



IMPORTANCE OF INDIANA AGRICULTURE

INTRODUCTION

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Indiana's agriculture industry has a treasured heritage. This industry has simultaneously remained true to its roots and adopted innovative practices to address current challenges and needs. As fewer individuals interact with the daily efforts associated with raising or growing agricultural products, appreciation of its place within the larger Hoosier economy and landscape becomes diminished. Likewise, grasping the breadth and importance of the agriculture industry can seem elusive due to the complexities associated with gathering data on all agricultural enterprises, big and small. Any assessment of the scope of urban agriculture

is mostly anecdotal, as little data exists to fully capture the breadth of activity occurring in urban areas. This introduction to the Food and Agriculture section will provide a big-picture view of Indiana's flourishing agriculture industry – in both rural and urban settings.

INDIANA'S LANDSCAPE: PAST AND PRESENT

In 2017, Indiana had 56,800 farms and 14.7 million acres devoted to agriculture production, comprising 63.1 percent of the state's land (State Agriculture Overview, 2017). While still sizable, between 1925 and 2017, the state saw a 71 percent drop in number of farms and a 26.2 percent drop in acreage (United States Census of Agriculture, 1925). Individuals might not realize that Indiana is one of three states with more than 50 percent of its land (12.9 million acres) classified as prime farmland (Hall, 2010).

As the quantity of farms and farmland downsized, the share of individuals residing on farms dropped and the size of the farm evolved greatly since 1925 (Hall, 2015). As of 2012, 46.7 percent of farms were less than 50 acres, 40.5 percent were between 50 and 500 acres and the remaining 12.8 percent were more than 500 acres. Therefore, in Indiana, large and mid-scale agriculture production exists, yet there has been a tremendous growth since 1925 (19 percentage points) in small farm production (less than 50 acres). The importance of agriculture is not solely relegated to the rural areas of the state, as smaller farms can and do exist in urbanized areas.

Researcher Arthur Nelson (1990) noted that most of the United States’ prime farmland is located within the suburban and exurban counties of metropolitan areas. Thus, land most suitable for agricultural production is often equally desirable for development (Solomon, 1984). Between 1982 and 2012, Indiana saw 563,700 acres converted to developed uses (Farmland Information Center, 2018), which will likely never be reconverted to agricultural uses.

Today, most farms are not engaged in subsistence farming; rather, they produce a few commodities and take all, or a large share, of their output to the market. Therefore, manufacturing and wholesale operations play a large part in adding value to the raw outputs from the farm.* At present, Indiana is experiencing a resurgence of interest in local foods and urban agriculture, with consumers yearning to produce agricultural products, understand food production practices and have a relationship with the farmer. The local foods movement has extended beyond farmers’ markets as restaurants source foods locally, institutions prefer purchasing local foods, communities are growing community gardens and consumers engage in farm tours, community-supported agriculture memberships and support local foods initiatives. Likewise, concerns about the prevalence of Indiana’s more than 200 food deserts, or areas lacking access to healthful whole foods, have increased interest in urban agriculture.

INDIANA AGRICULTURE PRODUCTION AND ITS VALUE

Given Indiana’s landscape, it is no surprise that, according to 2017 rankings, the state was a top 10 producer of 12 commodities (see **Table 1**). This production is possible because of the state’s prolific production ability and livestock-friendly practices. National and international demand for the agricultural products produced in Indiana has driven growth in addition to increased efficiencies in the production process.

TABLE 1: INDIANA’S RANK IN AGRICULTURAL PRODUCTION

Commodity	Rank
*Ducks	1
Eggs produced	2
Spearmint	3
Tomatoes	3
Peppermint	4
Pumpkins	4
Turkeys raised	4
Watermelon	5
Corn for grain	5
Pigs	5
Soybeans	5
Cantaloupe	6

Sources: NASS 2017 State Agriculture Overview; Duck data* from Indiana State Board of Animal Health

