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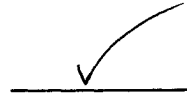
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# An Analysis of Labeling in the Cut-Flower Industry

By

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B.S. Morningside College, 2000

Presented in partial fulfillment of the requirements

for the degree of

Master of Science

The University of Montana

2002

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### **ABSTRACT**

The expanding cut-flower market in the United States relies heavily upon imports from Latin American nations. The terms of the trade favor the North, often at the expense of the greenhouse workers and the environment. The life of a typical cut flower begins and ends with heavy doses of petrochemicals. These chemicals are contaminating local ecosystems and communities. Intensive pesticide use, poor working conditions, and the physical demands of the intricate work endanger the health of flower workers. Additionally, workers in floriculture firms are often not paid enough to rise above the poverty level. They receive few to no benefits, lack job security, and are prevented from forming independent unions. Consumers are able to purchase cheap flowers at the expense of these workers.

This paper explores the potentials and limits for flower label programs to improve the conditions of production in Latin American. Two such labeling programs will be compared and evaluated in this paper. The labeling standards will be assessed as to their possible impact upon greenhouse practices.

## **ACKNOWLEDGMENTS**

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## TABLE OF CONTENTS

ABSTRACT . . . . .	ii
ACKNOWLEDGMENTS . . . . .	iii
TABLE OF CONTENTS . . . . .	iv

### Chapter

1. INTRODUCTION AND OVERVIEW. . . . .	1
Methods	
Chapter Overview	
2. SOCIAL AND ENVIRONMENTAL ISSUES IN THE CUT FLOWER INDUSTRY . . . . .	6
Pretty Poisons	
Flower Workers	
Flowers-Only for the Rich?	
Final Thoughts	
3. EFFECTIVENESS OF COMMODITY LABELING . . . . .	24
Types of Labeling	
Goals of Values Labeling	
Praises and Critiques	
In Closing	
4. FLOWER LABELING PROGRAMS . . . . .	38
Description	
Grower Motivations	



Comparison of Flower Labeling Standards  
Summary

5. POTENTIALS AND LIMITS OF FLOWER LABELING  
PROGRAMS . . . . . 60

Potential for Improving Flower Production

Limits of the Labeling Process

Conclusions

REFERENCES . . . . . 73

## CHAPTER 1

### INTRODUCTION AND OVERVIEW

The purpose of this thesis is to compare and evaluate labeling programs that certify growers of cut flowers. This analysis will be set in the context of literature discussing social and environmental issues in the flower trade and literature that analyzes the effectiveness of values labeling strategies. The differences and similarities between the labeling criteria, as well as their ability to address the problematic aspects of flower trading in the Americas, will be discussed in the following chapters. The specific research questions addressed in this thesis are as follows:

*What are the greenhouse conditions of flower production in Latin America? What are the characteristics of flower labeling programs? What are the potentials and limits of these programs to address the problematic conditions of flower production?*

#### **Methods**

A combination of methods was used to answer these research questions. As mentioned, a literature review was the method for establishing the

conditions of production in Latin American greenhouses. A separate body of literature analyzing labeling programs in general forms a basis for evaluating the flower label programs. The other portion of this research was to obtain, categorize, and compare the standards that the flower labeling programs use for certifying flower growers. An initial read through the labeling standards showed that most of the standards relate to either social or environmental issues. Thus the major classifications for evaluating the standards were social and environmental. The next step was to come up with subcategories, which again emerged out of a review of the regulations. Once these subcategories were created, the two programs were more easily compared side by side.

The final step in this process was to combine all the above information into an analysis of flower labeling programs. The two literatures, combined with my scrutiny and comparison of the label standards, leads to the conclusions on the potentials and limits of these programs.

One limitation of my research methods was that the Rainforest Alliance standards were only available in Spanish. The standards were initially translated with a software translation program. This provided a decent translation, but still with some errors. I reviewed this translation, using my own knowledge of Spanish, a Spanish dictionary, and a second software translation program. Thus the translation was not a perfect document, but it sufficed for the needs of this research.

There are both pros and cons to the methods used for this research. The literature review is a stand-in for personal observation of the greenhouse conditions in Latin America. This is perhaps advantageous in that it provides an overview from the perspectives of several different scholars. Visits to the sites would have been valuable, however, for attesting to the improvements or lack of improvements that result on labeled farms. In either case, this level of analysis, based upon written documents, rather than first-hand observation, was the most feasible strategy for this research project. Actual visits to certified and non-certified growers would be the optimum method for determining actual impacts of the flower label programs. The analysis here focuses upon the potential impacts based upon information from the literature review and the theoretical ability of the labels to address the found problems.

### **Chapter Overview**

In the past twenty years, Latin American nations have started growing cut flowers for export. Today, Colombia and Ecuador are leading suppliers of flowers sold in the United States (Rainforest Alliance 2001). Poor environmental and social conditions have evolved with the globalization of the flower industry. The literature clearly shows that there are recurring problems in the flower-growing industry in Latin American nations. Flower firms are frequently exposing workers to labor-intensive, hazardous work. The growers are risking the health of workers, as well as the local environments. Groundwater levels are being

depleted and soils rendered sterile as a result of the industry's presence in Colombia and Ecuador (Maharaj and Dorren 1995, Semple 1999). Chapter 2 will elaborate upon the problems evidenced in a literature review of cut-flower production.

Flower labeling programs have been created in response to these poor conditions under which flowers are typically grown. The labels lay out standards that growers must meet to produce flowers bearing the particular label. The labels are generally intended to result in a more environmentally and socially responsible production process. The labeling programs are similar to fair trade and organic initiatives. These value-labeling processes are also intended to reveal the conditions of production behind a commodity (Raynolds 2000). Capitalist market principles conceal and profit from labor and environmental exploitation. These value-labeling processes allow consumers to influence the market by demanding a more responsible production process.

Chapter 3 provides an overview of various labeling programs and the successes and pitfalls with which they have been met. Examining labeling programs in general creates a basis from which to evaluate the flower labeling programs. This is especially important because of the relatively short history of flower labels that were created and implemented within the past 3-5 years. Labeling strategies for other commodities such as coffee and wood have a somewhat longer history. The lessons and examples from other commodities can be applied to the particulars of flower labeling programs.

The flower label programs will be described in greater detail in Chapter 4. The specific criteria and methods of implementation for two flower labeling programs will be discussed and compared. A third program that is a voluntary program administered by the Colombian growers' association will also be compared with the labeling programs. The Colombian program has no formal certification and review process and thus provides a somewhat different approach to altering the conventional flower growing practices.

Chapter 5 analyzes the limits and potentials of these flower-labeling programs to promote change in the flower industry. The labeling criteria, when followed and enforced, improve upon the conventional flower production model. Standards addressing work hours, workers' right to organize, restricted pesticides, and re-entry intervals following pesticide application can clearly change many of the poor practices that typically occur in Latin American flower greenhouses. The flower labels also provide a forum for stakeholders to discuss the future directions of flower production. These are just a few of the improvements that will be fully discussed in Chapter 5. On the other hand, there are many problems with industrial floriculture that are not being or cannot be addressed through these labels. These limits will be recognized in Chapter 5, as well.

## CHAPTER 2

### SOCIAL AND ENVIRONMENTAL ISSUES IN THE CUT-FLOWER INDUSTRY

This chapter explores the forces that have created the floriculture industry, as it exists today, and the resulting social and environmental conditions. This will be accomplished through a literature review using available information on the flower industry in Colombia and Ecuador. Colombia and Ecuador are of particular interest because they are the largest producers in Latin America and together provide the bulk of the flowers sold in the United States. Social and environmental problems in the Latin American greenhouses have accompanied the growth of this commodity. Information in this chapter will illuminate the issues with production.

In the late 1990's, two out of every three retail flowers sold in the United States were grown in a Colombian greenhouse (Rainforest Alliance 2001). Ecuador also produces a large portion of flowers sold in the U.S.; they are the third leading supplier of U.S. cut flowers, following Colombia and the Netherlands (Rainforest Alliance 2001). In Colombia more than 300 companies grow cut flowers for export on more than 11,000 acres. The flower business in these two countries supplies a significant portion of their export income. In both nations

flowers are the fourth largest source of export income. The success and profitability of this industry continues to grow in such Latin American nations. Between the years of 1995-1998, Ecuador saw a thirty-seven percent growth rate in the flower sector; the numbers are astounding (Rainforest Alliance 2001).

The environmental and social conditions of Colombia and Ecuador make them prime locations for growing flowers. As with other agricultural products, flowers flourish in environments with high light intensity, abundant water, and fertile soil (Rainforest Alliance 2001). These key ingredients are necessary for growing healthy flowers. Being located near the equator, Colombia and Ecuador receive nearly twelve hours of daylight. Locations within these countries have been selected for their fertile soil, water availability, large labor supply, and access to transportation. Greenhouses are concentrated near the capital cities of Quito and Bogotá. Both locations offer premium agricultural land, access to the urban workforce, and a short drive to a major airport (Thrupp 1995). Few locations in the world could offer more advantages to flower investors than Quito, Ecuador and Bogotá, Colombia.

The sale of fresh flowers in the United States flourished in the 1980's as Latin American nations experienced a boom in non-traditional agriculture exports (Thrupp 1995, Rainforest Alliance 2001). Previous to the expansion of non-traditional agriculture in this region, the economies of the countries relied primarily upon a small group of agricultural products that are often considered "traditional" crops. The small number of commodities and the subsequent surplus of these traditional products resulted in a near economic and social crisis



of Latin America. Development agencies and governments of developed nations, particularly the United States, encouraged a new set of development strategies and policies (Thrupp 1995).

These new strategies consist of structural adjustment and trade liberalization policies. USAID and the World Bank are among the strongest proponents of structural adjustment policies. The objective of structural adjustment policies is to increase exports and free trade in an effort to reduce the debt burdens of the nations (Maharaj and Dorren 1995). Governments in these nations are to implement policies that reduce tariff and trade restrictions and encourage foreign investment in a variety of manners. Governments of developing nations are being encouraged to invest in infrastructure development and provide tax benefits to flower growers upon the premise that long-term benefits will be worthwhile (Maharaj and Dorren, 1995). To enhance these efforts, governments and development agencies provided money and other incentives to foreign investors to attract development. In fact, many of the non-traditional agriculture programs involve aggressive marketing to attract investors (Thrupp 1995). It was through this process that floriculture established its roots in Latin America (Thrupp 1995).

The flower industry has continued to flourish and grow as a result of many factors. The reduction in trade barriers has increased the ease and profitability of flower exportation from Latin America. A specific example is the United States' Andean Trade Preference Act passed in 1991, which exempts flowers from Colombia and Ecuador from U.S. tariffs (Thrupp 1995, Walt 2001).

