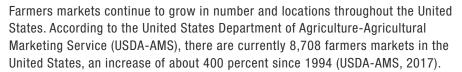
PURDUE EXTENSION

Selling at Farmers Markets: Benefits and Price Trends

Ariana Torres and Allan Pinto

Purdue Horticulture Business — hort.purdue.edu/HortBusiness
Purdue Horticulture and Landscape Architecture — ag.purdue.edu/HLA
Purdue Agricultural Economics — ag.purdue.edu/AgEcon



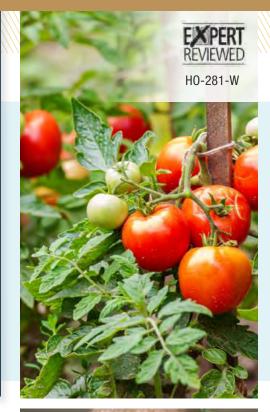
The USDA-AMS directory of farmers markets reported 191 farmers markets in Indiana by August 2017: 129 summer and 62 winter markets (Figure 1). Indiana farmers markets vastly differ in size: markets may occupy a few stalls to several city blocks. The wide variety of fruits and vegetables sold at these locally sourced

outlets highlight the Hoosier economy and gastronomy.

This publication provides information to farmers selling at farmers markets or other local outlets. This publication illustrates the main characteristics of farmers markets, the benefits of selling directly to consumers, and the main price trends of specialty crops sold at farmers markets. Since January 2017, the Horticulture Business Extension Program at Purdue University has been collecting fruit and vegetable prices at nine Indiana farmers markets. The goal of the project is to collect foundational data and establish long-term pricing reports for Indiana specialty crops sold at farmers markets.



Figure 1. Location of Indiana farmers markets. Source: USDA-AMS Farmers Markets Directory. Source: (www.ams.usda.gov/local-food-directories/farmersmarkets).









Indiana Growers Selling at Farmers Markets

The latest Census of Agriculture reported that 244,974 U.S. farmers utilized more than 14 million acres to grow specialty crops in 2012. The same census reported that Indiana's specialty crop industry includes 2,935 operations utilizing 63,252 acres to grow fruits and vegetables, tree nuts, dried fruits, horticulture, floriculture, and nursery crops. Thus, specialty crops include a long list of agricultural products that are sold through a wide variety of market channels.

In a 2012 survey of specialty crops growers, Torres and Marshall (2016) and Torres (2017) found that 86 percent of interviewed farmers in Indiana reported annual revenues less than \$250,000. Almost a third of Indiana farmers made less than \$10,000 annually. Their survey also found that about a third of the farmers reported additional off-farm sources of income while still spending an average of 46 hours per week on farm activities. The survey found that most specialty crops farmers who sell their fruits and vegetables through farmers markets or other local outlets, tend to be smaller, and grow 20 crops on average.

More information about specialty crops operations in Indiana are available in *Fruit and Vegetable Farmer Surveys: Characteristics of Indiana Vegetable Farming Operations* (Purdue Extension publication H0-270-W) and *Fruit and Vegetable Farmer Surveys: Characteristics of Indiana Vegetable Farmers* (H0-271-W). Both are available from the Education Store, *edustore.purdue.edu*.

Benefits of Selling at Farmers Markets

Farmers markets are much more than just a place to sell produce; these markets are a centerpiece of local food systems. Farmers markets offer important benefits to farmers, buyers, and communities across the United States. Farmers markets provide a venue for communities to socialize, revitalize downtown districts, and help educate people to make healthier food choices.

Andreatta and Wickliffe (2002) surveyed farmers market buyers, and they found that respondents prefer farmers markets due to the availability of fresh produce (88 percent) and local products (64 percent). The same study found that the main disadvantages of farmers markets include distance to markets (23 percent), seasonal variation (14 percent), and hours of operation (12 percent).

Farmers markets tend to serve as the primary outlet for smaller and part-time operations or as a complementary outlet for medium- and large-size growers who want to expand their sales (Feenstra et al., 2003). These markets connect farmers with consumers and offer an attractive outlet for locally grown flowers, ornamentals, and edible crops. By selling directly to consumers, farmers are able to gain a higher share of the consumer's dollar, improve their cash flow, and travel shorter distances (which reduces costs in transportation, handling, refrigeration, and storage). Farmers have indicated that these markets help them improve their skills in customer relations, merchandising, and pricing; they also increase their business self-confidence (Brown, 2002).

Pricing at Farmers Markets

Prices are one of the most important drivers of farm profitability and sustainability, yet it tends be one of the least controlled factors by farmers. The question is: Should farmers set prices based on production and administrative costs, profitability goals, market prices, or consumers' preferences?

