



POLICY BRIEF

Farmers meet diverse demands, including keeping food affordable

By Madi Clark,
Director, Initiative on Agriculture

April 2018

Key Findings

1. *Topping the list of American consumer demand is that food remains affordable. The 6.4 percent of our incomes we spend on food at home ranks as the lowest in the world.*
2. *As price takers, farmers have little to no influence over their market price and are subject to global pressures.*
3. *Profitability is achieved on the farm by balancing the three aspects of farm business: prices, management, and production.*
4. *When external factors, like government regulation, limit farmers' flexibility, they have less control over profitability. Regulations leave farmers vulnerable to volatile market prices, despite their best efforts to remain viable.*
5. *A recent study found that had USDA and EPA regulations stayed at 1997 levels through 2012, the total productivity growth in agriculture would have been 10 percent higher and 13.5 percent higher, respectively.*



POLICY BRIEF

Farmers meet diverse demands, including keeping food affordable

By Madi Clark,
Director, Initiative on Agriculture

April 2018

3	<i>Introduction</i>
4	<i>Price-takers are in the hardest business</i>
5	<i>Farms can be profitable through sound management and production decisions</i>
5	<i>Regulatory costs hurt farm profitability</i>
7	<i>Conclusion: Washington state farmers would be better off without excessive regulations</i>

Farmers meet diverse demands, including keeping food affordable

By Madi Clark,
Director, Initiative on Agriculture

April 2018

Introduction

Though we admonish our children for being picky eaters, American consumers as a whole have become quite picky. We want our food to be, fresh, local, GMO-free, gluten-free, pesticide-free, salmon friendly, RBST-free, and the list goes on.

Those qualities are important, but topping the list of American consumer demand is that food remains *affordable*.

The median household in the U.S. only spends 13.1 percent of its income on food (including both food at home and away from home) though this percentage rises to 32 percent for households in lower income brackets.¹ The 6.4 percent of our incomes we spend on food at home ranks the lowest in the world. Americans also have one of the highest levels of per-person calorie consumption in the world.²

Of the small percentage of income we spend on food, only 8.6 cents of every dollar reaches the farmers who grow food. The rest is paid to retailing, processing, energy, marketing, packaging, transportation, wholesale trade, food services, finance and insurance, legal, and other important parts of the agribusinesses chain.³

Additionally, the inflation-adjusted amount we spent on food over the past decade has remained relatively stable, whereas the inflation-adjusted price of commodities has experienced a long-term decline over the last century.

Farmers are faced with the reality that to continue their businesses they must meet the growing list of demands from American consumers while keeping costs low. The challenges of this competitive landscape make successful farming increasingly difficult.

Adding to this challenge is government regulation, costing family farmers vast amounts of time and money.⁴ Regulatory costs are transparent but are hidden within each category. For farmers, the diversion of 1-2 pennies from their 8.6 cents that they receive from every food dollar could mean the difference between their farms continued viability or its end.

1 "Food spending as a share of income declines as income rises," United States Department of Agriculture Economic Research Service, September 2017, at <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=58372>.

2 "Which countries spend the most on food? This map will show you," by Alex Gray, World Economic Forum, December 2016, at <https://www.weforum.org/agenda/2016/12/this-map-shows-how-much-each-country-spends-on-food/>.

3 "Nearly a third of the U.S. food dollar is spent on eating out services," United States Department of Agriculture Economic Research Service, April 2017, at <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=58354>.

4 "Regulatory System Impacting Farmers and Ranchers," Washington State Department of Agriculture, at <https://agr.wa.gov/FoF/docs/RegulatoryBurden.pdf>.

As farmers work to meet America's appetite for the next food adjective, consumers and policymakers must realize that many of the regulations faced by farmers could have disastrous consequences. Farms will be faced with consolidation, food prices could increase, and society will experience little to no benefit for these added regulatory costs.

Price-takers are in the hardest business

Shortly after college, I had a mentor who offered a straight-forward description of market competitiveness saying, "The hardest business is the 'me too business'" – businesses that are unable to differentiate and where competitors can enter that market space, delivering the same product relatively easily at a lower price, pushing other businesses out of the market.

