

Painting the Roses Green: Consumer Resistance in the Era of Globalization by Rebecca McMillan — fourth year environmental studies

This February, the world's biggest producer of roses, the Indian company Karuturi Networks, — which grows flowers in India, Kenya, and Ethiopia — shipped about 18 million roses to Europe and other markets for Valentine's Day. In addition, local rose sales were up 25 per cent, despite claims by Muslim and Hindu hardliners that the western holiday is immoral and against local culture (Agence France Press, 2008): globalization at its finest. The international trade in cut flowers is loaded with these apparent contradictions and unlikely linkages, making it an interesting case study in the dynamics of global integration.

While flowers have been given as gifts since ancient times, the cut flower industry only began to bloom at the end of the last century. The production of decorative blossoms such as roses, carnations, and chrysanthemums for North American and European markets accelerated rapidly in the 1990s, with industry growth rates of around 10 per cent per year by the end of the decade (CBC News, 2007). Today, the global trade in cut flowers is estimated to be worth in the area of \$88.5 billion (Agence France Press, 2007), with roses accounting for three-quarters of total production (Howard, 1999). The principal reason for the explosion in flower consumption is the decrease in prices as producers have relocated to lower cost countries in Africa, Asia, and Latin America (CBC News, 2007).

In the 1980s and 1990s, the economies and societies of Latin America, Asia, and Africa underwent major changes.

Upon the recommendation of the International Monetary Fund (IMF) and the World Bank, many countries adopted structural adjustment programs aimed at reversing import-

substitution policies and curing them of their debt by generating foreign exchange. The policies combined short-term stabilization measures with broader reforms designed to reduce state economic intervention and increase national integration with global markets. The results of these programs were controversial. At the regional level, they tended to reduce inflation rates while increasing exports and foreign direct investment, but benefits to national economies largely failed to materialize. Urban unemployment levels increased in many areas, real minimum wages were lowered, and social service programs were cut or privatized. Select sectors did, however, experience increases in both output and employment during this time, especially labour-intensive manufacturing and nontraditional agricultural exports such as cut flowers. The expansion of the latter has been associated with the relocation of labour-intensive branches of European and North American agribusiness to countries that have a comparative advantage in terms of wage rates and growing seasons (Korovkin, 2003).

While the Netherlands, home of the industry's headquarters, remains the world's largest exporter of cut flowers, Colombia is now a close second. Roughly one in every two flowers sold in the United States is grown in the Colombian savannah surrounding Bogota (Global Pesticide Campaigner, 2002). Volcanic Andean soils combined with little seasonal variation make growing conditions in Colombia and Ecuador ideal. In its formative days, rapid growth in the floriculture industry in the Andean region was spurred by tariff incentives from the United States government under President Bush. As part of the United States' war on drugs, the Bush administration tried to promote alternative agricultural exports in the Andes in order to encourage the conversion of fields from coca to other crops. The result was the hugely popular 1988 *Andean Trade Preferences Act* which, among other things, eliminated tariffs on

Colombian and Ecuadorian flower imports. Cocaine production did not decrease and the result was a dramatic influx of roses and other flowers from the Andean region into the US at the expense of local producers (Howard, 1999). Today, other flower exporting countries include Costa Rica, Mexico, Kenya, Tanzania, Zimbabwe, Malaysia, India, and Thailand with the emerging Chinese industry expected to overtake these countries in the coming years (Early, 2007).

Unlike many nontraditional crops that are grown by individual farmers under contracts with agribusinesses, cut flower production in these countries is controlled directly by domestic or foreign companies and is organized around wage labour, most of which is done by young women. This is because growing flowers is highly capital-intensive with considerable up-front investment costs for greenhouses and chemicals. Developing new varieties also requires extensive industry knowledge (Korovkin, 2003). Smaller farmers lack necessary market linkages and larger farms are better able to meet the demands of major North American and British supermarket chains such as Walmart and Marks and Spencer (Hughes, 2001). Because flowers are highly perishable, production must take place in close proximity to airports so that the product can be quickly transported to international markets, first by freezer van and then by airplane. Trade in cut flowers follows a complex supply chain. Most flowers are sent from the producer or exporter to auction houses in the Netherlands where they are bid on by wholesalers (Bonaventura et al., 2000). Over 20 million flowers per day are sold at auction houses in the Dutch town of Aalsmeer where the industry has its headquarters (CBC News, 2007). Some flowers are purchased directly from the producers by European or North American wholesalers who supply the retailers that ultimately deliver the product to consumers. Low quality products and overripe flowers are not exported but are destined for local markets (Bonaventura et al., 2000).

