Several million small-scale farmers grow coffee in Central America and Mexico. These small-scale farmers grow coffee for cash income and sell their beans to a cooperative or to a local intermediary purchaser. In addition to coffee, these farmers grow crops to feed their families. Two-thirds of the coffee farmers also have some income from off-farm employment [1]. With high coffee prices in the 1970s and 1980s, small scale farmers increased adoption of herbicides, insecticides and fungicides. In several countries, governments provided farmers with subsidies to purchase pesticides. Pesticide applications helped to increase yields and also reduced labor requirements for weeding. Weed control on smallholder farms in Central America consisted of machete weedicings several times a year followed by several applications of herbicides including 2,4-D, parquat and glyphosate [2].

Coffee prices paid to farmers declined significantly in the 1990s. Coffee farmers began a period when they received about 50% less for their crop. Production costs became higher than the market prices. As a result, cash-poor small-scale coffee farmers reduced the use of purchased inputs including pesticides and coffee yields declined [3]. International development agencies and NGO’s provided coffee farmers with an alternative option for selling their crop-organic cooperatives. Growers would receive a price premium (20-25%) for organic-certified coffee. In order to be certified, growers had to refrain from the use of synthetic chemical pesticides and industrial fertilizers.

Thousands of small-scale coffee farmers signed up to participate in the organic programs [4]. However, many of these farmers have reverted to conventional production. Farmers discovered that the higher selling price for organic coffee was not enough to cover the increased cost of production and make up for lower yield [4]. An organic coffee farm is estimated to produce 45% less than a conventional farm[5]. Labor requirements were significantly higher in the organic systems with hand weeding taking up about half of the labor needed to produce the crop [6]. The need for hand weeding the coffee also occurred seasonally at the same time labor was required for other crops. Recent severe outbreaks of coffee leaf rust have caused significant economic hardship on many Central American coffee farms[7].Typically, organic farms have located at higher altitudes where leaf rust was less of a problem. However, the pathogen has expanded to the higher altitudes and organic growers were caught unprepared and suffered yield losses of up to 70% [7].

With higher prices for coffee in recent years, there’s little financial reason for growers to continue raising organic beans [4]. Research has demonstrated that over a period of ten years, organic certified coffee producers became relatively poorer [8].

References