.25		1.69	
1997	1.62	0.21	0.23		1.84	3/
1998	1.44	0.18	0.24		1.63	3/
1999	1.48	0.17	0.20	0.22	1.89	3/
2000	1.31	0.14	0.20	0.20	1.66	3/
2001	1.26	0.12	0.15	0.33	1.72	3/

1. Decaffeinated is not separate from regular and soluble coffee, but is included in both the latter types.
2. Winter Coffee Drinking Study was not conducted.
3. Starting in 1997, data reported are for respondents 18 years of age or older. Prior to 1997, data are reported for respondents 10 years of age and older. Data for 1999-2001 reflect consumption of regular, soluble and decaffeinated coffee as well as gourmet coffee beverages. Data before 1999 reflect consumption of regular, soluble and decaffeinated coffee only.

Source: Horticultural and Tropical Products Division,
FAS/USDA

Table 5: U.S. Per Capita Consumption of Specified Beverages (gallons)

<u>Item</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000 5/</u>
Soft Drinks	22.7	26.3	34.2	40.3	46.9	50.9	53.0
Coffee 1/	35.7	33.0	27.2	26.9	26.2	21.3	16.8
Beer	18.5	21.6	24.3	24.0	24.3	22.3	22.2
Milk	32.0	30.4	28.5	25.0	24.2	22.8	21.7
Bottled Water 2/	---	1.2	2.4	4.5	8.1	10.1	13.2
Tea 1/	5.2	7.3	7.3	7.3	7.0	6.8	7.0
Juices	6.4	6.9	7.4	7.8	8.8	9.5	10.4
Powdered Drinks	---	4.8	6.0	6.2	5.4	4.9	4.6
Wine 3/	1.3	1.7	2.0	2.4	2.0	1.8	2.0
Sports Drinks 4/	---	---	---	---	---	1.1	1.5
Distilled Spirits	1.8	2.0	2.0	1.8	1.5	1.2	1.2
Sub-Total	123.6	135.2	141.3	146.2	154.4	152.7	153.6

1. Based on a 3-year moving average to compensate for stock changes.
2. Includes all packages, single-serve and bulk.
3. Includes wine coolers beginning in 1985.
4. Sports Drinks included in "Tap Water/all others" (not shown on table) pre-1992.
5. Forecast.

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Source: Horticultural and Topical Products Division,
FAS/USDA

Salvador's e-mail

Uncle Victor,

For the past several months I have been learning all that I can about coffee markets. Based on my investigations, I have identified the following alternatives for marketing coffee produced on your farm.

Alternative 1: Continue Current Practices

The least complicated option would be for you to keep operating as you have been – and as your father did before you. That is, process the coffee up to the *pergamino* stage, bag it, and transport it to an export house. Of course, then you must decide whether to take payment immediately or wait and see if prices improve. As you explained when we last talked, a problem with waiting to see if prices improve is that

you must find another source of funds to pay creditors while waiting to sell the coffee. The advantage of this alternative, in comparison with the next two, is that if commodity coffee prices improve, the farm can again become profitable with no new investment and no change in your current production practices.

Alternative 2: Specialty Coffee

Specialty coffees are generally high quality, private-labeled brands with significant value added beyond the farm-level. There are many important differences between specialty coffees and conventional coffees. Roasters of conventional coffees typically mix high quality, arabica beans with low-quality, robusta beans to obtain weight at the lowest possible cost. Also, when coffee is roasted a final fine skin separates itself from the green coffee bean. This fine skin is called chaff. Roasters of conventional coffees reincorporate the chaff into their ground coffee to add weight. To maintain high quality, specialty arabica coffees are not adulterated with robusta beans and do not reincorporate the chaff into the ground coffee. Because of this concern for quality, specialty coffees command a price premium in the market place.

There are also other distinguishing characteristics of specialty coffees. While conventional coffees generally do not designate a country of origin, specialty coffees almost always do. Specialty coffees are also roasted with more precise temperature control and ground to more uniform specifications than conventional coffees.