In the mid-1990s the media and nongovernmental organizations (NGO) generated considerable public concern over cut flower production practices in developing countries by drawing people's attention to such issues as low wages, health and safety risks, environmental degradation, and child labour. These problems were juxtaposed with the luxury and frivolity of flowers and contrasted with the pure intentions of gift-giving. The outcry sent shockwaves through the industry and has forced it to be re-regulated according to ethical standards (Hughes, 2001). Hughes suggests that notions of "governmentality" can help shed light on this movement to more ethical production practices. He defines governmentality in terms of the changing ways we think about governing and the ways this collective thought is made practicable. Governmentality refers not to the distribution of power but to the regimes and organized practices it creates. In the case of cut flowers, two theories of government coexist. As made evident by the extensive trade of flowers globally, the industry is underpinned by neoliberal rationalities that favour competition and free markets. At the same time, however, ideas of business responsibility are emerging and are resulting in the incorporation of rules that are designed to guide the nature of private industry. Public awareness of ethical trading issues has prompted a shift from strictly economic thinking to a focus on the "triple bottom line" which considers the economic, environmental, and social dimensions of trade (Hughes, 2001). This paper will focus specifically on the environmental problems associated with the cut flower industry and then discuss how new ideas about environmental responsibility in business are translating into practice.

As previously mentioned, floriculture requires extensive inputs. Cut flowers can be grown in open fields but are preferably grown in greenhouses, which permit better microclimatic control. Flowers are highly susceptible to pests and diseases and are also extremely perishable (Bonaventura et al., 2000). Additionally, unlike fruits or vegetables, the quality of flowers is principally defined by their cosmetic value, so even small blemishes are not tolerated (Bergman, 2008). For these reasons, massive amounts of chemicals are applied both during cultivation and for post-harvest quality control. Chemicals applied during cultivation include fertilizers, fungicides, insecticides, and fumigants – including the potent ozone depleter methyl bromide (Global Pesticide Campaigner, 2002). Post-harvest chemicals consist of nematocides and sterilants, foliar feeds, wetting agents, and acaricides (Bonaventura et al., 2000).

Statistics on chemical use in the global cut flower industry are difficult to obtain. While most

growers are required to register their chemicals, these records are elusive and in countries like Colombia, Ecuador, and Tanzania there is a substantial contraband in agricultural chemicals (Bonaventura et al., 2000; Bergman, 2008). It has been suggested that the application of chemicals during flower cultivation ranges from anywhere between 50 and 1000 times the amount used on vegetables (Bergman, 2008). Even if national regulations were being followed, the legal standards for pesticide use in many developing countries tend to be laxer than in North America and Europe. It is estimated, for example, that 20 per cent of pesticides used in the Colombian flower industry are either banned or severely restricted in the US and Europe (Bergman, 2008). This pesticide use is actually tacitly encouraged by Japanese and American trade regulations because these countries do not inspect for pesticides on imported flowers, as they are not edible. However, because they are considered an agricultural product they must be pest-free upon entry (Global Pesticide Campaigner, 2002). Pressure to fill increasing consumer demand for high quality products, especially during key festivals like Valentine's Day and Mother's Day, also contributes to the intensification of spraying (Hughes, 2001).

