Introduction

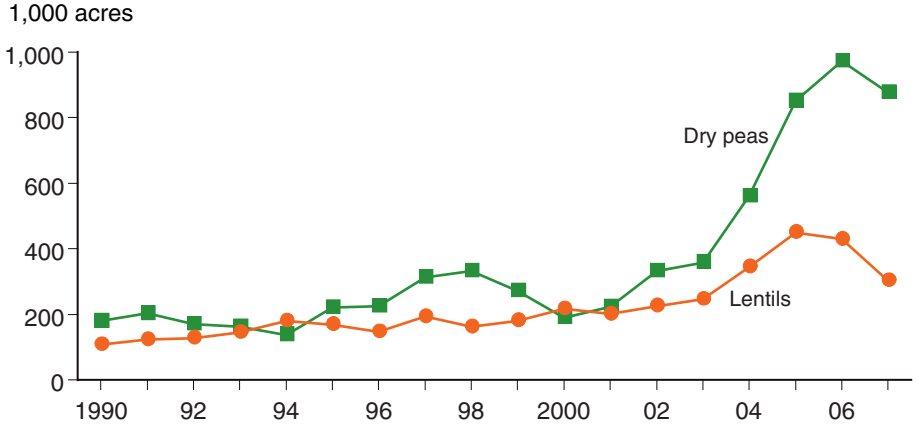
The 2002 Farm Act required the U.S. Department of Agriculture (USDA), for the first time, to implement marketing loans for dry peas, lentils, and small chickpeas—three pulse crops grown in the United States—for the 2002-07 crops.[1] The Marketing Loan Program sets the Loan Rate, a fixed return for the crops, and guarantees it to the grower even if the market price falls below it. This protection against downside price risk could potentially lead to expanded acreage for these crops, particularly when expected market prices fall below the loan rates. In 2000 and 2001, U.S. plantings of dry peas and lentils were around 200,000 acres for each. Since then, acreage planted to these crops has shown a steady upward trend, reaching nearly 1 million acres for dry peas and over 400,000 acres for lentils in 2006. Acreage decreased in 2007, to about 880,000 acres for dry peas and 305,000 for lentils, still considerably higher than in 2000 (fig. 1).

Although the pulse crop marketing loan program may have little significance for overall U.S. farm policy, it is important to producers of pulse crops in the United States, as well as of interest to competing producers in Canada. If domestic markets do not absorb the expanded production, U.S. exports of dry peas and lentils could increase and world prices could fall. This possibility is being closely watched by Canadian pulse growers and shippers, since large increases in U.S. pea and lentil shipments could chip away at Canada's status as a world leader in pulse exports.

The purpose of this study is twofold: (1) to investigate the role of marketing loans on supply increases of U.S. dry peas and lentils, and (2) to gauge trade implications of the marketing loans in terms of their impact on world prices and U.S. exports. For this analysis, the authors developed two models:

Figure 1

U.S. planted acreage for dry peas and lentils: 1990-2007[1]



[1]Excludes chickpeas.

Sources: USDA, National Agricultural Statistics Service, *Field Crops* and *Crop Production Annual.*

[1]In North American agriculture, the term "pulse crop" commonly refers to dry (mature) peas, lentils, dry beans, and chickpeas (garbanzo beans) used as food or feed crops (with "food" referring to human use and "feed" to animal use) (Lucier and Jerardo, 2002). Although small chickpeas are covered by marketing loans, that crop is not within the focus of this report.

- A supply response model for dry peas and lentils, which separates out the impacts of the marketing loans on the production of those commodities from the impacts of market forces.
- A policy simulation model, adapted from a model by Sumner (2005) that incorporates the share of expected farm returns from marketing loan benefits vs. those from market revenues, along with supply elasticities and other key parameters, to estimate the impacts of the marketing loans on world prices. Additional production induced by the marketing loans is used to estimate the impact on U.S. exports.