Technological advancements throughout the floral chain have also increased the profitability of flowers as a commodity. On the supply end, for example, the improvements in transportation channels and the development of refrigeration technology have enhanced the speed and quality with which the flowers reach the retail market.

On the demand side, the ease of ordering flowers on the Internet has increased availability and profits (Rainforest Alliance 2001). The advent of supermarkets and superstores dabbling in flower sales has diversified the target flower buyer. Consequently, supermarkets and superstores have re-structured the traditional chain of flower sales in the United States. Such stores have often contracted directly with growers or purchased their own flower plantations. Such methods enable them to sell flowers at lower prices than traditional retail stores (Rainforest Alliance 2001). Thus a combination of government incentives, development strategies, external wealthy investors, consumer demand, and technology has facilitated the growth of the flower trade between Latin America and the United States.

Most of the information for this analysis came from two books—*The Game of the Rose: The Third World in the Global Flower Trade* by Niala Maharaj and Gaston Dorren (1995) and *Bittersweet Harvests for Global Supermarkets: Sustainability and Equity in Latin America's Agroexport Boom* by Lori Ann Thrupp (1995). Additionally there was a comprehensive report by the Rainforest Alliance, entitled *Flowers & Foliage Farming in Latin America: An Environmental and Social Analysis*. These three sources provided the bulk of the information in

this literature review. The Internet also proved to be a wealthy source for information on the flower industry. But there are limits to what is available on the Internet. Most of the findings came from non-profit organizations that focus upon environmental and social issues. The articles were short in length and did not provide a lot of depth. They usually arrived at similar conclusions and relied upon the two books above and limited research studies as their sources of information. The language barrier also limits the access to sources, as many studies and reports are written in Spanish.

### **Pretty Poisons**

Though most consumers may imagine their flowers to have come from a healthy, sunny, natural field of blossoms, quite the opposite is true. The majority of flowers in Ecuador and Colombia grow under the artificial protection of greenhouses (Rainforest Alliance 2001). Flowers are a fragile, vulnerable commodity that must be handled with the utmost care right from the beginning (Maharaj and Dorren 1995). To facilitate the proper environment for flower growth, a sophisticated infrastructure must be established. The greenhouse must be erected with intricate irrigation and drainage systems, artificial lighting, and massive coolers for maintaining the proper conditions once the flowers have been cut (Thrupp 1995). Maharaj and Dorren (1995) refer to the flower as an “industrial product” originating in a biotechnology lab, growing in an artificial

environment, being nourished with synthetic agrochemicals, and finally transported through a complex chain (1995).

Greenhouses have long been cited as a major cause of pollution. The largest flower-producing nation in the world, the Netherlands, has highly contaminated water and soil in the concentrated flower growing regions of the country (Maharaj and Dorren 1995; Rembert 1999). This problem has spread into Third World nations along with the expansion of the flower industry. Nearly every article provides examples of the environmental degradation that is occurring in the flower-growing locales of Latin America (Higgins 2001; Maharaj and Dorren 1995; Rainforest Alliance 2001; Rembert 1999; Semple 1999; Thrupp 1995). Kevin Watkins (2001) attributes a lowering water table outside of Bogotá to the intense floral production. He also reports on highly toxic pesticide residues being found at dangerous levels in this region's groundwater. In a study of the impacts of fern and flower production in Costa Rica, Claudette Mo found pesticides present in seventy-percent of surface water samples (Rainforest Alliance 2001).

From start to finish, the flower growing business is fortified with chemical inputs. The first step in establishing a greenhouse is to sterilize the soil with methyl bromide, rendering the soil biologically dead (Maharaj and Dorren 1995; Thrupp 1995; Watkins 2001;). All fungi and bacteria in the soil must be killed, as they are potential threats to the delicate monocrop blooms. Methyl bromide is a Category I acute toxin, and as such is one of the most dangerous substances known (Rembert 1999). Methyl bromide also contributes to depletion of the

ozone layer, and is currently being phased out in the United States (Hattam 2001). This is only the first dose of toxins, in a series of many that are employed in the industrialized flower-growing process. Fungicides, nematicides, herbicides, fertilizers, and growth stimulants are yet to be fed to the fragile plants.

In the midst of all these chemicals, Colombian flower workers in the Bogotá region are reportedly exposed to 127 different types of pesticides (Hattam 2001; Thrupp 1995). Up to one-fifth of the chemical use in Bogotá's savannah greenhouses are toxins or carcinogens that are restricted in the U.S. (Watkins 2001; Rembert 1999; Thrupp 1995). Researchers account to having witnessed undiluted pesticides running on the ground in and around greenhouses (Rembert 1999). Due to shrinking water supplies and contamination by the flower industry in Colombia, Gaston and Dorren (1995, 61) write, "People and flowers compete for water, and flowers get the better of it." There is clear evidence that the needs of the flower industry are often taking precedence over the needs of local residents.

Although authors are exposing the harmful pesticide misuse by the floral industry, by most accounts there have been vast improvements in the past ten years (Semple 1999; Watkins 2001; Friedemann-Sanchez 2001). Tracey Rembert (1999) cites industry representatives as claiming that the pesticides used in the flower industry are of low toxicity and have a short, residual life. Of course they are going to argue in this manner, their profits depend upon it, but there seems to be a greater amount of evidence provided by those on the other side of the issue. Another dissenter, Dr. Terril Neil, a floriculture professor at the

University of Florida argues for a more moderate position, claiming that pesticide misuse is not as prevalent as many researchers suggest. Dr. Neil is of the opinion that growers have an incentive not to overuse pesticides because of their high cost (Rembert 1999). This may be true, but there are other forces besides cost pushing growers to spray heavy doses of pesticides.

One of the largest influences on pesticide overuse is the assumption by marketers that consumer will not accept anything short of perfect blooms (Eskilson 1994; Rainforest Alliance 2001). In order to ensure that their products will meet consumer standards, greenhouse managers make every attempt to produce a perfect flower. Spraying large doses of a variety of pesticides is one certain way to ward off any pest or disease that might affect the flowers. In this manner, consumers are contributing to the overuse of pesticides.

A second influence on pesticide use in Colombian and Ecuadorian greenhouses is the border inspection at U.S. customs. There is a zero-tolerance allowance for pests and diseases on flowers and ornamental plants entering the United States (Rembert 1999; Warrick 2000). To be certain their flowers will not be rejected, flower growers are taking out insurance in the form of pesticide overuse. Profits might be lost if bugs were found in a shipment of flowers. This law is another factor pushing growers to spray heavily.

Finally, there is evidence that government and development agency policies encourage the consumption of agrochemicals, and in fact subsidize it (Murray 1994; Thrupp 1995). All of these factors wrapped up together, seem a convincing reason to maintain a high level of chemical inputs in a flower

greenhouse. After all, the people deciding to use more chemicals are not the ones that have to deal with the effects.

### **Flower Workers**

In this section, the composition of the work force, the salary and benefits of the workers, and working conditions will be examined in detail. Before getting to the workforce, the employers ought to be discussed. The literature revealed little information on who owns these large flower greenhouses. Lori Ann Thrupp (1995) asserts that the majority of profits from the floriculture business in Latin America go to large national and transnational firms. This may be due to the large capital investment that is required to establish and maintain the complex infrastructure that the mass production of flowers requires. Only large investors have access to the needed level of capital to enter the floriculture business.

The Rainforest Alliance Report (2001) provides a list of agenda setters based upon companies that dominate the retail end of the chain. This list includes 1-800-FLOWERS, Dole Foods, Florists' Transworld Delivery (FTD), and Florafax. Additionally, a list of retail grocers that lead the market in floral retail are listed. As mentioned, grocers are frequently avoiding the middleman by contracting directly with growers, if not investing in their own greenhouses in Latin America (Rainforest Alliance 2001). While these companies may not all be directly involved in the growing end of the business, the domination by large

transnational corporations in the retail end likely suggests similar patterns among growers.

In turning to the workforce, it is important to note the large number of people affected by floral production. For example, the Colombian association of flower growers, Asocoflores, estimates that the floral industry in Colombia employs 70,000 people directly and another 50,000 indirectly through input supplies and transportation (Rainforest Alliance 2001; Semple 1999; Watkins 2001; Thrupp 1995).

Of those employed by the over 350 companies in the Bogotá savannah, eighty-percent are women (Rainforest Alliance 2001; Thrupp 1995). The total number employed by the flower industry in Ecuador are fewer, but a similarly high sixty-nine percent of the workforce is women (Thrupp 1995). When asked why women compose the bulk of the workforce, managers gave several reasons. They said that women are generally more skilled at dexterous, intricate tasks, such as those required when caring for flowers. As further support for this, a study was conducted on a rose plantation that revealed women to be more efficient at cutting flowers than men. Managers also point out that women can be paid less than men and that they are more submissive and obedient than men (Thrupp 1995). With the globalization of industry, women have indeed become the targeted work force in manufacturing jobs for these very same reasons (Elson & Pearson 1997; Peterson and Runyan 1999).

The women in these greenhouses are working under much the same conditions as other “sweatshop” labor, but with the added detriment of a highly



toxic work environment. The tasks of tending the plants and harvesting flowers require that the women workers frequently spend their days bending and kneeling over the delicate plants. Furthermore, the hot, humid temperatures inside the greenhouses make for a tough day at work (Maharaj and Dorren 1995).

In spite of this hard work, women workers are paid right at or slightly above the legal minimum wage in both Colombia and Ecuador. And, as similar to the United States, the minimum wage is not enough to provide for a family. The cost of maintaining a family is approximated to be three times the minimum wage in Colombia (Maharaj and Dorren 1995). Women workers earn around \$4 per day. These women can barely provide one third of the income required for a household to survive—that is definitely not a fair wage. By all estimates, the wages paid by flower growers are not enough to escape poverty. To compound matters, job security is almost non-existent (Maharaj and Dorren 1995). Due to the seasonal fluctuations, a flexible labor force is needed for the flower industry. Extra workers need to be hired for peak production periods during the U.S. holidays of Valentine's Day and Mother's Day, but then laid off shortly following. Also the workforce must expand and contract as the demand varies.

One of the reasons why flower growers are getting away with these practices is the lack of effective workers' unions. Colombian law upholds the right to organize, but this is rarely recognized in the flower industry. Approximately twenty percent of flower workers in Colombia belong to a union—the same union. The problem is that the flower growers set up this union.