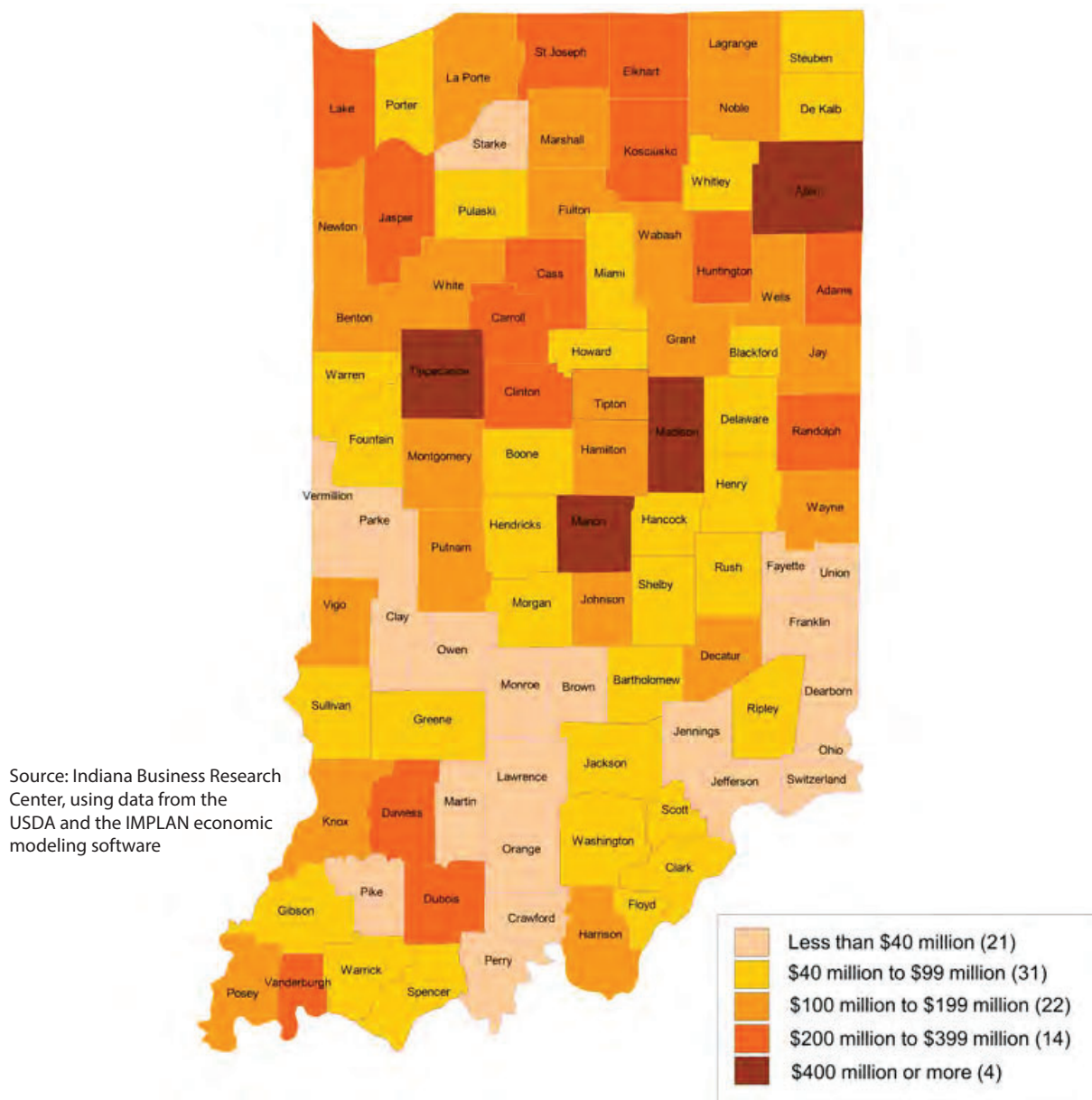
Production of these commodities (and more) led to Indiana farmers receiving \$10.6 billion in cash receipts from farm marketings in 2017. More than one-third of the cash receipts came from animals and products (35.1 percent) with the remainder coming from crops (64.9 percent), namely corn and soybeans (31.5 and 29 percent, respectively). All other crops, vegetables, melons, fruits and nuts comprised 3.6 percent of the cash receipts, but are likely higher as fruit production data is suppressed (NASS, 2018).

ECONOMIC IMPACT OF THE INDIANA AGRICULTURE INDUSTRY

As of 2012, the Indiana agriculture industry's impact on sales was estimated at \$44.1 billion. The value added created by the agriculture industry (GDP) accounts for nearly 5 percent of the state's economy (\$14.9 billion) and every dollar of GDP generated another \$0.88 in economic activity within other industries in Indiana. Despite agricultural production comprising more than 70 percent of the economic impact on sales, it only accounted for half of the total GDP contribution (\$7.44

billion) as the remainder went to agriculture-related manufacturing (IBRC, 2015a). Due to the prevalence of agriculture-related processing and manufacturing activities, often within more urbanized counties' borders, several of Indiana's more urbanized counties made the largest contributions to the agriculture industry. Much of this was driven by grain and soybean processing, causing Marion, Madison, Allen and Tippecanoe counties to have the largest share of total agricultural GDP effect amongst all counties (see **Figure 1**) (IBRC, 2015b).