In economic terms, "me too" means the business is a price-taker. Price-takers are market participants who are unable to influence the prices of goods or services they offer and must accept the dominant prices within the marketplace.⁵

Farms frequently fall in to this category. As price takers, farmers have little to no influence over their market price and are subject to global pressures. Specifically, commodity farmers are price-takers because it is difficult to differentiate standard commodities like corn, wheat, and soybeans.

Agricultural commodities are traded via marketing exchange boards and these largely set the market price: Chicago Mercantile Exchange Group, Kansas City Board of Trade, Intercontinental Exchange. Market participants sell and buy contracts of major agricultural commodities, usually future contracts, allowing farmers to sell their product for future harvest and delivery. In 2005, 41 percent of farmers used contracts, though that figure grew steadily over the previous five years from 36 percent.⁶

Market exchange sites allow farmers to participate in price discovery and it is a very efficient practice. Additionally, as a major exporter of agricultural commodities, the United States largely sets the global price for commodities like corn, wheat, and soy.⁷

Corn prices are also a major determinant of price for other commodities. Corn production in the U.S. accounts for 90 percent of the total value and production of feed grains like grain sorghum, barley, and oats. Demand and supply shocks on corn resonate through other crop industries and affect their prices.⁸

5 "What is a price taker?" Corporate Finance Institute, at <https://corporatefinanceinstitute.com/resources/knowledge/economics/price-taker/>.

6 "Agricultural Contracting Update, 2005," by James MacDonald and Penni Korb, Economic Information Bulletin Number 35, United States Department of Agriculture Economic Research Service, April 2008, at https://www.ers.usda.gov/webdocs/publications/44225/12193_eib35_1_.pdf?v=41055.

7 "The U.S. Role in the Price Determination of Major Agricultural Commodities," by Getachew Nigatu and Michael Adjemian, United States Department of Agriculture Economic Research Service, 2016, at file:///C:/Users/WPC%20AG/Downloads/IsTheUnitedStatesRoleInThePriceD_preview.pdf.

8 "Price Determination in Agricultural Commodity Markets: A Primer," by Randy Schenpf, CRS Report for Congress, Congressional Research Service, The Library of Congress, January 2006, at <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL33204.pdf>.

Agricultural markets are also more volatile than other commodity markets because of three factors: seasonality, changes in demand for specialty foods, and the relatively inelastic demand for food.⁹

Farmers must navigate these shifts in global prices, while also surviving in a market where the production costs are outpacing the prices received.¹⁰ Additionally, major inputs like oil affect the profitability of farms and the price of agricultural commodities is closely correlated with the price of oil.¹¹

Farms can be profitable through sound management and production decisions

With all of these external factors affecting the prices farmers must take, how does a farm make a profit?

Profitability is achieved on the farm by balancing the three aspects of farm business: prices, management, and production. As price-takers, very few farmers can control price, but they have significant amounts of influence over management and production.

Farmers can manage costs, crop storage, and marketing of their crop by choosing when to sell. Production decisions can be made scientifically, minimizing costs while maximizing profits. Power over these two aspects allows some farms to be profitable while less adept operators are impacted by the variability in the marketplace.¹²

However, when external factors, like government regulation, limit a farmers' flexibility, they have less control over profitability. Regulations leave farmers vulnerable to volatile market prices, despite their best efforts to remain viable.

Regulatory costs hurt farm profitability

The three words most often used by farmers to describe the effects of regulations, are "paperwork," "time," and "money." Rarely do they use words like "improved," "benefited," or "necessary," to describe the additional laws, rules, and court rulings imposed on farms.

Obviously not all regulations are bad and some are necessary for the high level of food safety in the United States. Yet, the ever-increasing burden of regulations, many of which do not help their targets or meet intended policy goals, has left many farmers vulnerable to economic hardship.¹³

Baylen Linnekin, a food-policy lawyer, said, "So many of the farmers I've spoken with tell me that stricter and stricter regulations have put many of their neighbors and

9 Ibid.

10 "Commodity Costs and Returns," United States Department of Agriculture Economic Research Service, at <https://www.ers.usda.gov/data-products/commodity-costs-and-returns/>.