Workers attempting to form independent unions are quickly fired and “black-listed” among the flower companies (Maharaj and Dorren 1995). And any temporary or seasonal employees have no legal bargaining rights. So in practice, the right to unionize is not being fairly recognized. This is one of the most crucial factors in determining workers’ rights. In order to be able to bargain for better wages and working conditions, the workers must be allowed to form their own unions.

In addition to the harsh conditions already outlined, there are the horrific health impacts as a result of the high chemical usage by the flower growers. Case after case documents the health problems workers experience as result of pesticides. The severity ranges from symptoms of pesticide intoxication, which includes acute symptoms such as headaches and nausea, to long-term chronic effects such as leukemia (Rainforest Alliance 2001). One study documented the presence of dangerous organochlorides, which can cause miscarriage, birth defects, epilepsy, and cancer. A Colombian non-profit organization located near Bogotá reports that two-thirds of flower workers suffer from some type of pesticide related illness (Warrick 2000).

While pesticide use is problematic, the negligent misuse of pesticides further endangers the health of workers and the environment. In some cases, workers are being required to remain in the greenhouse while pesticides are applied or return to the greenhouses immediately following fumigation. The workers often lack the proper protective clothing and are exposed to the wide array of pesticides through dermal contact (Maharaj and Dorren 1995). The lack

of knowledge and training on pesticide safety by the workers is overwhelming. Yet even more alarming is the lack of knowledge by supervisors. Growers in Ecuador reported that most of their information came from pesticide salespeople or product labels (Thrupp 1995). This information is informing their decisions of how much to spray, what concentration, how frequently, and what precautions are necessary.

A doctor in Madrid, Colombia, a town composed almost entirely of people employed by the flower industry, describes the high rates of adverse health effects, but is afraid to speak out about the problems. At the same time, the doctor's superior is publicly claiming that such high incidences are a result of the dusty savannah and not the flower industry (Shakespeare 1995). The man may be correct in that there are a host of factors contributing to the poor health of local people, but pesticides should not be discounted as the primary contributor. The long hours, tough physical conditions, and the intense heat of the greenhouses exacerbate the effects of pesticide exposure. A high rate of malnutrition among workers and their families may also compound the adverse health effects (Shakespeare 1995). On the subject of nutrition and food security, it has been shown that food production in Colombia has suffered as a result of the floral industry's takeover of the Bogotá plain. Food must now be brought into the plain to feed the residents, an area that previously grew enough to support the local population (Maharaj and Dorren 1995). This phenomenon is reiterated by further studies that demonstrate a decline in dietary nutrition when shifting

from staples produced on one's own land to foods purchased with cash-crop earnings (Thrupp 1995).

### **Flowers-Only for the Rich?**

By examining the economics of the floral industry, much is revealed about the power structure associated with this commodity. It is obvious from the evidence provided that the laborers in the greenhouses are not profiting from the industry's presence. The wages of greenhouse workers do not allow them to increase their standard of living or rise above the poverty level (Rainforest Alliance 2001). Besides the low wages, there are poor working conditions and environmental degradation to contend with. In an area ridden with poverty and unemployment, the conditions offered by the flower firms appear to be better than nothing. It is clear that the workers are being taken advantage of; this is especially clear in the preference for women and the reasons given for that preference. Women in these countries are more vulnerable to exploitation.

So who is profiting? This industry is obviously profitable or it would not continue to expand. The majority of the profits go to national and transnational corporations and foreign investors who supplied the up-front capital to establish the greenhouses (Thrupp 1995). A survey in Ecuador revealed that seventy-five percent of flower firms worked with foreign brokers (Thrupp 1995). These powerful entities extract the majority of the financial resources from the region. Neither the countries nor the workers end up profiting from the flower business.

As an example, Dole Foods has recently joined the flower power forces. Dole now controls twenty percent of the flower growing facilities in Colombia (Watkins 2001). It is corporations such as this and their wealthy executives that benefit from the globalized flower trade.

The economics of the floral trade also reveal a North-South power differential. The monetary divide is expansive between the “privileged” knowledge of experts and the workers in the greenhouses. In many cases, floral firms bring in experts from the North to manage the greenhouses. These key people are reimbursed with salaries up to \$200,000, while the workers survive on \$120-\$150 per month (Maharaj and Dorren 1995). Another instance where the monetary gains go to the North are in the expanding role of biotechnology in the flower industry. Scientists in developed nations manipulate and hybridize genes to form “improved” varieties of flowers. These specialty items are then patented so that growers must pay royalties to the seed developers for many years to come. This is another way for Northern countries to stay on top of the flower business, even though their climates and labor conditions are less conducive to flower growth. The fact that this is a consumer-driven industry again privileges the North. Consumers determine the trends, and marketing experts in the North are best able to track these trends and react, thus disadvantaging the producers in Colombia and Ecuador (Maharaj and Dorren 1995).

Throughout the market chain of this commodity, there are mark-ups at every stop along the way—exporter, importer, wholesaler, and retailer. Pesticide manufacturers profit plenty from the chemically intensive production process,

with an average flower firm spending \$18,000 or more per year on agrochemicals (Thrupp 1995). Transportation costs are obviously huge when the flowers must be maintained in controlled, cooled environments over such great distances to reach the consumers. Cuts are also taken by biotech and marketing experts as described above. By the time the chain is complete, approximately ten percent of the final retail price remains in the regions that grew the flowers (Maharaj and Dorren 1995). Though the commodity is complete when it leaves the Latin-American countries, mere slivers of the profits remain. Every time the flowers transfer hands, the price increases tremendously, for very little work. The workers in the greenhouses are crucial to the flower industry, but are not being compensated or treated as such.

Barriers to entry in this field restrict small landowners from entering these lucrative markets. Rembert refers to this market as a stable and marketable international crop that returns earnings five times that of fruit crops (1999). Again the power structure favors the already wealthy, allowing no room for anyone else to enter the lucrative business. The initial start-up money and the continued need for costly inputs prevent even the local large landowner from being able to invest. Besides that, it is the wealthy investors that are being encouraged through funding and subsidies to enter this market (Maharaj and Dorren 1995). In fact, managers of banks and non-traditional agricultural export promotion programs reportedly discourage small farmers because the market instability is too risky for them (Thrupp 1995). So it is only the wealthy that are able to control this

market, and there is no evidence that this cycle of power will change in the future.

### **Final Thoughts**

The problems with the floral trade are obvious from this review of the literature. Workers are exposed to labor-intensive, hazardous work. Pesticide use is negatively affecting the workers, as well as the local environments. Groundwater levels are being depleted and soils rendered sterile as a result of the industry's presence in Colombia and Ecuador. By most accounts, there have been improvements throughout the industry, but problems still remain. It is obvious that large, powerful entities are controlling this industry and are profiting from the present conditions.

Yet there are authors arguing that the presence of the flower industry in Latin America has its positive side. Some note that women are aware of the gender bias in the workplace, and are contesting it to some degree (Appendini 1999). Greta Friedemann-Sanchez (2000) also argues that the women in Colombia are challenging the patriarchal structures through their employment in the flower industry. The flower firms provide women with an escape from the often oppressive home, a social outlet, and a means to discussing the patriarchal society with other women. She also testifies from personal interaction with women workers that there is a sense of job satisfaction among some workers. Many of them consider their work in the flower industry to be a career. And with

a near forty percent unemployment rate around Bogotá, the flowers offer a hopeful escape from poverty (Watkins 2001). Kevin Watkins (2001) is headed in the right direction when he states that for the World Bank and the G8 nations, Colombian flowers represent a success; while anti-globalization scholars view them as symbolic of all that is wrong with international trade. But both viewpoints are wrong, because the women want jobs—they simply want jobs with rights.

Thus methods for improving the flower industry ought to be pursued. Flower labeling programs are one possible means to doing so. Such labels have sprung up in European markets. The most prominent labeling program originated from a collaboration of European non-governmental organizations that formed the flower campaign in 1990. The aim of the campaign is to “improve the social and environmental conditions in the international flower industry” (FIAN 2000). The Flower Label Program (FLP) arose out of this campaign. The FLP is a quality seal on cut flowers that have been certified to meet the conditions set forth by the labeling guidelines. The guidelines address environmental protection, as well as labour, health, and safety standards. The FLP has been certifying flowers grown in both the North and the South since 1999. Other similar certification programs exist in the European market.

Recently, the Rainforest Alliance (RA) has proposed a similar labeling program for flowers and foliage, primarily targeting flowers destined for the United States’ market. The RA plans to begin certifying flowers in the near future (Rainforest Alliance 2001b). The following chapters will explore these flower labeling programs in greater detail.



## CHAPTER 3

### EFFECTIVENESS OF COMMODITY LABELING

Labeling has become a popular market mechanism throughout the world. Corporations label clothing with their official symbol. Consumers recognize and purchase products according to brand loyalty. Products now bear labels that indicate the type of conditions under which production occurred. Terms such as organic, chemical-free, dolphin safe, fair trade, shade grown, recycled, biodegradable, no animal testing, free range, and hormone free abound in today's marketplace. For the purposes of this paper, these ethical labeling schemes will collectively be referred to as "values labels" (Barham 2001).

Values labels have arisen in response to market principles that sacrifice social and environmental standards to profit. The dollar often takes precedence over ethics. Corporations are profiting while sweatshop labor and environmental destruction continue to abound. This is evident in the case of the flower industry. Flower growers frequently underpay employees, risk the lives and health of workers, and poison communities and wildlife with pesticide run-off for the sake of growing a non-necessity--flowers. But this example is not restricted to flowers. Similar situations occur in other manufacturing and agricultural industries.

Labels potentially provide consumers with the power to influence production methods in one part of the commodity chain. Often consumer decisions to purchase labeled products are linked to expressions of ethical or political goals (Barham 1997). By purchasing an organic apple, for example, a consumer is able to reinforce her personal conviction that pesticides are unnecessarily contaminating our bodies and our environments. Displaying one's values in this manner causes corporations to take greater notice and cater to these consumer desires, to some extent. Labels are a means to inform and influence the customer (Diller 1999) who then pressures corporations to comply with certain desirable production characteristics. Some economists cite consumer choice in the marketplace as the most effective means to encouraging manufacturers to abandon unsound practices (Holloway and Wallich 1994). Thus labeling may be one means to influence production conditions and market trends. This chapter explores the various types of values labels and the successes and problems that accompany labeling schemes.

### **Types of Labeling**

The following discussion of labels refers to physical symbols on a product that describe or give some clue as to the social and/or environmental conditions behind the production of that product. Such labels are usually administered by a non-governmental organization (NGO), and are expected to be free of

commercial interests (Barham 1997). Labeling is a voluntary mechanism that producers or companies adopt in response to consumer demand (Diller 1999).