Perhaps the reason that this has up until now failed to generate the type of mainstream consumer concern associated with food products is that there is little evidence that the application of chemicals to flowers poses health risks to consumers. Instead, the workers and the natural environment that pay the price. Workers spend many hours at a time in confined spaces with the flowers and it is frequently only the sprayers who are provided with masks and respirators, not the graders and packers who also handle the flowers (Bonaventura et al., 2000). Worldwide, flower workers are complaining of headaches, dermatitis, irritated eyes (including cataracts), pain, and more serious conditions that result from exposure to carcinogens such as respiratory problems and neurological symptoms. Female workers exposed to chemicals have reported difficulty getting pregnant as well as miscarriages and birth defects. Studies conducted by the Canadian-based International Development Research Centre found that two-thirds of Ecuadorian flower workers showed signs of exposure to toxins (Bergman, 2008).

Flower cultivation requires large quantities of water that are usually delivered by drip irrigation systems or overhead sprinklers. If roses go without water for over 24 hours they sometimes need to be replanted, a process that is expensive and time-consuming (Bonaventura et al., 2000). For this reason, flower production usually takes place near bodies of water which can become easily contaminated by pesticide runoff, killing fish and harming other wildlife. In some places, chemicals and contaminated wastes are dumped directly into water sources (Bergman, 2008).

While the impacts of chemicals have garnered far and away the most concern from environmentalists, other negative ecological impacts have been highlighted. Flower cultivation requires large tracts of land that could be used for cultivating food crops. Foreign investors purchase most of the land for flower farms from indigenous farmers and in some cases, new land has to be cleared, destroying wildlife habitat (Bonaventura et al., 2000). In addition to land and water, flower cultivation and trade are energy intensive. When grown for export, flowers travel long distances by plane before reaching the consumer. Refrigeration requirements are impressive and in North America and parts of Europe where flowers are grown for local consumption, greenhouses need to be heated for at least part of the year (Howard, 1999).

This seems like a thorny situation, but producers are beginning to respond to increasing consumer pressure for more sustainable flowers. Like with coffee and produce, labelling has a key role to play in this transition. Both national and international standards systems that help the consumer identify which flowers are grown in environmentally friendly and ethical ways are being developed. These labels usually identify the flowers as either "organic" or "sustainable". Organic flowers are subject to the same criteria as organic foods. Organic certification focusses mainly on environmental practices and requires farming techniques that build rich, fertile soils and uses natural means to combat pests, prohibiting the use of synthetic pesticides.

Sustainable certification is broader than organic certification, encompassing ethical concerns as well as ecological ones. VeriFlora, established in 2004, is the largest "sustainable" label in North America

and includes standards for environmental responsibility, social responsibility, and quality control. VeriFlora's chemical restrictions are less stringent than those for organic certification, allowing the use of certain synthetic pesticides, but include rules about packaging, greenhouse gas emissions, and habitat mitigation that are absent in organic standards. Social responsibility standards include the prohibition of child labour and provisions for adequate wages, training, and medical care for workers. Lastly, quality control includes rules about product freshness and refrigeration. Thus far, VeriFlora has certified eight farms in California, three in Colombia, and eight in Ecuador (Bergman, 2008).

Similar to VeriFlora, The Milieu Project Sierteelt (MPS) is an international body based out of the Netherlands that attempts to maintain and promote the image of the floriculture sector and acts as a "one-window" certification body. Mainly certifying products for European markets, the MPS has several different certifications for environmental responsibility (MPS-A, B, and C), social responsibility (MPS-Socially Qualified), and quality control (MPS, 2008). In addition to these international bodies, some countries have their own nongovernmental national certification. In Kenya, the growers themselves, concerned about consumer criticism, took on the role of industry regulators with the establishment of the Kenya Flower Council, which certifies farms and conducts regular audits (Hughes, 2001).

Unlike with fruits and vegetables, sustainably grown flowers usually cost the same price as their competition. Therefore, the biggest impediment to more sustainable consumption is not a financial one; rather, it results from a lack of awareness on the part of consumers about the issues associated with flower production as well as confusion about the labels. With so many diverse certification bodies with widely varying standards, it is difficult to know which certification to trust (Bergman, 2008). Some national certification systems, such as the Kenya Flower Council's system, closely follow government regulations, which are generally much lower than those of North America and Europe (Hughes, 2001). Steps should therefore be taken to make standards more uniform. VeriFlora, for example, is attempting to have its criteria approved by the American National Standards Institute (Bergman, 2008). Furthermore, considerable improvements must be made in the vein of auditing processes to make farmers and certifying bodies more accountable (Hughes, 2001).