11 "Oily Food," *The Economist*, October 2015, at <https://www.economist.com/news/finance-and-economics/21672342-fuel-price-shocks-have-big-influence-price-food-oily-food>.

12 "As 'price takers,' what are farmers to do?" by Michael Evanish, *Over the Fence, Lancaster Farming*, June 2017, at http://www.lancasterfarming.com/farming/dairy/as-price-takers-what-are-farmers-to-do/article_59d34f9b-ce2b-586a-8a72-39c21ebcf464.html.

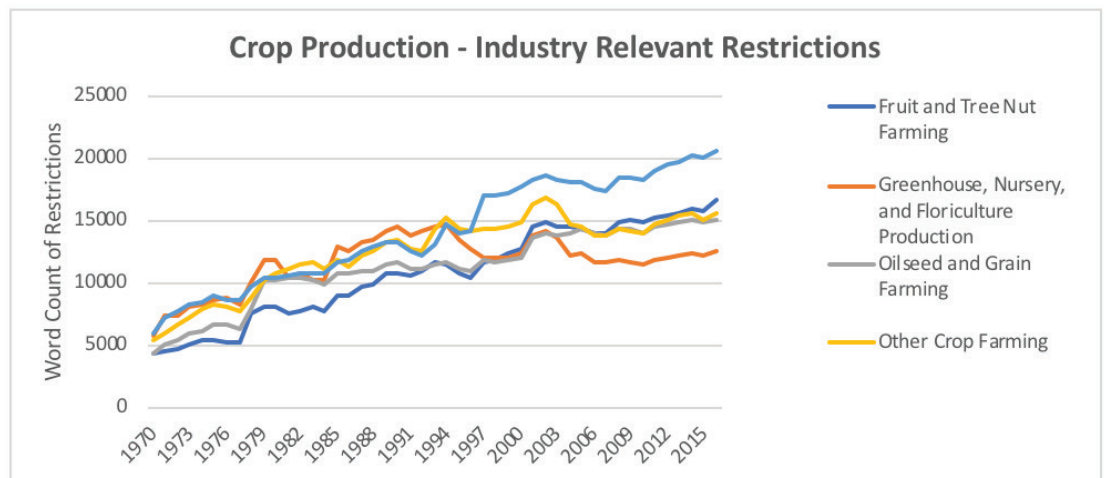
13 "When picking apples on a farm with 5,000 rules, watch out for the ladders," by Steve Eder, *The New York Times*, December 2017, at <https://www.nytimes.com/2017/12/27/business/picking-apples-on-a-farm-with-5000-rules-watch-out-for-the-ladders.html>.

friends out of business, and in doing so cost them their homes, land and livelihoods. For many farmers, rolling back regulations is the only way they can survive.”¹⁴

Since 1970, the number of regulations restricting farms has consistently increased, averaging an annual 2.15 percent increase in the number of regulations that include the words shall, must, may not, required, prohibited, and restrictions.¹⁵ The NAICS code is the North American Industry Classification used by the government to classify business establishments. This data looked at the increase in regulations associated with each industry code.