The answer is: All of the above. The price that growers set for the produce represents the monetary value of a product. In economic terms, price reflects how much the consumer values a product, which depends on internal factors (produce quality, the farm's image, production yield, credit terms) and external factors (competitors, consumers' preferences, seasonality).



Darby et al. (2008) found that consumers prefer locally grown over regional or U.S.—grown produce, and are willing to pay almost twice as much for several local products. Data from our project shows that consumers paid almost \$4 for a pound of slicing tomatoes at the Lafayette farmers market in July; while in retail markets a pound of slicing tomatoes sold for \$1.99 during the same period (USDA-AMS, 2017). That represents a 98 percent price premium at the farmers market.

The growth and popularity of farmers markets offer important opportunities for fruit and vegetable farmers in Indiana. While Indiana farmers can take advantage of the opportunities from selling directly to consumers, they face a dearth of information regarding pricing and marketing strategies. Information about pricing and product quality requirements are generally available for farmers who produce enough volume to enter wholesale markets, but not for those selling locally.

For example, the USDA-AMS publishes wholesale and retail prices of fruits and vegetables weekly on the Market News website, www.ams.usda.gov/market-news/fruits-vegetables. Growers selling wholesale can access these weekly reports to overcome risk and uncertainties, define their marketing strategies, assess investment in new technologies, and assure profitability.

By contrast, Indiana farmers face a lack of pricing and sales information for farmers markets and other local markets. Indiana growers have to rely on farmers market prices from neighboring states or walk down the market aisles to define prices. The lack of pricing and sales information not only increases risk, it also limits farmers' ability to assess farm profitability, evaluate price and marketing strategies, determine the market window for specific crops, choose market channels, and assess market feasibility for new crops.

Pricing Strategies at Farmers Markets

Information about price-setting strategies is one of the most frequent requests among farmers who sell directly to consumers. Below we offer a few strategies that specialty crop growers selling in farmers markets commonly use.

- Cost plus pricing is the simplest pricing technique for specialty crops. Farmers should quantify their total costs and sell their products above those costs. Any dollar amount above total costs will contribute to farm profitability.
 - Ideally, growers should keep records of expenses and determine the production costs for each crop. However, new growers may not have access to records or pricing information to estimate production costs. If your costs are unknown, several university extension services have published enterprise budget tools to help estimate the costs and returns of growing and selling specialty crops. The Purdue Horticulture Business website is currently building a HortBusiness Calculator (www.purdue.edu/hla/sites/hortbusiness/resources/hortbusiness-calculator) to help specialty crop growers create their enterprise budgets.
- Odd pricing is used by business managers who set prices that end in odd numbers: typically 5, 7, or 9. The idea is that customers may perceive that a produce sold for \$2.99 appears to be significantly more attractive that one sold for \$3.00. Figure 2 illustrates an example of odd pricing vegetables for zucchini in a farmers market.
- Bundling is a strategy in which growers group several products into a package that
 offers customers extra value at a special price. Bundling helps farmers highlight and
 sell unique produce that customers cannot find in a supermarket. Figure 3 illustrates
 an example of vegetables sold by bundle at farmers markets.



Figure 2. Odd pricing strategy used by farmers selling at the Lafayette (Indiana) Farmers Market.



Figure 3. A bundle of stir-fry vegetables sold at the West Lafayette (Indiana) Farmers Market.



Figure 4. The counties in yellow are where our project collects farmers markets prices.

The Horticulture Business Pricing Project

The team of researchers at the Purdue Horticulture Business Extension Program has been collecting weekly fruit and vegetable prices and sales data at Indiana farmers markets. The goal of the project is to collect foundational data and establish long-term pricing reports for Indiana specialty crops sold at farmers markets. We collaborate with farmers market managers and county extension educators in several Indiana counties to collect and publish weekly prices of produce sold through Indiana farmers markets. The project has been funded by Purdue AgSEED and supported by the Indiana Vegetable Growers Association (IVGA).

The project started in January 2107 by collecting and publishing prices from the Bloomington Winter Farmers Market. Since then, we added eight summer markets from northern, central, and southern Indiana. Summer markets are located in Bloomington (Monroe County), Boonville (Warrick County), Corydon (Harrison County), Culver (Marshall County), Kokomo (Howard County), Lafayette (Tippecanoe County), Plymouth (Marshall County), and West Lafayette (Tippecanoe County) (see Figure 4). Prices are recorded once a week per market and published on the Horticulture Business Program website, hort.purdue.edu/HortBusiness.