Though certification is far from perfect, this re-regulation of the flower industry is a prime example of how consumer resistance can translate into alternative regimes of governance in the absence of international and national laws. And as Amy Stewart, author of *Flower Power: the Good, the Bad, and the Beautiful in the Business of Flowers* states, "...certification is the future. Life on any kind of certified farm is better than it would be on a noncertified farm" (cited in Bergman, 2008: 52). In the coming years, it is likely that further strides will be made in painting the roses green. After all, while we may not all see eye-to-eye on the merits of Valentine's Day, I think we can all agree that our planet deserves a little more love.

Since the military regime assumed power in 2002, the Burmese government has continued to follow hardline policies of state repression, crushed all opposition parties, and prohibited free speech (Thurman, 2003: 443). Moreover, the government has taken control of virtually every aspect of Burmese society including education, the media, and public expression. To sever public access to information, the SPDC has established laws such as the Computer Science and Development Law, which authorizes a jail sentence of up to 12 years for anyone found in possession of an unauthorized modem or for misdeeds (Mann, 2003: 113). Other alarming activities are the continued practice of forced conscription of child soldiers, forced labour, and the use of torture and degrading treatment of prisoners (Amnesty International, November 10, 2007). In November 2006, a video posted on the Internet showing the wedding of the daughter of General Than Shwe, leader of the junta, provided fresh evidence of the extreme greed of the Myanmar elite. The wedding was reportedly given fifty million dollars worth of wedding gifts including cars, jewelry, and houses (BBC

¹ The author has chosen to use the term Burma instead of the more Myanmar (official name changed in 1989) as the term "Myanmar" has been deemed to be no more inclusive of the ethnic groups of the country and acknowledges the legitimacy of the SPDC regime.

Works Cited

- Bergman, C. (2008, February 1). A rose is (not) a rose. *Audobon*, 46-53.
- Bonaventura, C., Hatibu, H., Mbelwa, R. & Semboja, H. (2000). *Working paper 152 - the cut-flower industry in Tanzania*. Retrieved February 15, 2008, from <http://www.ilo.org/public/english/dialogue/sector/papers/tanzflow/index.htm>
- Early, A. (2007, April). Colombian workers feel flowers' thorns. *Industrial Worker*, 104(4), 12. Retrieved February 15, 2008, from Proquest Research Library database.
- Flower power: a blooming movement for change. (2007, May 9). *CBC News*. Retrieved February 16, 2008, from <http://www.cbc.ca/news/background/fair-trade/flower-power.html>
- Hughes, Alex. (2001). Global commodity networks, ethical trade and governmentality: organizing business responsibility in the Kenyan cut flower industry. *Transactions of the Institute of British Geographers*, 26(4), 390-406.
- Indian rose grower's sales bloom ahead of Valentine's Day. (February 13, 2008). *Agence France Press*. Retrieved February 16, 2008, from <http://news.sg.msn.com/lifestyle/article.aspx?cp-documentid=1241434>
- Korovkin, T. (2003). Cut-flower exports, female labour, and community participation in highland Ecuador. *Latin American Perspectives*, 18-42. Retrieved February 15, 2008, from JSTOR Research Library database.
- MPS. (2008). *Labels for growers*. Retrieved February 16, 2008, from <http://www.mymps.com/asp/page.asp?sitid=457>
- Pesticide Action Network North America. (August, 2002). Flower workers heavily exposed to pesticides. *Global Pesticide Campaigner*, 12(2), 28. Retrieved February 15, 2008, from Proquest Research Library database.
- War of the roses. (1999, December 15). *Colorado Springs Independent*, p. 11. Retrieved February 15, 2008, from Proquest Research Library database.