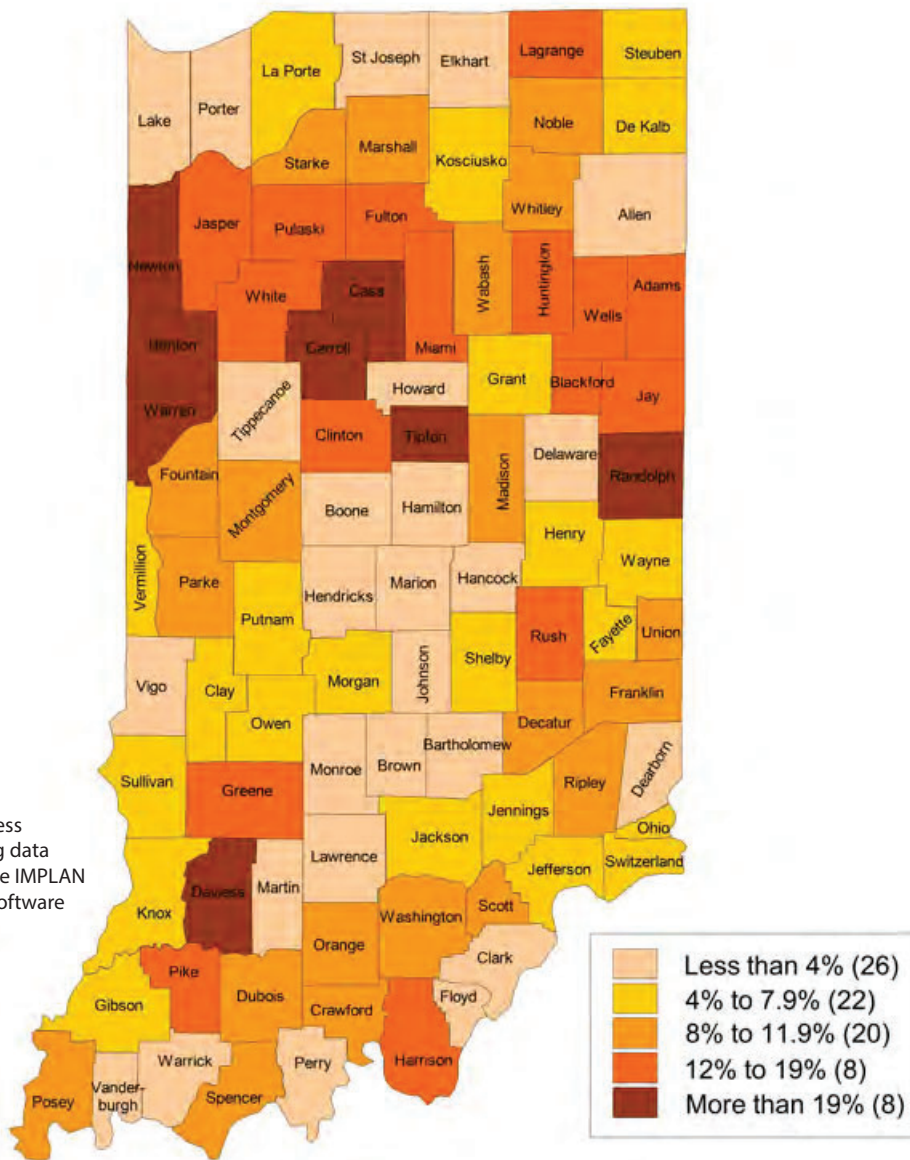
FIGURE 1: INDIANA AGRICULTURE'S TOTAL GDP EFFECTS BY COUNTY, 2012



Indiana's agriculture industry also employs a significant amount of individuals – more than 107,600 workers. As can be expected, agriculture plays a more critical role in the smaller or midsized counties around the state versus urbanized areas with a heavier presence of additional industries (IBRC, 2015b). In fact, the distribution of the quantity of individuals employed within the agriculture

industry mimics the dispersal evident in **Figure 1**. This is again because of the presence of agricultural-related manufacturing and other supply chain firms that employ large quantities of workers. **Figure 2** shows the agriculture employment effects as a share of the total employment by county in 2012.

FIGURE 2: AGRICULTURE EMPLOYMENT EFFECTS AS A SHARE OF TOTAL EMPLOYMENT BY COUNTY, 2012



Source: Indiana Business Research Center, using data from the USDA and the IMPLAN economic modeling software

CONCLUSION

In summary, agriculture is big business in Indiana (economically and in land use consumption) and is not relegated only to the more rural areas of the state. The state has very rich farmland and attractive terrain, which has led to its national prominence in grain and livestock production. In recent years, there has been a great resurgence in interest and concern about wholesome food access (mainly fruits and vegetables) in urban markets. Therefore, Indiana has become a state where commercial agriculture, small farms and urban farming co-exist. This co-existence can only occur if careful consideration is made toward sustainable development and mindful land use – regardless of whether the land in question is in a rural, suburban or urban setting.

This careful consideration ought to include local government incorporating goals and policies concerning agriculture in their comprehensive plans. Local government and planning officials should take the time to familiarize themselves with the local agrarian landscape as well as topics and issues surrounding agricultural land use. Given the breadth of the agriculture industry, it would be prudent to include the agricultural community, local food advocates and agricultural firms in the planning process. The following sections dive into specific agricultural topics and possible land use policies.

* Likewise, one could see how it can be difficult to discern where the agriculture industry “ends” within the valued-added process. Some researchers argue that it should include manufacturing and wholesale outlets, whereas others only include industries with a sizeable share of raw agricultural input.

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