Currently, in the U.S. specialty coffees are selling at retail prices between \$8.00 and \$15.00 per pound!

If you choose to pursue this alternative, you could either sell green coffee beans directly to a U.S. specialty coffee roaster or you could roast, package and market your own retail brand of specialty coffee. If you sell to a U.S. specialty coffee roaster you would need to negotiate when and how the beans would be delivered in the U.S. You would also negotiate a price. The amount specialty coffee roasters are willing to pay for green coffee beans depends upon the quality characteristics of the coffee. Your coffee is sole-source and high quality although it would not have the high acidity desired by many U.S. consumers. It would likely be used in specialty, blended coffees. Given the number of different quality factors involved, it is very difficult to get an estimate of the price that you could expect to receive from a specialty coffee roaster. One roaster did tell me that private label coffee retailers pay

him between \$4.00 and \$7.00 per pound for purchasing, roasting, blending, and packaging specialty coffees. Obviously, he would pay much less than this for the green coffee beans. However, when he realized that I was just inquiring and did not actually have coffee to sell, he was not willing to give me an estimate. He did say that he negotiated buying prices such that the seller bears the cost of transportation to his roasting facility.

A major shipping company gave me a price of \$0.10 per pound to ship green coffee beans from Guatemala to New Orleans (a major port of entry for coffee coming into the United States). Depending on where the roaster is located it might cost as much as another \$0.10 per pound to transport the coffee from New Orleans to the roaster.

If you choose to create your own retail brand you would need to submit a sample of your coffee to an independent reviewer of specialty coffees. One of the best known is The Coffee Review. Their ratings carry a great deal of weight in the specialty coffee market. Many specialty coffee retailers will only handle coffees that have ratings from The Coffee Review that exceed some minimum threshold.

Within the specialty coffee industry, freshness is paramount. Coffee beans remain fresh in their green stage for two years. However, when the beans are roasted they remain fresh for only two weeks, and if the beans are ground the freshness is gone after two days. If you submit your coffee to reviewers, they will want the freshest coffee. For example, coffee submitted to The Coffee Review must have been roasted no more than one week prior to submission.

Custom roasters in Guatemala are currently charging about \$1.00 per pound to clean, roast, and bag coffee for retail sale. A U.S. roaster indicated that the quality and consistency of Guatemalan custom roasting might not be up to U.S. standards. I was not able to get a comparable estimate from a U.S. roaster but, no doubt, the cost would be much higher.

If you choose to retail your own brand, another alternative would be to construct your own coffee roasting facility in the United States. A representative for a major manufacturer of coffee roasting equipment told me that the equipment necessary to roast and package your own coffee would cost approximately \$100,000. I suspect that it would probably cost at least an additional \$100,000 to purchase or construct a building. A plant of this size could roast approximately 1,000 pounds of coffee in an 8-hour workday and would require 1 or 2 employees.

Alternative 3: Organic and “Cause” Coffee Production

A small percentage of producers are finding niche markets selling organic coffee. Organic coffees are a subset of the specialty coffee market. The term “organic” means that no synthetically produced chemicals are used in the production process. Various independent organizations certify organic producers. Some organic producers also acquire additional certifications such as the “bird-friendly” certification offered by the Smithsonian Migratory Bird Center.

Environmentally and socially conscious consumers in developed nations are driving the market for organic coffees. They tend to believe that organic coffees are healthier for consumers. But they are also concerned about issues such as, farm worker exposure to chemicals, erosion, habitat for wild birds, and maintaining small family coffee farms in developing countries. Organic and various “cause” coffees have been available at specialty coffee shops for many years. Now, major retailers such as Starbucks, Seattle’s Best Coffee, and Bucks County Coffee Company are also selling organic and bird-friendly coffees.

According to Quality Assurance International (an independent organic certification organization) coffee cannot be labeled organic until the farm has gone three years without any synthetic fertilizer or agricultural chemical applications. These three years are called the “withdrawal period.” If you chose this alternative, your yields would likely fall but you would also have lower purchased input costs. A rough estimate is that yields would decrease by 10 percent and production costs would decrease by up to 25 percent per pound.