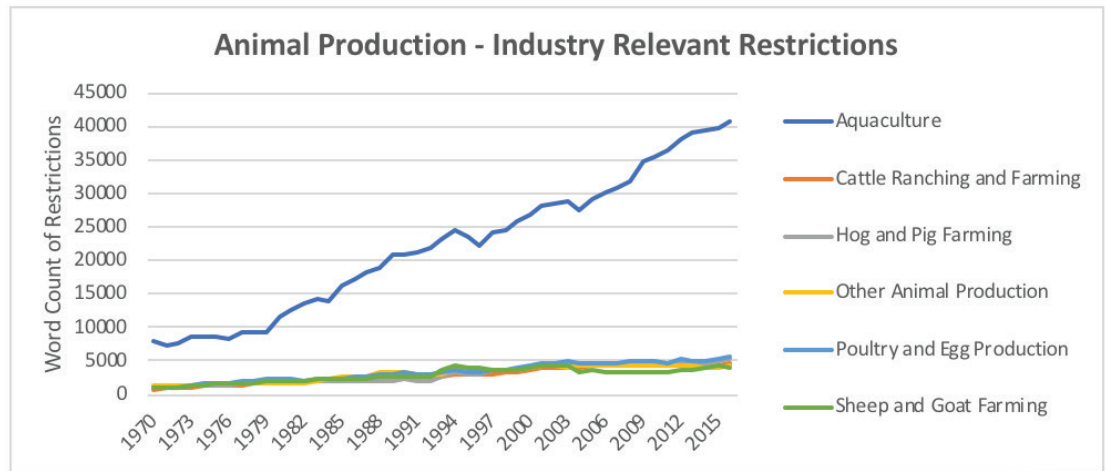
Industry Classification (by NAICS Code)	Average Annual Change (1970-2016)
Animal Production	2.87%
Aquaculture	3.78%
Cattle Ranching and Farming	4.23%
Hog and Pig Farming	4.12%
<u>Other</u> Animal Production	3.01%
Poultry and Egg Production	4.07%
Sheep and Goat Farming	3.33%
Beverage and Tobacco Product Manufacturing	3.41%
Crop Production	2.63%
Fruit and Tree Nut Farming	3.25%
Greenhouse, Nursery, and Floriculture Production	1.99%
Oilseed and Grain Farming	3.01%
<u>Other</u> Crop Farming	2.50%
Vegetable and Melon Farming	2.92%
Fishing, Hunting and Trapping	4.83%
Food and Beverage Stores	2.25%
Food Manufacturing	0.46%
Support Activities for Agriculture and Forestry	3.49%
Grand Total	2.15%

Aquaculture and vegetable/melon farming are the most strictly regulated. However, fruit and tree nut farming and cattle ranching have seen the greatest average increases in regulation. A visual representation of the NAICS data is presented below.



¹⁴ Ibid. (See also: “Biting the Hands that Feed Us,” by Baylen Linnekin, September 2016.)

¹⁵ “QuantGov—A Policy Analytics Platform,” by McLaughlin, Patrick A., and Oliver Sherouse, Mercatus Center, George Mason University, 2017, at http://docs.quantgov.org/quantgov_working_paper.pdf.



The sheer presence of regulations would be less concerning if their effects were more benign. However, the growing regulatory burden is having a direct negative effect on farm profitability.

A recent study entitled, “Effects of USDA and EPA Regulation on Farm Profitability and Productivity,” found that had USDA and EPA regulations stayed at 1997 levels through 2012, the total productivity growth in agriculture would have been 10 percent higher and 13.5 percent higher, respectively.¹⁶ The researchers recognized that productivity is a better measure of farm financial performance and managerial ability because it ignores the effect of prices and more accurately depicts regulatory impacts.

Conclusion: Washington state farmers would be better off without excessive regulations

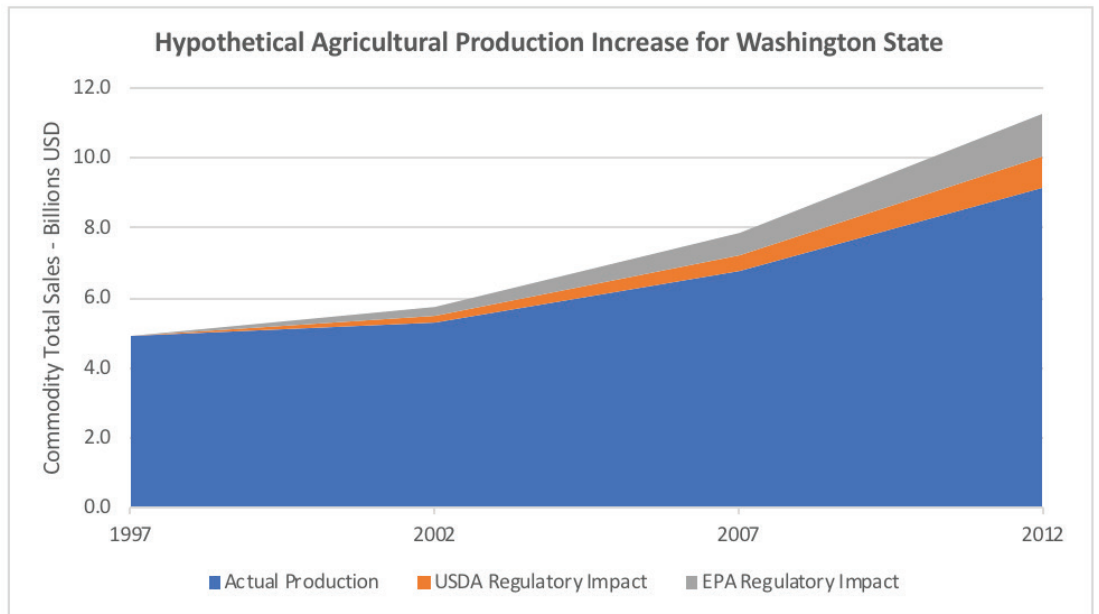
In Washington state, our growers are no exception to the increasing regulatory burden.¹⁷ Regulatory problems regarding water, labor, environmental policy, transportation, pesticide and other input use, taxes, trade, and farm policy are all mentioned by farmers and ranchers across the state.¹⁸