As mentioned, labels can be applied to a wide variety of products and set varying criteria that producers must meet. Alternative trade, fair trade, organic, eco-labels, ethical trade, and social labeling are all phrases that refer to some type of labeling program. Labeling programs might address social or labor issues, environmental issues, or both. And most recently, labels indicating the place of origin of a product have come into use, primarily in Europe (Barham 2001).

These programs will not be discussed in great detail, as the processes and goals are often similar, they just vary in relation to the type and degree of issues(s) addressed. For example, organic certifications mark a product that has been grown under prescribed conditions that are intended to be more ecologically sound than conventional production. Fair trade entails a secured price premium and advance payment to the producer to ensure a more stable income and community improvements. An eco-label can vary in meaning, but normally refers to a product that is more environmentally friendly than its conventional counterparts. These days, social values and labor practices are frequently being incorporated into eco-labels (Barham 1997). The same is true of labels that originally focused on social standards—many social labeling processes have adopted standards that incorporate environmental issues. Thus the lines between types of labeling programs have begun to blur.

Many different phrases are now used to refer to any of these types of labeling programs. Mick Blowfield and Keith Jones (1999) use the concept ethical trade as “the adoption of societally and environmental responsible strategies within the value chain, the monitoring and verification of these strategies, and the reporting of societal and environmental performance to key stakeholders.” These strategies can include human rights, worker welfare, producer livelihood, sustainable production methods, animal welfare, and biodiversity. Similarly, the term alternative trade has been coined to encompass these different market linkages. One author describes this concept as “Systems of trade in which partners seek deliberately to establish a more equal basis of exchange b/w the First and Third Worlds, as well as a closer link and greater consumer understanding of producer situation,” (Brown 1993).

The descriptions may vary among authors and organizations, but the concepts are generally the same. A values labeling program sets criteria that producers must meet, monitors implementation and adherence, and informs the customer of the designated conditions. As Marie-Christine Renard (1999) describes it, such labeling processes rest on the ability to “sell” ethics. The labels allow customers to buy based upon their personal ethics. Thus values labels seems a fitting term to encompass a scheme that encourages ethics in the marketplace.

## **Goals of Values Labeling**

Values labeling programs are normally created by non-profit organizations that have an interest in the issue at hand. The process of creating a standard may occur entirely within the organization. But often a broad range of stakeholders work together to create feasible, effective criteria. This group may involve workers' unions or representatives, social and scientific experts, industry representatives, environmentalists, etc. The general goal of the issued criteria and ensuing labeling scheme is to work toward improving one or more aspects of the production process through this market scheme.

Some view the values that underlie labeling schemes as parallel to the elements of sustainability. Comprehensive labeling programs incorporate social, environmental, and financial aspects (Blowfield, n.d.). These three categories are often considered the three key components of sustainability. Thus, in some ways values labels are attempting to promote a more sustainable production process. Or as Laura Reynolds (2000) argues, alternative trading movements critique not just the production methods, but also conventional consumption patterns in their push for sustainable systems. The consumer is an important component in determining this commodity shift.

Another desired outcome of values labeling is to "re-embed commodity circuits within ecological and social relations" (Reynolds 2000, 297). Consumers often know little more than the price and packaging of the products they purchase. Alternative trade is intended to reveal production conditions, as

opposed to the conventional trend to conceal such information. In so doing, consumers can potentially re-connect their purchased commodities with the people, places, and conditions under which production occurred. Labeled products uncover product relationships that allow consumers to make informed decisions about their purchases.

Finally, values labels critique conventional trading values. Alternative trading seeks “to counter the organization of production and trade around abstract market principles that devalue and exploit disadvantaged peoples and the environment, particularly in poorer regions of the South” (Raynolds 2000, 298). Renard (2001) reiterates that the objectives of alternative trade are to improve living conditions for poor and oppressed persons in developing countries and change the unfair structure of international trade.

The shift in trade toward alternative models is accompanied by some key characteristics. Barham (1997) illustrates values labeling as embracing more cooperative norms, as opposed to the more competitive nature of international trade. In a similar description, Michael Barrat Brown (1993) describes alternative trade as consisting of flexible networks. This is in contrast to the typically hierarchical pattern of conventional commodity chains.

## **Praises and Critiques**

### **Praises**

Values labeling schemes have achieved successes at many levels, but at the same time there are also a variety of criticisms relating to labeling. Both Diller (1999) and Blowfield and Jones (1999) report that improvements have been made in many industries in working conditions. Reductions in chemical usage, improved worker wages, and compliance with labor laws are frequently reported in conjunction with the implementation of labeling guidelines.

These same authors also point to the increased attention to problems and issues that labeling schemes create. In the creation of and future evaluations of labeling criteria, a variety of stakeholders are often brought together to discuss the issues. Just bringing these interest groups together in an effort to improve the production process may be viewed as a success in itself. A label can be a means to providing a forum for open recognition, discussion, and evaluation among groups that are more frequently adversaries than colleagues.

Similarly, a values labeling scheme can also draw the attention of the public. Administering NGO's often have an education component that accompanies the labeling process. Increasing social concern and knowledge of production issues can heavily influence the market demands if the consumer interest is strong enough (Diller 1999). And as Pollan (2001, 11) so eloquently points out, "Food that comes with a story presents a challenge to every other product that dare not narrate its path from farm to table." Presenting consumers

with products that explain themselves does call into question those products that are not providing production information. If a story, in the form of a label, is necessary, what are the label-less products hiding from the consumer? In this manner, labels might be a revolutionary influence upon the current market practices that conceal as much production information as possible.

### Critiques

On the other hand, there are many negative accusations leveled at alternative trade mechanisms such as value labeling. Though the programs are still in their infancy, the costs on either end have not yet proven to be self-sustaining (Diller 1999). For instance, the costs of administering a labeling program are not recouped through collected fees. Grants and funders are currently a needed component of a financially successful labeling program. At the production end, producers frequently incur expenditures that are necessary for meeting labeling criteria; the return investment for increased market share from the labeling process has not yet proven to be worth the costs (Diller 1999). If a labeling program cannot support itself, questions arise about the lasting power of such endeavors. Both administering organizations and particularly growers will need to see the financial rewards in order to continue pursuing label programs.

Many debates arise surrounding the uniformity of label standards. A review of labeling programs by the International Labour Organization (ILO), discovered significant discrepancies in the content and operation of the programs



(Diller 1999). This is exactly the reason why labeling can be confusing to purchasers and troublesome for organizations desiring certification. With a growing number of labels with different certification criteria, consumers have a difficult time knowing and evaluating the quality or integrity of the value label. There is no overarching standard or guarantee of quality to purchasers. The varying certifications may be just as difficult for producers desiring to market their products. The burden of certifying under many different labels for optimum market share may be more than a producer can afford. Thus, even though the proper criteria are being met, the administrative and monetary requirements discourage producers from seeking multiple labels.

In response to this problem, many labeling organizations and supporters are calling for harmonization of international standards (Blowfield and Jones 1999). The formation of international standards for various certifications would eliminate many of the problems associated with varying criteria. Though there are also objections to the creation of international standards. Centralizing the standards lessens the available opportunities for local input on standards (Blowfield and Jones 1999). In many cases, this results in eliminating workers and producers in scattered locations throughout developing nations from participating in standard development. The continual discussion and revision of individual labeling programs normally encourages participation from a diverse group of interested parties. Setting a single set of standards abolishes the need for localized discussion forums and disallows for guidelines that are specific to the particular needs of a region or industry.

Along these same lines, Blowfield and Jones (1999) point out the problem of labeling standards being imposed upon Southern countries based upon preferences and desires of NGO's and consumers in the North. Their case study of African horticulture shows that there are limits to the successes of imposed standards. Values labels that incorporate Southern stakeholders into the discussion are likely to be more successful. Taking this even further, those standards that originate from within the production countries and industries may have the largest impact upon production conditions, e.g. from labor unions or industry organizations. In order to really render alternative trade "fair" in the long run, the North-South power differential must be addressed (Blowfield n.d.).

Values labeling standards may also disadvantage growers or producers in the South through structure and requirements. Standards often require detailed record keeping, a practice that assumes a degree of management expertise and literacy that small farms may not have (Blowfield, n.d.). In some cases, the fees that a certification scheme entails may be too costly for small growers to meet. And as mentioned earlier, compliance with regulations often requires infrastructure investments on the part of the grower. Thus a degree of capital and knowledge of growing practices, languages, and literacy are often pre-requisites for becoming certified. This can be very problematic to small growers who may be lacking in any one of these areas.

In their article on the organics market, Patricia Allen and Martin Kovach (2000) assert that this group of consumers is composed mostly of individuals with power and money, thus they are in a position to effect change. While this may

be a powerful consumer group, it is also an elite group. That seems problematic. If these modes of alternative trade are not accessible or desirable to a wider variety of persons, are they really successful?

The co-optation of alternative trading schemes by corporations is another instance in which powerful entities are influencing the values labeling movement (Murray and Reynolds 2000). Chip Mitchell (1998) describes a bitter fight between a pioneering fair-trade coffee retailer in Madison, Wisconsin, and the city's popular gourmet coffee seller. Upon the success of fair trade coffee, the gourmet shop quickly launched their own version of this popular coffee. Similar processes are happening on a larger scale, as evidenced by Starbucks entry into fairly traded coffee and Dole's recent venture into organic bananas.

Corporations that are not necessarily committed to the ethical viewpoints behind alternative trade are grabbing on to the concepts for a piece of the market share.

Competition is also emerging in the grower realm. In many cases, the supply of products and interested producers for alternative networks, especially fair trade items, is growing at a quicker pace than the demand for such products. Renard (1999) describes this problem in fair trade coffee. This can be very problematic to the concept of alternative trade. In order for alternative networks to be successful, the supply must remain below demand in order to maintain item novelty and price (Renard 1999). Thus with the situation turned on its head, the concept of alternative trade might be threatened. By its nature, alternative trade is intended to be cooperative rather than competitive. When some growers receive a marked advantage over neighbor growers, rivalry brews. And when a

surplus of products floods the market, economic theory dictates that prices will drop. If prices drop, the alternative market cannot be maintained in its intended state of fairly paying the producers.

One of the goals of alternative trade is to challenge the mainstream economic model by increasing market share and penetrating the market. But as Renard (2001) argues, the outcome of this model may be contradictory. Fair trade would no longer be an “alternative” trade if it were absorbed into the mainstream. Laura Reynolds (2000) similarly questions whether alternative trade can successfully challenge the market through market mechanisms.