With organic production, it will be harder to combat disease and insect infestations. Rather than addressing problems after they occur, organic producers tend to adopt preventative measures to help minimize the risk of disease or insect problems. For example, organic producers in Chiapas, Mexico are cultivating *Cephalonomea stephanoderis* (a wasp) to biologically control “broca” (a pest that burrows into the coffee fruit and eats the bean). Also, in Chiapas, organic farmers use a worm called *Eisennia fetida* to decompose the pulp that is removed from the coffee bean. Once the pulp decomposes it is used as fertilizer in place of synthetic fertilizers.

I read about a farm in Colombia called *Café Mesa de los Santos* that has been certified as bird friendly (by the Smithsonian Migratory Bird Center) and organic (by Biolatina). The farm uses *Cephalonomea*

stephanoderis to control *broca* and provides a variety of shade trees to attract birds that help control unwanted pests. For fertilization, the farm uses the decomposing leaves that fall from the shade trees plus a combination of cattle manure, chicken manure, and coffee pulp.

So why would anyone want to go to all of this trouble? Because retail organic coffee prices can be as much as 25 percent higher than prices of non-organic specialty coffees! Other certifications further increase price premiums. Since, it costs no more to process or roast organic or bird-friendly coffees, much of this price premium is passed on to the farmer. You could either sell your coffee in the *pergamino* stage to an organic coffee buyer in Guatemala, or roast, package, and sell your own branded organic specialty coffee as described in alternative two.

Well, this is what I have learned. I hope that it is useful. Let me know if I can be of further assistance.

Salvador

The Decision

Victor glanced again at the computer screen. He was not naïve. He had not been expecting Salvador to find some magic solution – a marketing strategy that would guarantee the future profitability of the Melgar family coffee farm. He knew that such guarantees didn't exist in the real world with many competing producers of coffee and erratic consumer demand. However, he had hoped that Salvador's investigations would help him identify a single strategy that promised the best chance of maintaining the family coffee-producing tradition. Now he was more confused than ever. If he continued with his current marketing practices, maybe he could just "ride-out" the current low prices. But then again, maybe the current low prices were not temporary. The other alternatives that Salvador had mentioned seemed almost overwhelming. But maybe such drastic measures were his only hope for maintaining the Melgar family coffee farm.

Teaching Note for “Victor Melgar’s Coffee Farm”

When and Where to use “Victor Melgar’s Coffee Farm”

This case is intended for use in upper-level undergraduate courses in agricultural marketing, management, or finance. For students outside of Central America the case can be used to introduce an international dimension into the course curriculum. Further, while many students will be familiar with coffee as a consumer good, the case provides an opportunity for students to learn about the production and marketing of coffee. While the case highlights Victor’s decision regarding alternative marketing channels, there are related economic and financial issues underlying the marketing decision.

Learning Objectives

Students outside of coffee-producing regions in Central America may wonder why they should concern themselves with decision’s facing a coffee farmer in Guatemala. Yet, one of the most important insights to be gleaned from this case is that while the commodity and the geography may be different, the decision facing Victor Melgar is similar to decisions currently faced by many farmers across Europe and in countries such as the United States, Canada, and Australia.

An objective of this case is to identify issues faced by those who market commodities. One such issue is the desire to “add value” to commodities so as to capture a larger share of the retail price, especially when commodity prices are low. By analyzing the decision facing Victor Melgar, students consider what factors affect the success of these efforts to add value to agricultural commodities. Important considerations include: market identification, required investment, economies of scale, and whether or not commodity producers’ existing entrepreneurial skills are sufficient to successfully participate in markets for differentiated value added agricultural products.

Students, who seriously analyze the decision faced by Victor Melgar, will need to incorporate insights from a number of disciplinary or subdisciplinary areas, including marketing, management, finance, and economics. Demonstrating these interrelationships in a “real world” context is another important objective of this case.

Finally, an objective of this case is to provide a marketing situation for students to discuss. Students can analyze the alternatives Victor is facing, and potentially develop a marketing plan for Victor’s coffee.