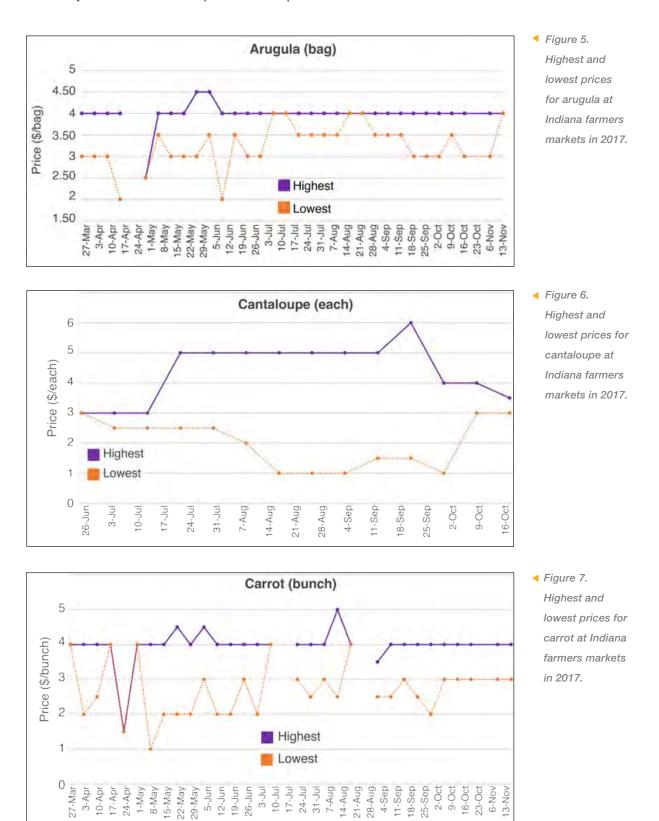
Using Price Reports to Make Informed Decisions

Price reports provide farmers with price benchmarks for a wide variety of fruits and vegetables sold in Indiana farmers markets. Some of the benefits of using price reports are:

- Farmers can compare produce prices across markets (urban versus rural) and units (selling by bag versus by pound). This information
 can help farmers assess the potential of increasing or decreasing prices depending on their cost structure, market access, location, and
 time of the year.
- Farmers have more information to understand competition in farmers markets by looking at the price ranges of specific crops.
- Farmers can determine the market window of their crops. Market window is the period of time when produce and prices are available
 for a specific market. For example, data from our price reports show that asparagus was available in Bloomington from mid-April (\$5
 per pound) to mid-June (\$3.50 per pound).
- Farmers can assess the economic feasibility of season-extending technologies and new crops by considering when products
 reach the market (market window) and at what price. For example, farmers can determine if investing in high tunnels to extend the
 production season or raise new crop varieties will be profitable given the previous year's prices.
- Farmers can evaluate the return on investing in valued-added strategies by assessing if cut-washed-bagged produce has received
 price premiums when compared to produce sold by the pound.
- Beginning and current farmers can use our price reports and integrate information with enterprise budgets to estimate potential farm
 profitability. Growers can assess if market prices are enough to cover production and administrative costs while providing enough
 money to make a living.
- Farmers can select market channels for their products. Farmers may decide that selling in rural markets closer to their farms could
 generate enough revenue to meet their profitability goals and give them more time with their families compared to selling in more
 distant urban markets. Similarly, farmers may find that selling to a neighboring farmers market can bring as much revenue (or more)
 than selling to a wholesaler or retailer.

Pricing Trends from Indiana Farmers Markets

Figures 5-12 show price trends of various specialty crops sold in Indiana farmers markets in 2017. Some graphs show a gap in prices, which was mainly due to the lack of those products at the specific week.



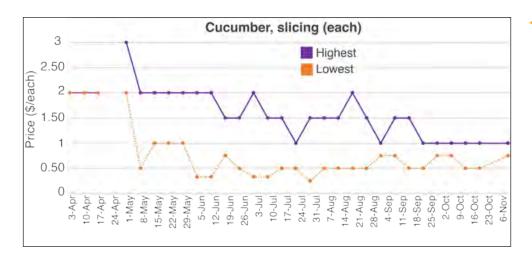


Figure 8.

Highest and
lowest prices
for cucumber at
Indiana farmers
markets in 2017.