Many labeling programs appear to be doing an excellent job of addressing issues on the production site. But there are areas outside of that sphere that are being overlooked. Blowfield and Jones (1999) point out a vital issue that values labeling programs fail to address. The labeling programs are not addressing any occurrences previous to the establishment of the operation. Specifically, the authors are concerned about the lack of regulations regarding land acquisition. This is important because many larger companies operate on land confiscated from peasant farmers or other powerless groups. By not addressing this issue, corporate investors can continue to illegitimately claim ownership over land that has been stolen.

In examining alternative trade mechanisms, it is important to consider the relative newness of such efforts. They are “works in progress” that have not been in existence long enough to effectively assess the impacts upon workers and the environment (Blowfield and Jones 1999). The long-term impact of

values labeling as an alternative “should be assessed by contribution toward a more holistic and ethical approach to business that values social and environmental impact and helps restructure North-South relations” (Blowfield n.d., 7).

In some manner, alternative trade is influencing the direction of international trade toward a more ethical practice. Sarah Whatmore and Lorraine Thorne (1997) discuss fair trade networks as processes that contest the typical, logical flow of the trend toward globalization:

Fair trade coffee networks illustrate the fashioning of social and environmental configurations of agro-food production and consumption that coexist with those of industrial food corporations, but which in some way counter, or resist, their institutional values and practices.

Small though the market shares for alternative trade might be, they are impacting the overall scheme of world trade. Their presence has created a new arena for discussing the role of ethics in market mechanisms. The long-term goals of labeling schemes may never be fully realized, but they can serve as an important catalyst in “transforming the value chain into a values chain” (Blowfield and Jones 1999).

## **In Closing**

While labels generally appear to be improving the conditions of trade in a global, capitalist market, there are also many challenges to the overall effectiveness of labeling schemes. Essentially, the authors argue that the process of labeling products results in better market conditions for the growers or producers when compared to conventional trade. And many argue that labels challenge the tendency of the capitalist system to conceal production conditions. Thus fair trade, organic, and other such labels are pushing the limits of the global marketing mechanisms.

But on the other hand, the labels still operate within the same market that they are questioning and critiquing. Problems also arise with the scope and depth of label programs. There are clearly issues that the label programs do not address, and key topics that lie outside the scope of label programs. Thus label programs are not the answer to all that is wrong with current system of international trade; yet they may be able to positively influence some of the conditions of production. These praises and critiques need to be kept in mind as the particulars of flower labeling programs are discussed.

## CHAPTER 4

### FLOWER LABELING PROGRAMS

In the wake of the rising popularity of fair trade, organic, and eco-labels, arose labels for certifying cut flowers. Labels for flowers likely came later than other products due to the fact that flowers have so recently become an international commodity. The flower labels seem to incorporate principles from many of the other established labeling types; addressing issues of workers' unions, wages, pesticide use, reduced input consumption, and wildlife protection. This chapter illustrates the processes through which flower labels function, from the creation of grower standards through the certification steps.

This description focuses on two formal labeling programs. One of these programs was started by a group of German organizations concerned with flower production. This label has been certifying growers since 1998 (FIAN 2000). The other labeling program is in the final stages of formation. The Rainforest Alliance (RA) has expanded its Eco-O.K. labels to incorporate standards for cut flowers and foliage. Both organizations certify growers in Colombia and Ecuador, or intend to in the near future. Additionally, the Colombian growers' association, Asocoflores, has implemented their own voluntary program to improve the conditions of flower growing among members. This program, Florverde,

currently has no certification component, though they are considering adopting one. Florverde provides a comparison of a program implemented from within rather than from outside. The specifics of these three programs will be presented and analyzed in the following sections.

## **Description**

### **Flower Label Program (FLP)**

In response to the poor conditions in Colombia, that are frequently cited as representative of the problems with the industry, a group of European non-governmental organizations (NGO's) started a campaign aimed at floriculture reform. In 1990, five German NGO's formed the Flower Campaign to "improve the social and environmental conditions in the international flower industry" (FIAN 2000, 1). The campaign initially focused on Colombian growers, but has since expanded to include growers in Ecuador, Zimbabwe, Kenya, and Tanzania.

The Flower Campaign served mainly as a means for disseminating information on the conditions involved in flower production. The campaign wrote publications and held conferences to raise the level of awareness around issues of flower production. The campaign brought in diverse stakeholders, including growers, traders, consumer groups, governmental representatives, and horticulture experts, with the aim of improving conditions for workers and protecting the environment. Citizen action, consumer letter writing, and dialogue



between diverse interests were the campaign's approach to improving the industry conditions (FIAN 2000).

In 1998, the Flower Campaign joined with other interested organizations to propose an International Code of Conduct (ICC) for cut flowers. The proposed standards were based on the universal Human Rights, the International Labor Organization (ILO) conventions and basic environmental standards. Within a year, the Flower Label Program (FLP) began certifying farms that comply with the ICC standards. Food Information and Action Network (FIAN), based in Germany, oversees the FLP program. In addition to administering the certification of farms, the FLP promotes the purchase of labeled flowers and facilitates workshops in which diverse stakeholders meet to discuss prominent issues and labeling concerns (FIAN 2000).

Currently, fifteen percent of flowers grown in Ecuador receive the FLP certification (Lucas 2001), and just recently two Colombian growers received FLP approval (FLP website). The majority of FLP certified flowers that originate in these countries are destined for European markets. European consumers are demanding flowers with the FLP certification, while American consumers are oblivious to the label (Maharaj 1995).

#### Rainforest Alliance (RA)

The lack of consumer awareness in the United States is likely contributing to the low rates of grower participation in Latin America. Seventy percent of Ecuadorian flowers are bound for U.S. markets (Lucas 2001), as are an even

higher seventy-seven percent of Columbian flowers (Imperial Flowers 1996).

With a lack of consumer interest and demand, there is little motivation for flower growers in these Latin American nations to pursue certification labels.

But at least one organization in the United States has taken notice of the problems with cut-flower cultivation in Latin American nation, and has proposed a similar labeling program for cut flowers and foliage. The Rainforest Alliance has been a leader in implementing and promoting eco-labels as a means to reducing the environmental impacts and increasing the social benefits of tropical agriculture. They have recently expanded their labeling programs to include cut flowers and foliage. The mission of their Eco-O.K. label programs is as follows:

The mission of the sustainable agriculture program is to protect ecosystems and the people and wildlife that live within them by developing and implementing best management practices and standards for commodity crops, providing incentives to farmers to meet those standards, and encouraging the marketing industries and consumers to support farmers who are making on-farm improvements toward sustainability.  
(RA website)

The Rainforest Alliance began the Smartwood program in 1989, which has since become one of the largest and most extensive certification labels in the world (Smartwood website 2002). Building upon their experiences with the Smartwood program, the Rainforest Alliance has ECO-O.K. certification labels for bananas, coffee, citrus, cocoa, and now flowers and foliage. RA views their certification labels as a means to protect human welfare and promote biodiversity and economic viability (RA website).

RA administers the ECO-O.K. programs in conjunction with other organizations that form the Sustainable Agriculture Network. This network is

composed primarily of non-profit organizations based in Latin American nations.

In describing the creation and revision of certification guidelines, the RA's website states:

The Rainforest Alliance and its partners in the Sustainable Agriculture Network develop guidelines through a transparent and participatory process that involves all the stakeholders in agriculture: scientists, conservationists, community leaders, industry members, government agencies, research institutions, consumers and, of course, the farmers themselves. (RA website).

The Rainforest Alliance is obviously making an effort to include diverse stakeholders and encourage outside input on their standards.

### Florverde

In addition to the FLP and RA labeling schemes, the Florverde ("green flower") program promoted by the Colombian Association of Flower Exporters, Asocoflores, will also be examined. Florverde is quite different from the two labels discussed thus far. In fact, Florverde is not a label, but a program of voluntary compliance among member growers. It is also very different in that it is initiated and monitored by the growers' association. The FLP and RA labels are created and processed through non-profit organizations that are independent of the flower industry. This may have its advantages and disadvantages, as will be discussed in the concluding chapter.

Florverde was created by Asocoflores in 1996 to achieve sustainable development on participating farms. In their mission, sustainable development is described as "social responsibility and environmentally friendly practices, coupled with productivity and profitability" (Florverde n.d., 1). To achieve this, Florverde

has established best practices guidelines for member growers. A team of administrators, scientists, and social service specialists established these practices. These experts visit each farm four to eight times per year to verify conditions reported by growers and to suggest action plans for improvement (Florverde n.d., 2).

Today there are 155 Florverde member growers in Colombia. This program has led to lower consumption of pesticides, less contamination, and promotion of clearer and fairer labor regulations, according to Juan Carlos Izasa, the head of Asocoflores (Lucas 2001). Florverde has markedly changed the Colombian flower industry. Yet this program is clearly different from the Flower Label Program and the Rainforest Alliance's ECO-O.K. labeling. There are no specific criteria being met by the growers, and there is no label to guide consumers. Florverde is an on-going method of improving the social and environmental conditions on Colombian flower farms through voluntary participation by member growers.

The program has not sought market recognition as one of its objectives. But this will soon be changing. With its success, Florverde has become more interested in marketing their improved corporate responsibility. Plans are in the making to seek third-party certification for some of the better-performing farms in the Florverde program (Florverde n.d.). There are no indications of whether this will be through one of the other labeling programs or by setting up their own label.

## **Grower Motivation**

Growers are generally interested in pursuing certification labels for two main reasons—reputation and increased market share. As the Rainforest Alliance (2001b) notes, “Certification achieves prestige, compliments and publicity for the companies showing that they prefer investing in environmental and social improvements.” A growing number of consumers are interested in purchasing products that have been produced under conditions favorable to workers and the environment. Creating a reputation for corporate responsibility can greatly increase the profitability of a corporation, as it may impress both consumers and investors.

Producing flowers that bear a certification label can also help a flower firm expand their market, at least in the European markets. A certain portion of wholesalers, retailers, and consumers that are concerned with the social and environmental processes behind cut flowers will purchase only flowers with a certification. By becoming certified, a grower is able to reach this portion of buyers, while still being able to sell in the conventional market. Thus, the label expands the potential markets in which a grower might sell their flowers (FLP 1999).

## **Comparison of Flower Labeling Standards**

This section first gives a general comparison of the two standards, focusing primarily upon the overall scope of the program. An in-depth analysis of several key issues that surfaced in the literature review of floriculture follows the general comparison. The labeling standards are quite comprehensive, thus an exhaustive review of every standard is not appropriate. For this reason, the key issues of pesticide restrictions, workers' unions, and gender equality will be focused upon to provide the reader with greater insight to the extent and impact of the regulations.