Synopsis of the Case

Victor Melgar is a coffee farmer in Guatemala, Central America. Given current low coffee prices, he is worried that he may not be able to maintain the family tradition of coffee production. He wonders whether the current low prices are just another of the periodic downturns in the volatile coffee market or whether the market is experiencing structural changes that will have long-term implications. Victor asks

a nephew who is studying agribusiness in the United States to help him think about marketing alternatives. After a few months of research, the nephew sends Victor an e-mail outlining three alternatives for marketing the coffee on Victor's farm. One alternative is simply to continue producing and marketing commodity coffee, in hopes that coffee prices will improve. The other alternatives involve changes in production and/or marketing practices intended to increase profit margins on Victor's coffee. Additional investments may also be required. Victor is faced with a decision between making significant, and potentially expensive, changes in his production and marketing practices, and continuing his present practices. There is risk in whatever decision Victor makes since none of the available alternatives provides an assurance of profitability.

Potential Discussion Questions

1. How would you characterize the market into which Victor Melgar currently sells his coffee? Perfectly competitive? Monopolistically competitive? Oligopolistic? How would you characterize the market for specialty coffee including organic or cause coffees?
2. Identify the similarities and differences between Victor Melgar's situation and circumstances facing producers of agricultural commodities in your region.
3. Make a recommendation for Victor to follow. Justify your recommendation by examining the pros and cons of the alternatives facing Victor.
4. Develop a marketing plan for Victor's coffee based on your recommended strategy.
5. Suppose that Victor decides to differentiate his coffee. What recommendations would you make to Victor regarding management of his production and marketing activities? What new entrepreneurial skills will Victor need to either acquire or hire?
6. How significant are the economies of scale for specialty coffee roasting and packaging? Given his current level of production, can Victor justify investing in a coffee roasting facility?

Teaching Strategies

This section suggests discussion topics based on the questions provided above.

1. Commodity coffee is traded in a market similar to a perfectly competitive market where the grower is a price-taker. As Victor moves further away from selling at the export house (from selling green coffee beans to a U.S. roaster all the way to roasting and packing his own branded coffee) he becomes more of a price-setter. This discussion question is intended to aid the student in recognizing differences in marketing structure and how these

differences are influenced by the extent of product differentiation. An additional point that can be brought out is the cost involved in trying to capture more of the marketing margin.

2. Common similarities will include: 1) low current prices and/or uncertainty about future prices for undifferentiated agricultural commodities; 2) a desire on the part of producers to increase margins by transforming homogeneous commodities into at least partially differentiated products; 3) changing consumer demand; 4) a recognition that traditional production and marketing strategies may no longer be sustainable; 5) a recognition that alternative production and marketing strategies will likely require capital investment and/or new entrepreneurial skills; and, 6) a frustration with having to make decisions under less than sufficient information.
3. There are many pros and cons to the alternatives suggested in the case study. Additionally, students may be encouraged to create alternative solutions not presented in the case. Some major pros and cons we expect to be part of a discussion of the alternatives include the following:

Alternative 1 (Continue Current Practices): It was noted in the case that overall consumption of coffee has been steadily decreasing, while demand for specialty coffee has been increasing. A con of this alternative is that commodity coffee prices may not increase given these trends. A pro is that there will be no additional investment (financial or managerial) needed.

Alternative 2 (Specialty Coffee): First, it should be noted that although Victor does produce arabica coffee, he does not produce the highly acidic, high altitude beans preferred for many specialty coffee consumers. This will likely limit his ability to retail a sole-source specialty coffee produced from his beans. He could purchase high altitude coffee in Guatemala and create his own blended specialty coffee or he could sell his coffee to roaster who produces blended specialty coffees. An objective here is for students to recognize the cost involved in capturing more of the marketing margin. In the e-mail from Salvador, he is excited about the \$8 to \$15 per pound retail prices, however, what portion of this can Victor capture? Within this alternative, the student should discuss the pros and cons of selling directly to a U.S. specialty coffee roaster versus creating a retail brand.