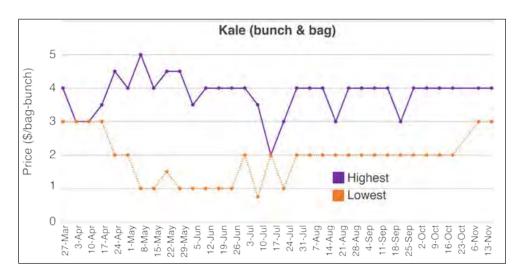


Figure 9.

Highest and
lowest prices for
kale at Indiana
farmers markets
in 2017.

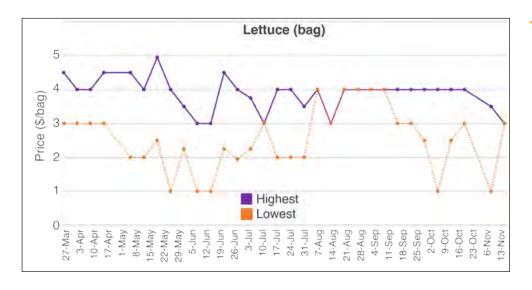


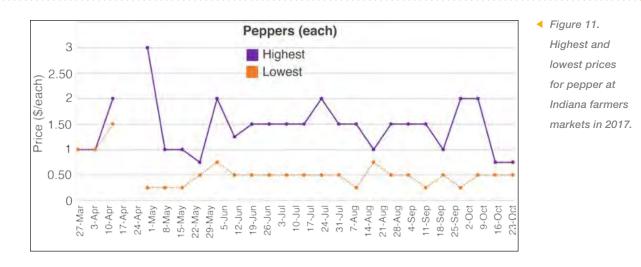
Figure 10.

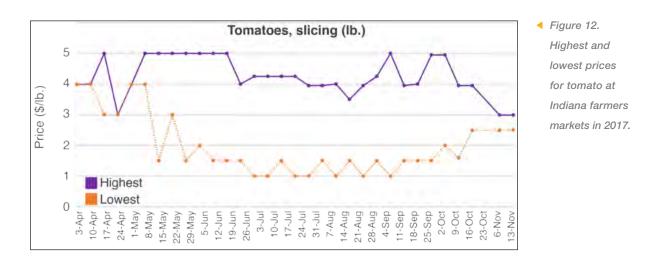
Highest and

lowest prices for

lettuce at Indiana
farmers markets

in 2017.





Increases in the demand of local foods has provided important economic opportunities for growers selling through farmers markets. Farmers selling at farmers markets can gain a larger share of the consumer's dollars, use alternative labels (such as "local" or "natural") to capitalize on price premiums, and improve their cash flow. However, farmers market prices can vary depending on the seasonality, location, and supply and demand forces.

This publication provides information to farmers selling at farmers markets or other local outlets. To find information about additional crops, specific market prices, and alternative unit prices, visit the Purdue Horticulture Business site, hort.purdue.edu/HortBusiness.



References

Andreatta, S. and W. Wickliffe II. 2002. "Managing farmer and consumer expectations: a study of a North Carolina farmers' market." Human Organization 61(2):167–176.

Brown, A. 2002. "Farmers' market research 1940–2000: an inventory and review." American Journal of Alternative Agriculture 17(4):167–76.

Darby, K., M.T. Batte, S. Ernst, and B. Roe. 2008. "Decomposing local: a conjoint analysis of locally produced foods." American Journal of Agricultural Economics 90(2):476–86.

Feenstra, G.W., C.C. Lewis, C.C. Hinrichs, G.W. Gillespie, Jr., and D. Hilchey. 2003. "Entrepreneurial outcomes and enterprise size in US retail farmers' markets." American Journal of Alternative Agriculture 18(1):46–55.

Torres, A. and M. Marshall. 2016. Fruit and Vegetable Farmer Surveys: Characteristics of Indiana Vegetable Farming Operations, Purdue Extension publication H0-270-W, <u>edustore.purdue.edu/item.asp?ltem_Number=H0-270-W</u>

Torres, A. 2017. Fruit and Vegetable Farmer Surveys: Characteristics of Indiana Vegetable Farmers, Purdue Extension publication H0-271-W, edustore.purdue.edu/item.asp?ltem Number=H0-271-W

USDA-AMS. 2017. Specialty Crops, www.ams.usda.gov/market-news/fruits-vegetables

Reference in this publication to any specific commercial product, process, or service, or the use of any trade, firm, or corporation name is for general informational purposes only and does not constitute an endorsement, recommendation, or certification of any kind by Purdue Extension. Individuals using such products assume responsibility for their use in accordance with current directions of the manufacturer.

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran.

Purdue University is an Affirmative Action institution. This material may be available in alternative formats.

Jan. 2018