### **General Comparison and Points of Interest**

Regulations of the Flower label program appear to be based on principles of sustainability addressing social, environmental, and economic aspects. The standards of all three programs incorporate a variety of the International Labor Organization (ILO) conventions regarding the right to organize and bargain collectively, non-discrimination, and chemical handling. The standards also refer to SA8000, a document that sets up guidelines in regards to human rights and third-party verification of procedural compliance.

In comparing the programs, the focus will be primarily on the FLP and RA standards, as they are the most similar and comprehensive. These two organizations readily provided the detailed regulations of their labeling programs;

whereas Asocoflores would only provide a brief article on the general goals and concepts of their Florverde. They only provide the “Best Practices Manual” to growers in Colombia, not outside interested persons.

When comparing the two labeling programs, several distinct differences appear. For one, the Rainforest Alliance’s certification guidelines are over fifty pages long, while the Flower Label Program’s are about half that. In these document, the groups generally cover similar criteria. Yet the FLP guidelines manage to touch upon a larger number of topics than the Rainforest Alliance, the particulars of which will be discussed throughout this section. On the other hand, the RA document goes into somewhat greater detail on each aspect.

The RA guidelines are currently only available in Spanish. According to personnel at RA, this is because the guidelines are still being field-tested (Amy Risillo-phone conversation, 2/11/02). Once any necessary revisions have been made, the guidelines will be posted on their web page in Spanish and English. RA’s guidelines for the other commodities they certify are easily accessible in both Spanish and English on the Internet. FLP guidelines are similarly accessible on their website in a variety of languages. In their guidelines document, the FLP requires that the Basic Principles be posted on certified farms. It notes that respective translations can be provided by the FLP office (FLP 1999).

In turning to the specific content of the standards, Table 1 provides an overview of topics covered in each of the certification schemes. As the table shows, a wide variety of environmental and social issues are included in all of the

**Table 1.--Issue Comparison of Flower Labeling Programs\***

<b>Category</b>	<b>Sub-Category</b>	<b>Issue Addressed</b>	<b>FLP (section)</b>	<b>RA (section)</b>	<b>Florverde</b>
<b>Social</b>					
	<i>Labor</i>	Unions	1.1	3.3.1	yes
		Contracts	1.3	3.2	
		Non-Discrimination	1.2	3.2.1	yes
		Wages	1.6, 1.7	3.2.3	yes
		Work Time (hours/overtime/breaks)	1.8	3.2.1	yes
		Part-time Workers	1.4	3.2.3	
		No Child Labor	1.9	3.2.4	yes
		No Forced Labor	1.10	3.2.5	yes
		Maternity Leave	3.5	-	
		Benefits	3.1	-	yes
		Harassment	1.11	-	
	<i>Occupational Health</i>	Health-Safety Training	2.2	3.4.2	yes
		Medical Check-ups	2.5, 4.11	3.4.4	
		Sanitary Infrastructure	2.6	3.4.3	
		Pregnant-Nursing Safety Precautions	3.3, 3.4	3.1.1	
	<i>Community</i>	Housing Accomodations	3.6	3.5.1	
		Children's Education	3.8	3.5.2	
		Employee Transportation	3.9	-	
<b>Environment</b>					
	<i>Pesticides</i>	Integrated Pest Management	4.2	5.1.1-5.1.3	yes
		Allowed & Prohibited Chemicals	4.3	5.2.1-5.2.2	
		Chemical Transport	-	5.3	
		Chemical Storage	4.12	5.4	
		Chemical Application	4.5-4.7	5.5	
		Restrictions on Re-entrance Periods	4.7	5.5.3	
		Document Chemical Applications	4.1, 5.1	5.1.3	
		Post-Harvest Chemical Treatments	4.4	-	
		Provide Protective Clothing & Equipment	4.9	3.4.1	
		Chemical Labelling	4.13	-	



**Table 1.--Issue Comparison of Flower Labeling Programs\* (Continued)**

<b>Category</b>	<b>Sub-Category</b>	<b>Issue Addressed</b>	<b>FLP (section)</b>	<b>RA (section)</b>	<b>Florverde</b>
	<i>Water Use and Quality</i>	Water Conservation	7.1, 7.3	7.2	yes
		Water Treatment	8.7	7.4.1	
		Water Quality Testing	7.5	7.5.1	
		Prohibition on Dumping Chemicals into water	8.3	7.3	
		Measures to Protect Drinking Water	6.4	7.5.1	
		Collect Rain Water	7.4	-	
		Document Water Usage	7.2	7.4.1	
	<i>Biodiversity</i>	Ecosystem Conservation	6.5, 9.2	1	
		Wildlife Protection	6.5, 9.2	2	
	<i>Resources Conservation</i>	Reduce, Reuse, Recycle	8.1-8.5	6.1.1	yes
		Erosion	-	8.2.1	
		Composting and Organic Fertilizer	5.5	6.3.1, 8.3.1	
		Document Energy Usage	7.2	-	
		Use of Renewable Energy	7.5	-	
		Energy Conservation	7.5	-	
	<i>Other</i>	Safe Distance from Residential Areas	9.3	3.5.1	
		Expansion Limitations	9.4	4.2.1	
		Community Involvement	3.10, 9.5	4.3.1	
General		Worker Representation in Decisions	6.2	3.3.3	
		Continuous Improvement	-	9.2	yes
		Display Label Standards	4.16	-	
		Documentation Requirements	7.2, 4.1, 5.1	9.1-9.2	
*The Florverde is not a labeling program but is incorporated for comparison					

standards. Overall, the RA and FLP standards are very similar. One difference between the two programs is in their primary focus. The Rainforest Alliance considers their label to be an eco-label. Thus the main goal is to protect and preserve natural resources and wildlife, but this focus has been expanded to include the well being of workers and communities. It is clear from the principles that the protection of wildlife and encouragement of biodiversity are among the top priorities of the Rainforest Alliance. On the other hand, the RA program lacks a bit in comparison to the FLP worker protections. The specifics of these differences will be discussed throughout this section.

The FLP requirements seem to be more aligned with principles of sustainability and employee welfare than RA's. One author classifies the Flower Label Program as a social labeling program that also incorporates environmental concepts (Diller 1999). FLP briefly mentions the protection of wildlife, but does not go into details of how to do this as do the RA guidelines. In regards to sustainability, FLP encourages several simple actions by growers that contribute to the overall impact of the farms. The reduction in energy consumption, use of renewable fuel sources whenever possible, and rainwater collection are specifically mentioned in the guidelines. RA's program makes no mention of these simple steps toward a more sustainable industry. In regards to general sustainability, FLP seems to be more encompassing.

The FLP program also takes further measures on employee rights than does RA. The FLP makes a general requirement that wages be enough to cover living expenses and provide for some discretionary income. This may sound like

a rather wishy-washy requirement, but the RA guidelines never pin down a wage requirement. The farthest they go is to require set salaries for given positions that have been agreed upon through negotiations with unions. Additionally, the FLP requires companies to provide other benefits such as social security and paid maternity leave.

There are just a couple other differences in content that I would like to briefly point out. The FLP guidelines require companies to provide employee transportation. They also ban post-harvest chemical treatments to the flowers, in an effort to protect consumers. The FLP appears to have stricter documentation standards and chemical labeling requirements. These are the bulk of the differences between the two labeling programs.

Florverde also hits on many of the major categories, as Table 1 shows. The program may be as comprehensive as the other two, but as mentioned above, I was unable to obtain the complete standards so there is no basis for comparing it with the tenets of the other two labeling guidelines.

## Specific Examples

### *Pesticides*

As highlighted in the literature review, the use and misuse of pesticides by the floral industry is one of the largest threats to workers, neighboring communities, and ecosystems. Thus it is of the utmost importance that flower labeling programs address the use of pesticides. Even in narrowing the discussion to pesticides, the requirements, of course, contain many provisions

relating to this topic. Both programs discuss the use, labeling, storage, re-entry periods, and worker protections that accompany pesticide use.

The RA standards start by mandating integrated pest management (IPM) systems and specifying the means to following this guideline. In this section, RA (2001b, 5.1.1) requires that growers first attempt the use of biological controls before turning to agrochemicals. In the event that the producer turns to pesticide application, there must be documentation to justify this practice. The regulations further encourage producers to use the chemical treatment with the least amount of active ingredients per hectare when chemicals are necessary.

The FLP guidelines call for “an appropriate combination of organic, cultural, mechanical and chemical methods” of pest control. And continue by requiring organic methods to replace pesticide treatment “whenever possible.” In this situation, the RA standards appear stricter in their allowance of agrochemical use.

The standards both lay out guidelines as to which pesticides are banned from use and which ones have restrictive use. The two programs use somewhat different references for designating appropriate chemicals. The Rainforest Alliance prohibits the use of chemical products restricted by international agreements and chemicals listed in the Pesticide Action Network’s “Dirty Dozen” list (1985). RA also states that all chemical products must be registered specifically for use in flower growing. Under this regulation, the requirements further specify that any chemical used must be approved by the nation in which

the grower is located, the U.S. Environmental Protection Agency, and the European Economic Community (RA 2001b, 5.2).

The Flower Label Program also bans the use of chemicals not approved by the home country of the grower. FLP requires that growers strictly avoid the use of persistent pesticides, soil fumigants, and herbicides. The guidelines continue by stating that “Highly toxic WHO I products (CBI/COLEACP negative list) and/ or carcinogenic/mutagenic pesticides (EPA A+B) should be replaced wherever possible by lower toxic ones” (FLP 1999, 4.3). These two lists of particular chemicals are provided in the appendices of the document. The frequent use of phrases such as ‘wherever possible’ in the labeling standards may be problematic, as will be discussed later.

So what effect are these standards having on pesticide usage of certified farms? At a minimum, the requirements are calling for use of lower toxicity chemicals and banning chemicals that are not approved for use in the U.S. and Europe. Restricting usable pesticides to those approved by these developing nations affords greater protection to the workers and the environment in flower growing regions. If they are not suitable for use in home nations, they should not be allowed in developing nations.

Yet as Caroline Cox (1997) points out, approval by the U.S. EPA is nowhere close to a guarantee of safety. The risk-benefit method of chemical approval allows the continued registration of highly toxic chemicals. Thus the approval by such organizations as the U.S EPA and the EEC are not necessarily

strict enough to ensure worker safety; but at least they are a step further than the minimal regulations from home nations.

From the information available, the Rainforest Alliance appears to be calling for stricter agrochemical standards. Growers are required to attempt alternative controls before resorting to pesticide application. The standard for the FLP is difficult to interpret based upon their “wherever possible” standards. How the organization and inspectors judge these criteria is not known. At one point, I requested further information from the FLP on the measures used to evaluate such phrases. Their response was simply that all such information was available on their website (Nina Weipert-email correspondence, 3/27/02).