Alternative 3 (Organic and "Cause" Coffee Production): Victor's current expected production is 37,000 pounds with a cost of production of \$0.90 per pound. If Victor switches to organic production practices, he can expect production to fall to around 33,300 pounds (10 percent reduction) with a cost of production of \$0.675 per pound (25 percent reduction). The price Victor

would receive for organic coffee is unknown, but expected to be as much as 25% above specialty coffee prices. The remaining discussion for this alternative would be similar to that for the second alternative; however, there is an added issue of the three-year withdrawal period.

4. As a part of the marketing plan development, students could be asked to address the four P's, execute a SWOT analysis, and perform a competitive analysis of the industry. Suggested items to focus on include, but are not limited to, the following:

Product: In a general sense, the product is coastal, low-acidity, arabica coffee. But more specifically, the product depends on which of the alternatives Victor chooses to pursue. The product may be homogeneous commodity coffee or coffee differentiated by production practice (organic, bird-friendly, etc.), and/or other specialty coffee characteristics (sole-source, family-produced, premium processing, packaging, etc.).

Price and promotion also depend on production and marketing practices. The point is that in all of these respects, coffee is not just coffee. There are significant differences between commodity coffee and coffee differentiated by production or marketing practices.

Place: How and where will the coffee be roasted and processed? How and where will it be sold? How will it be transported? Recall that coffee only remains fresh for two weeks after roasting.

Strengths: Connections in the United States (his nephew), Arabica coffee, wet coffee bean extraction process

Weaknesses: Lower altitude (less acidic) coffee, Volume

Opportunities: Differentiation (organic, bird-friendly; family-produced, etc.); increasing demand for specialty coffee

Threats: Low commodity prices; Decreased demand overall for coffee

Industry analysis: An analysis of Porters Five Force model would reemphasize the market structure issues discussed above.

5. Assuming Victor selects alternative two or three, to further differentiate his product, a discussion of management skills needed could focus on the issue that Victor will be expanding beyond his core competency – growing coffee.
6. Any discussion of Victor marketing his own specialty coffee centers around building a roasting facility in the United States (roasting in Guatemala is ruled out due to the length of time roasted coffee remains fresh). The information provided in the case is for a small roasting plant. However, even at this size, Victor would have roasted all of his coffee (37,000 pounds) in 37 days of operation. Students may suggest Victor work with his neighbors to generate the quantity needed, or may determine the roasting facility is not feasible given his size.

The following is a list of references that may be given to students to provide extra information about the industry.

Selected Specialty Coffee Resources:

Specialty Coffee Association of America, <http://www.scaa.org>

The Coffee Review, <http://coffeereview.com>

Selected Organic and “Cause” Coffee Resources:

Biolatina. <http://www.biolatina.com>

Café Mesa de los Santos. <http://www.cafemesadelossantos.com>

Garcia, Jaime E., 1997, La Agricultura Organica en Costa Rica,
<http://www.uaca.ac.cr/acta/1997may/jaimee01.htm>

McMahon, Patrick. July 26, 2001, “Cause coffees produce a cup with an agenda.”
USA Today.

Northwest Shade Coffee Campaign, Coffee and Birds: Making the Connection- Your coffee could help save habitat for migratory birds!,
<http://www.seattleaudubon.org/shadecoffee/>

Organic Coffee Association, <http://www.orcacoffee.org>

Organic Trade Association, <http://www.ota.com>

Quality Assurance International, <http://www.qai-inc.com/>

Smithsonian Migratory Bird Center.
<http://natzoo.si.edu/smbc/Research/Coffee/coffee.htm>

World Resource Institute, Global Trends, World Resources 1998-1999, Production and Consumption: Trouble Brewing: The Changing Face of Coffee Production,
<http://www.wri.org/wr-98-99/coffee.htm>

Other Coffee Resources:

Foreign Agricultural Service, United States Department of Agriculture.
<http://www.fas.usda.gov>

International Coffee Organization, <http://www.ico.org>