**Ecuadorean Valentine Roses**

It is 6:20 A.M. February 7, in the Ecuadorian town of Cayambe, and Maria Pacheco has just been dropped off for work by the company bus. She pulls on 'thick rubber gloves, wraps an apron over her white, traditional embroidered dress, and grabs her clippers, ready for another long day. Any other time of year, Maria would work until 2 P.M., but it's a week before Valentine's Day, and Maria along with her 84 co-workers at the farm are likely to be busy until 5 P.M. By then, Maria will have cut more than 1,000 rose stems.

A few days later, after they have been refrigerated and shipped via aircraft, the roses Maria cut will be selling for premium prices in stores from New York to London. Ecuadorean roses are quickly becoming the Rolls-Royce of roses. They have huge heads and unusually vibrant colors, including 10 different reds, from bleeding heart crimson to a rosy lover’s blush.

Most of Ecuador's 460 or so rose farms are located in the 'Cayambe and Cotopaxi regions, 10,000 feet up in the Andes about an hour's drive from the capital, Quito. The rose bushes are planted in huge flat fields at the foot of snowcapped volcanoes that rise to more than 20,000 feet. The bushes are protected by 20-foot-high canopies of plastic sheeting. The combination of intense sunlight, fertile volcanic soil, an equatorial location, and high altitude makes for ideal growing conditions, allowing roses to flower almost year-round.

Ecuador's rose industry started some 20 years ago, and has been expanding rapidly since. Ecuador is now the-world's fourth largest producer of roses. Roses are the nation’s fifth largest export, with customers aII over the world. Rose farms generate $240 million in sales and support tens of thousands in jobs. In Cayambe, the population has increased in 10 years from 10,000 to 70,000, primarily as a result of the rose industry. The revenues and taxes from rose growers have helped to pave roads, build schools, and construct sophisticated irrigation systems. This year construction will begin on an international airport between Quito and Cayambe from which Ecuadorean roses will I their journey to flower shops all over the world.

Maria works Monday to Saturday, and earns $210 a month, which she says is an average wage in Ecuador and substantially above the country's $120 a month minimum wage. The farm, also provides her health care and a pension. By employing women such as Maria, the industry has fostered a social revolution in which mothers and wives have more control over their family's spending, especially on schooling for their children.

For all of the benefits that roses have 1 bought to Ecuador, where the gross national income per capita is only $1,080 a year, the industry has come under fire from environmentalists. Large growers have been accused of misusing a toxic mixture of pesticides, fungicides, and fumigants to grow and export unblemished pest-free flowers. Reports claim that workers often fumigate roses in street clothes without protective equipment. Some doctors and scientists claim that many of the industry's 50,000 employees have serious health, problems as a result of exposure to toxic chemicals. A study published by the International Labor Organization claimed that women in the industry had more miscarriages than average and that some 60 percent of all workers suffered from headaches, nausea, blurred vision, and fatigue. Still, the critics acknowledge that their studies have been hindered by a lack of access to the farms, and they do not know what the true situation is. The International Labor Organization has also claimed that some rose growers in Ecuador use child labor, a claim that has been strenuously rejected by both the growers and Ecuadorean government agencies.

In Europe, consumer groups have urged the European Union to press for improvements in environmental safeguards. In response, some Ecuadorean growers have joined a voluntary program aimed at helping customers identify responsible growers. The certification signifies that the grower has distributed protective gear, given training in using chemicals, and hired doctors to visit workers at least weekly. Other environmental groups have pushed for stronger sanctions, including trade sanctions, against Ecuadorean rose growers that are not environmentally certified by a reputable agency. On February 14, however most consumers are oblivious to these issues; they simply want to show their appreciation to their wives and girlfriends with a perfect bunch of roses.

**Case Discussion Questions**

1. How has participation in the international rose trade helped Ecuador's economy and its people? How has the rise of Ecuador as a center for rose growing benefited consumers in developed nations who purchase the roses! What do the answers to these questions tell you about the benefits of international trade?

2. Why do you think that Ecuador's rose industry only began to take off 20 years ago? Why-do you think it has grown so rapidly?

3. To what extent can the alleged health problems among workers in Ecuador's rose industry be laid at the feet of consumers in the developed world and their desire for perfect Valentine's Day roses?

4. Do you think governments in the developed world should place trade sanctions on Ecuador roses if reports of health issues among Ecuadorean rose workers are verified? What else might they do to improve the situation in Ecuador?