To further substantiate the pesticide restrictions, both labels call for some type of documentation of pesticide use. The FLP guidelines require a record to be made of all pesticide applications, including information on the date, time, crop, pest and disease, pesticide used, active ingredient(s), quantity, and dosage. At the end of the month, the total quantity of pesticide application per hectare must be calculated (FLP 1999, section 4.1).

The Rainforest Alliance guidelines provide even greater detail on the methods of documentation. The growers are required to keep record of their continual reduction in agrochemical usage, maintaining a yearly comparison that shows a reduction in application or dosage of chemicals (RA 2001b, 5.1.1). The standard also requires companies to keep a log of their pesticide purchases for the year. Flower growers are required to document their investigations and evaluations that lead to the use of agrochemicals. RA is essentially requiring the

growers to justify all use of pesticides. RA guidelines require thorough evaluation and documentation of decisions to use chemicals, as opposed to the mere recording of uses required by the FLP. In this manner, the RA requirements create a stronger barrier to pesticide use than FLP; though this may not be entirely accurate due to the uncertainty of the means through which the FLP enforces its 'whenever possible' phrase. Florverde also asserts that pesticide reduction and the incorporation of IPM principles are key components of its' program (Florverde n.d. 2)

### *Labor Unions*

Another issue that is clearly important to worker rights in the flower industry is the right to organize and collectively bargain. A union allows workers to voice their concerns and have some power over their working conditions. The literature indicated that workers are frequently discouraged from joining labor unions. Yet such unions would be one means to improve the workers' situations. Both labeling programs and Florverde address the issue of the right to organize. On this issue, the standards essentially adopt the same criteria. All three programs base their right to organize standards upon the International Labor Organization's (ILO) conventions 87 and 98 (FLP 1999, 1.1; Florverde n.d., 1; RA 2001b, 3.3.1).

Convention 87 is entitled "Freedom of Association and Protection of the Right to Organize Convention" and 98 is the "Right to Organize and Collective Bargaining Convention" (ILO website 2002). The ILO conventions lay out

guidelines further articulating the necessary protections afforded by the conventions. The Rainforest Alliance specifically requires that the right to organize be upheld by certified growers, regardless of whether their country has ratified the ILO conventions. Nothing in the FLP guidelines suggests that their requirements create any exemptions either.

Thus the three programs have more or less uniform regulations regarding workers' rights to form unions. The incorporation of the international standards creates common requirements among certification bodies, making the process easier for growers. This is one point where harmonization has occurred among the standards.

In addition to the right to organize and bargain, all three programs also incorporate ILO conventions prohibiting discrimination and requiring equal pay (FLP 1999, 1.2; Florverde n.d., 1; RA 2001b, 3.2.1). FLP and RA have also adopted codes prohibiting child labor and forced labor, as specified by conventions 29, 105, and 138 (FLP 1999, 1.9-1.10; RA 2001b, 3.2.4-3.2.5). The three programs are attempting to address cases of worker mistreatment that the literature clearly indicated was problematic among growers. In addition to the right to organize and collectively bargain, the labels are providing worker protections against discrimination, unequal pay rates, forced labor, and child labor. At least in theory, the labels are addressing many of the needs of workers.



## *Gender Issues*

One key issue regarding workers' needs is clearly being missed by the Rainforest Alliance standards—that is the specific needs of female workers. With women composing the majority of the workforce, there are particular protections that could greatly improve their work environment. The FLP (1999, 1.11) requires that employees be protected from harassment, especially in regards to the physical and mental repression of female workers. This is an essential requirement, as the literature review on problematic practices in the floral industry indicates that gender inequalities are common to this commodity chain. The gendered composition of flower workers, wages, and tasks assigned are problematic aspects of flower production. The Flower Label Program (1999, 3.5) standards also require employers to provide three months maternity leave, with full pay, to female employees. RA guidelines are definitely lagging in regards to women's issues by not providing maternity leave or a clause restricting the repression of women in the workplace. The needs of the workers, which are primarily women, have been ignored, to some extent in the RA guidelines.

## **Certification and Enforcement Procedures**

The Rainforest Alliance clearly lays out the scheme for growers to become certified by their organization. The steps may involve a preliminary site visit, an evaluation visit, a certification committee meeting, entering into certification contracts, and annual audits (RA website). Growers may elect to have an initial

visit where qualified staff visit the site and provide a detailed report of changes that must be made for the grower to be certified. This is an entirely optional step in the certification step.

The first required step is a visit from an official group of technicians that perform a comprehensive review of farm practices and procedures. This visit is to include interviews with site workers and managers. Within six weeks after the visit, the auditors must prepare a detailed written report on their findings. This report is then provided to the farm and the certification committee (RA website). The certification committee, composed of Sustainable Agriculture Network (SAN) members, evaluates the report and makes a determination on grower certification. If approved, a contract is offered to the growing organization. Growers are then subject to yearly audits, with the right of SAN to perform random audits at its discretion (RA website).

The information available on the FLP is much less specific in laying out the certification process. The website notes that once a request with proper documentation has been received by the FLP, a certification visit will be arranged. This visit by independent auditors is similarly the basis for evaluating the farms compliance with FLP guidelines. Once certified, a yearly audit will be performed (FLP website). There is no mention of pre-inspection visits to suggest changes. FLP does point out that local coordinators are available to provide professional advice to farms. These local offices may be an alternative to the Rainforest Alliance's preliminary consultation. In some ways, a local representative that is more readily available may be more helpful to the growers.

It is important that RA and FLP are making attempts to reach out and assist producers in their efforts toward certification.

I requested more details from the FLP office on what numerical criteria or good faith efforts met the necessary requirements of their standards. I also inquired into their enforcement methods. Their response was simply that the requested information was available on their web page. It may be the case that such details are on their German page, but no such information exists on the English counterpart.

The RA's evaluation process by a representative committee of SAN members appears to be a subjective process, not relying on specific amounts of chemicals applied, worker retention numbers, etc. This approach allows more leeway for the specifics of individual farms. If the grower is making efforts and improvements toward a more equitable and sustainable production process, the committee can make decisions at their discretion.

Both the FLP and Eco-O.K. certifications require grower organizations to bear the cost of certification. That is, the costs for site visits and annual certification fees are charged to the growers. No specific numbers are given by the Rainforest Alliance, but FLP estimates indicate that the initial certification would run about \$3500 dollars, with subsequent renewal in the range of \$1,500 per year. These numbers include the inspection fees and annual member costs (FLP website).

The yearly audits by professional inspectors are intended to ensure grower compliance over time. Yet no further information is available from either

organization as to their methods of dealing with cases of grower non-compliance. An FLP representative replied that the grower is given three months probationary period to meet the standards (Nina Weipert-email correspondence, 3/27/02). That is the extent of the information on certification and compliance at my disposal.

### **Summary**

The labeling programs are covering a wide array of issues intended to improve environmental and social practices in Latin American flower production. The labels address issues of biodiversity, workers' rights, wages and benefits, occupational health, limiting pesticides, reducing waste, and documentation of practices. Many of the key issues pointed out in the literature are incorporated into the label standards. The regulations, in theory, improve upon conventional practices regarding labor rights and pesticide use, two huge issues in floriculture. Furthermore, the FLP guidelines at least partially tackle some of the issues of gender equality in the flower industry. The extent to which these guidelines impact the production process will be examined further in the following chapter.

## CHAPTER 5

### POTENTIALS AND LIMITS OF FLOWER LABELING PROGRAMS

The final piece of this research is to draw together the information contained in the previous chapters and evaluate the potentials and limits of flower labeling programs. This chapter assesses the positive impacts of flower labeling programs, as well as the shortcomings and problematic aspects of these programs. When strictly enforced, flower-labeling programs can clearly improve the obvious problems of pesticide misuse, environmental contamination, and worker abuse that occur in the flower industry. But can labeling programs truly revolutionize floriculture? The label standards may improve the conditions, but likely cannot eliminate all problematic aspects of this business. Is improvement all that can be attained? Is this sufficient? Additionally, there are certain aspects of floriculture that are not easily remedied through a set of enforceable standards. These questions and issues will be dealt with throughout the chapter.

The specific pros and cons of labeling in the flower industry will be addressed to the extent possible without physically visiting the farms in Colombia and Ecuador. Thus the focus here will primarily be upon theoretical ability to

address problems through the standards, as opposed to practical changes that would be better assessed through site visits.

## **Potential for Improving Flower Production**

### *Setting a Level of Performance*

Flower labeling programs have contributed to some obvious improvements in the production process in Latin American nations. As discussed in Chapter 3, labeling schemes tend to result in increased worker wages, greater compliance with labor laws, and decreased usage of chemical inputs (Blowfield and Jones 1999, Diller 1999). Due to the relatively short operating time of flower labeling programs, little information exists to fairly evaluate the improvements that have been made. Though it appears that the standards are making improvements over conventional practices among flower growers. Flower growers achieving label certification likely make changes that result in better production methods and worker satisfaction. As the infractions in Colombia and Ecuador often seem horrific, it can be assumed that label standards represent a welcome improvement among workers and community members, in most cases.

### *Creating Dialogue*

Flower labeling programs have also facilitated discussion among a variety of stakeholders. From the beginning, the Flower Label Program (FLP) has incorporated the needs and interests of labor through interaction with trade

unions (Diller 1999). Both the FLP and Rainforest Alliance (RA) programs strive to involve a wide range of interests in the creation and implementation of standards. The FLP encourages feedback on the bottom of their standards, where they also note that the standards are revised every couple years. This shows that the FLP is willing to alter their standards in response to recommendations.

FLP also brings consumers into the dialogue through their education programs. The FLP grew out of a flower campaign that primarily targeted consumers as the changing force in the flower industry. Creating consumer awareness and drawing them into the issues of flower production is a potentially effective tool to bring problems to the surface. If consumers are inquiring and campaigning, growers are usually forced to listen.

The mere creation of the flower labeling programs can draw the attention of various stakeholders in the flower production process. Whether chemical companies are allowed or choose to participate in the discussion of labels is not the important point. The main importance of flower labeling is the attention they bring to the issues. Just through the creation of flower label programs, parties involved in flower production are forced to take notice and consider the questions that have been raised. Flower labels create a forum for discussing the environmental and social problems that frequently accompany the industry (Blowfield n.d.).

A great example of this is the recent creation of the Florverde program by Colombian flower growers. The official certification schemes drew the attention

of the growers even though they did not choose to participate. The growers suddenly became interested in improving their operations. Whether this is through genuine interest or profit motivations cannot be known, but either way improvements in environmental and social conditions have resulted.