Applying the USDA and EPA findings on farm productivity, farmers in Washington state lost \$2.1 billion in productivity due to overregulation from 1997 through 2012. This estimate does not account for regulatory differences of states and crops. The chart below shows the hypothetical increase in production if regulation had remained consistent at 1997 levels. This estimate does not include the added effects of state regulation.

¹⁶ “Effects of USDA and EPA Regulation on Farm Profitability and Productivity,” by Levi Russell, John Crespi, and Michael Langemeier, Public Choice Society’s 2015 Annual Meeting, March 2015, at https://www.researchgate.net/publication/282815944_Effects_of_USDA_and_EPA_Regulation_on_Farm_Profitability_and_Productivity.

¹⁷ “Regulatory System Impacting Farmers and Ranchers,” Washington State Department of Agriculture, at <https://agr.wa.gov/FoF/docs/RegulatoryBurden.pdf>.

¹⁸ “Small apple growers disappear as industry grows,” by Dan Wheat, *Capital Press*, February 2018, at <http://www.capitalpress.com/Washington/20180222/small-apple-growers-disappear-as-industry-grows>.



Policymakers would be wise to keep these existing costs in mind before adding more regulation to the safest food system in the world. Farmers and Washington's citizens will benefit by policymakers reducing excessive regulation and by reassessing the effectiveness of our laws and their intended purpose.

As price-takers, farmers need flexibility to adapt to the variability of the market. Policies that encourage, rather than suppress, food production serve the public interest by promoting profitable and stable farm operations in Washington, to the benefit of all communities in the state.

Washington Policy Center is an independent research organization in Washington state. Nothing here should be construed as an attempt to aid or hinder the passage of any legislation before any legislative body.

Chairman	John Otter
President	Daniel Mead Smith
Vice President for Research	Paul Guppy
Communications Director	David Boze

If you have any comments or questions about this study, please contact us at:

Washington Policy Center
PO Box 3643
Seattle, WA 98124-3643

Online: www.washingtonpolicy.org
E-mail: wpc@washingtonpolicy.org
Phone: (206) 937-9691

© Washington Policy Center, 2018



About the Author

Madilynne Clark is the Director of the Initiative on Agriculture at Washington Policy Center, based in our Tri-Cities office.

An Oregon native, Madilynne brings a lifetime of experience in Agriculture to WPC. Her passion for agriculture grew as she helped her dad on veterinary calls and then became active in FFA.

Before joining WPC, she worked for Ag Association Management in Kennewick as an Account Manager and field rep for the Far West Spearmint Marketing Order. She worked with growers and industry across Washington, Oregon, and Idaho. She also spent two years as an associate of The Context Network. Her time involved working as a business analyst on various agriculture projects in production, wholesale, retail, and policy Ag sectors.

Madilynne holds a Master's Degree in Agricultural and Resource Economics from Colorado State University as well as a B.S. in Environmental Economics, Policy and Management from Oregon State University. When not working for WPC, she enjoys knitting, running, and every minute with her husband, two sons, and their dog, Parli.