The Economic Benefits of Backyard Gardening in Barbados

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The use of home gardens has been suggested numerous times as a solution to some of the issues surrounding food security (Yu et al. 2009; FAO 2009; Collier et al. 2008; IICA 2009). Gardens have been shown to be very beneficial not only in aiding with food security but also has other benefits such as: the ability to feed livestock; the provision of raw materials for handicrafts, fuel wood and construction materials; and the creation of additional wealth through the sale of surplus produce and homemade goods (which can be...
quite significant), a good source of rural employment and the use of plants for medicinal purposes (Marsh 1998; Kumar and Nair 2004; Finerman and Sackett 2003).

During the summer of the year 2009, Katia Colton-Gagnon, Lauren Forbes and Annelise Miller, three students from McGill University (in conjunction with the University of the West Indies) worked with the Inter-American Institute for the Cooperation on Agriculture (IICA) to determine the cost benefits of having a home garden. A demonstration greenhouse garden (that had been previously set up by IICA with other McGill students in the backyard of the St. Patrick's Cathedral in Bridgetown, Barbados) was used to plant a variety of vegetables for which growth and yield were monitored in order to determine the value of the annual savings such a garden can potentially provide. In order to evaluate the economic benefit of home gardening, 25 grocery stores were surveyed bi-weekly over a three month period in order to determine the average costs of vegetables on the island. The survey also showed that all the surveyed vegetables were not available in all stores at all times. In fact, some vegetables are only carried by 40% of the most important food stores on the island. Moreover, data from Barbados Agricultural Development and Marketing Corporation (2008) indicates that the price of vegetables is higher during the months of August through to January which is linked with the weather conditions during these months (wet season in Barbados). However, the proposed greenhouse model for home gardening could easily solve the common problems of growing vegetables under large quantities of rain and permit a Barbadian to grow vegetables all year round. Furthermore, a complete budget was created in order to accurately evaluate the implementation costs, the potential revenue (the yield and its market value), the maintenance cost and the cash left at the end of a year of a typical greenhouse structure. After examining different greenhouse structures it was found that a Barbadian would save the most by buying the required material from Carter’s Hardware store and building a greenhouse on their own. The implementation costs of such a garden may have a minimal value of $1,215 BBD which includes the greenhouse structure and irrigation system investment and the variable and fixed expenses for the year of implementation. The potential revenue of such a garden when vegetables are grown in a tight rotation all year-round was estimated to be $2,030 BBD and the annual maintenance cost were evaluated to be $35 BBD. When a
1-year loan is taken to cover the initial investment and expenses of the first year, the cash left at the end of the first year is $383 BBD and, by the end of the second year, the cash left is $2030 BBD which shows that the garden becomes highly profitable by the end of its second year in operation. In fact, whether the vegetables are consumed or sold, the gardener can save or make approximately $1,650 BBD per year. In conclusion, this study has shown that home gardening can significantly reduce a Barbadian’s percentage of income spent on vegetables and potentially give him/her access to another source of income. By producing their own vegetables Barbadians can also increase their total vegetable consumption which can potentially improve their health. Furthermore, backyard gardening could help decrease the food import bill by stimulating a movement back to agriculture and the domestic production of vegetables which could render Barbados more food secure and less dependent on food imports.

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References