### *Promoting Ethics in a Capitalist Economy*

Values-labeling programs, in general, are challenges to the capitalist market that obscures production practices, as Chapter 2 discusses. Flower labeling programs are contributing to a re-introduction of ethics into the globalized marketplace. This is particularly important with a commodity like flowers, which are frequently regarded as symbols of beauty and nature. Those connotations may have been true previous to the mass production of this commodity. Today, even the labeled flowers fall far short of being any sort of “natural” gift. The beauty of conventionally grown flowers conceals the environmental destruction and social inequalities that created the product. Certified flowers bring ethics back into the production processes.

As the previous section discussed, raising awareness is vital. Certification makes the issues more obvious and is in itself a critique of conventionally grown flowers. And on a larger scale, flower-labeling programs, as part of the values labeling movement, create an alternative to the frequently destructive practices of capital-driven markets. Values labeling critiques the dominant economic model of today (Renard 2001), and provides consumers with an outlet to express personal convictions through their purchases (Renard 1999).



## **Limits of the Labeling Process**

While flower labels have led to improvements in the industry, there are still issues that have not been addressed. Some of these issues are beyond the scope of labeling programs, and others could potentially be included in the labeling process.

### *Sustainability*

My main critique is that the labeling programs are not pushing the industry to a point where the operations are “sustainable.” Borrowing from Brewster Kneen’s (1993, 193-194) discussion of sustainable food systems, sustainable, “Means that present production is not being obtained at the expense of future production. . . . Sustainability also means that the resources called upon or used, are renewed by the very process that calls upon them.” Flower production is not currently a self-renewing process, even with the stipulations imposed by label programs.

Flower label programs encourage an “improved” production process, not a sustainable one. This is likely because the flower industry can never become a sustainable operation, due to the high resource inputs and transportation requirements. Advocating for a sustainable flower industry would essentially be calling for an end to flower production in its current form.

The artificial environments require large amounts of water, energy, and agrochemicals. Once cut, the flowers must be refrigerated through their lengthy

journey from producer nations to consumer nations. The entire flower chain requires enormous amounts of energy that result in environmental harm. But consumers have become accustomed to purchasing cheap flowers in the middle of winter, and have little intention of losing this luxury. Thus flower label programs are attempting to bridge the gap between consumer desires and better social and environmental practices. The labels are making small steps toward improved practices, but are not calling for a revolutionary change in the functioning of the market economy.

As the previous section described, improvements are being made as a result of flower certification. But the general premise of intensively growing products in locations with the warmest climates and cheapest labor is still problematic. Wealthy nations are sacrificing environmental quality and taking advantage of laborers for the sake of purchasing non-necessities at cheap prices. Flower labels can improve upon the general practice, but the resource consumption is beyond anything that might be considered sustainable.

The flower labels give people who are concerned with issues of labor and the environment a license to purchase the products that have been flown in from Latin America on refrigerated aircraft. This type of consumerism with a conscience assures people that they need not change their lifestyles toward a simpler way of life, but merely need to alter their purchases (Allen and Kovach 2000). In this manner, the labels may be promoting a continued pattern of unsustainable consumption.

## *Dimensionally Restricted*

### Place of Growth

Flower labels are making changes in the growing conditions of flowers, though the labels are restricted to one portion of the flower commodity chain—the growing process. There are two particular instances in which I would like to discuss the time and location dimensions that could be incorporated to further improve the labels. First of all, the values labels are issued purely for the product based only upon the greenhouse conditions. Cut flowers have an entire life beyond the greenhouses; traveling north from Latin America via refrigerated plane and passing through at least two stops before reaching the consumer. An eco-label that covers the entire commodity chain would have an even greater impact upon the overall industry.

There are many improvements to be made at stops along the values chain. While there is likely little that can be done about the energy consumptive transportation process, potential for greening the product at the wholesale and retail levels is huge. Again, from personal experience, I can attest to the waste that occurs primarily at the retail end. The flowers arrive wrapped in plastic and packaged in cardboard boxes. Most of these packing materials are immediately discarded. A few wholesalers will accept their boxes back for re-use, but the majority of the boxes are sent to the garbage or recycled. Furthermore, the retail florist throws away flowers when they have become too old to sell. These flowers could contribute to a substantial compost pile rather than the landfill.

There are many other opportunities for reducing and reusing just at the retail end. Similar steps could be taken in wholesale warehouses as well. A label that extended coverage to these aspects of the chain could also require steps toward clean energy for operating the buildings and vehicles. Countless more prospects exist for creating an even more “responsible” label.

The place of growth is an obvious place to begin when greening the flower chain, but other aspects of the commodity links could also be improved upon. Problematic environmental and social practices are easily recognizable in the greenhouses of Colombia and Ecuador; more so than throughout the wholesale and retail phases. Yet a label that extended to certify the wholesalers and retail florists would have more expansive impacts. Additionally, such a label would require changes in the way of doing business in the North, rather than placing the sole burden of change upon countries in the South.

#### Time

Another dimension that existing labels do not cover is the history of the property before it became a flower plantation. The labels leave out the process of land acquisition (Blowfield and Jones 1999). In many cases, land is “stolen” from peasant landowners, either directly by the company or through governmental measures. By not setting a standard for rightful land acquisition in the flower labeling programs, the flower companies may continue to obtain land through illegitimate means.

## *Gender Issues*

The first chapter pointed out the gender inequality that pervades flower plantations and Chapter 3 discussed the label approaches to addressing gender issues. As the last chapter mentioned, the FLP label sets a standard that addresses this particular issue. Guideline 1.11 states, " Harassment at the workplace and mental and physical repression, particularly of female workers, must be strictly prevented" (FLP 1999). The Rainforest Alliance certification guidelines do not mention the treatment of women. The FLP guidelines also require paid maternity leave and a separate restroom for pregnant and nursing mothers. Again, RA standards ignore the gender issues that can be problematic in the growing conditions of this particular commodity.

Both programs also require the growers to post pay scales as they relate to duties performed in an effort to equalize the pay rates between women and men. Thus the FLP program is targeting the gender issues that are specific to this commodity much better than RA. There is still more that could be done. For one, I would like to see the programs require a certain portion of the managers to be women. There need to be assurances that women receive raises and advancements at the same rate as men. A legitimate standard might require fifty percent of the management positions to be filled by females. This is not an unreasonable requirement when one considers that almost three-quarters of people employed by the flower growers are women.

It would also be helpful for the certification standards to require growers to provide day care for employees' children. Further steps need to be taken to

address the needs of this particular labor force, which are primarily women. FLP has made progress in this direction, while the Rainforest Alliance has completely ignored this vital issue. Both organizations should make a concerted effort to meet the needs of the female flower workers; and this effort should be reflected in their certification standards.

### *Lack of Opportunities for Small Growers*

A problem that is inherent to industrialized floriculture production is the lack of opportunities for small farmers. The infrastructure required to operate a flower farm in today's market is an enormous investment. The capital obligation restricts the flower growing business to wealthy persons. Fair trade mechanisms, such as in coffee, provide up-front money to small producers to establish the necessary infrastructure for a grower's cooperative (Brown 1993). It is desirable for a similar mechanism to occur for flower production, but this option does not appear to be possible due to the particulars of the industry.

The issue of incorporating small farmers into the industry warrants further attention. This is not an issue that could be easily resolved. I am not advocating that label programs remedy this situation; I am just pointing it out as one problem that labels cannot address. The lack of opportunity for small farmers remains in the existing flower labeling and certification criteria.

## **Conclusions**

This thesis focuses upon the Latin American nations of Colombia and Ecuador when examining flower production conditions. In this manner, the analysis of labeling programs has been limited to a particular region. The scope was limited to purposely narrow the focus and illuminate the particularities of these locations. Of course, there are still many particulars of each country, region, and individual greenhouses that are not reached by this evaluation. But there are enough common themes among authors writing on the Latin American floriculture industry; the majority of them point to the issues of pesticides, wages, labor unions, and mistreatment of women. These common themes serve as a basis for assessing the potential impact of flower labeling programs that strive to improve the social and environmental conditions of flower production.

Overall, flower-labeling programs are setting criteria that can potentially improve the industry. For the most part, the standards are recognizing and addressing the localized problems that affect greenhouse workers and their communities. While the labels have differing criteria, many of the issues are dealt with in similar manners. The Rainforest Alliance may enforce stricter provisions relating to pesticide use and integrated pest management, but the FLP goes further in addressing the needs of women employees in the flower industry. They each have their particular advantages, but are tackling the issues of importance.

The critiques point out that the flower labels may not be covering every aspect of flower production. The transportation chain, wholesalers and retailers,

and land history are not covered by the labeling criteria. But these limitations do not render the labels ineffective. The labels had to start somewhere; and I would say they started in the right place. The greenhouse appears to be the place where the worst environmental and social infractions occur. Plus, the labels are following the standard practice of labeling schemes. Generally, it is the point of production that receives certification. Maybe in the future, label programs will be able to expand their scope. Nevertheless, the labeling organizations are concentrating on an essential piece of the flower commodity chain.

While there remain improvements that could be made, the labels are addressing the on-the-ground, immediate needs of flower growing communities. Some of us may wish that the labels made stronger stands regarding pesticide use and women's opportunities, yet the more moderate approach of the label standards is likely the best approach. Flower labels are a new concept to the industry. If, for example, the labels called for an absolute end to pesticide use, most growers would not consider joining the program. The smaller increment of incorporating IPM might be feasible. This moderate approach provides the needed relief to workers. The large number of people employed by the flower industries in Colombia and Ecuador are greatly in need of their jobs. These people are dependent upon the flower industry for their livelihoods. If the people are going to work in the industry, at least they could work under the improved conditions of labeling programs.

Other limits focused upon in this chapter are not problems inherent in the label programs. Specifically, the lack of opportunity for small growers is due to



the nature of the infrastructure intensive production process. There is little a label could do to address this nature of the industry. Also, the consumerism concept is a larger societal problem that a single label could likely not remedy. If people assume that a label makes their purchase a benign one, that is not the fault of the label. It is the fault of personal interpretation. Flower labels are clearly not the answer to combating consumerism. They are merely a means to limit adverse impact of the commodity.

Examining the labels in this realm reveals that they seem to be doing a good job at what they are attempting to do: produce a more environmentally and socially responsible product. That is occurring as a result of their efforts. Thus I would say that flower labels are successful toward their desired goal. Yet I would also point out that flower labels are not the answer to every problem associated with the globalized trade of cut flowers.

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