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RE: Comments on Access to Fertilizer: Competition and Supply Chain Concerns (87 FR 15191): Docket number AMS-AMS-22-0027; Page 15191-15194; submitted online via www.regulations.gov

Introduction

Farm Action and the undersigned organizations (collectively, "Commenters") thank you for the opportunity to comment in response to your request for information: Access to Fertilizer: Competition and Supply Chain Concerns.

In our comments, we will respond to questions (1), (2), (3), (4), (10), (11), (14), and (15). We will demonstrate that the fertilizer industry is highly consolidated and that fertilizer corporations have used their market dominance to price-gouge farmers by tying fertilizer prices to commodity prices, instead of to natural market pressures. They have done so under the guise of global crises, mounting costs, and supply chain issues; however, their own financial statements and sky-rocketing profits clearly refute these excuses. Instead, they are effectively robbing farmers of their profits, contributing to the hollowing-out of rural America, and driving up food prices for the consumer. In response, we ask the USDA to work towards decentralizing fertilizer production, while simultaneously decreasing our dependence on synthetic fertilizer cartels by incentivizing alternative forms of fertility management.

Overview of the fertilizer industry

The 1980s marked the beginning of a period of rapid consolidation within domestic fertilizer production and distribution. Between 1980 and the mid-2000s, low commodity prices and high input expenses led to a drop in fertilizer demand.[1] The 1980s also marked the beginning of a new federal approach to antitrust enforcement that prioritized efficiencies and consumer

[1] Bekkerman, A., G.W. Brester, and D. Ripplinger. 2020. "The History, Consolidation, and Future of the U.S. Nitrogen Fertilizer Production Industry." Choices. Quarter 2. Available at: https://www.choicesmagazine.org/choices-magazine/submitted-articles/the-history-consolidation-and-future-of-the-us-nitrogen-fertilizer-production-industry

welfare over competitive markets.[2] This new approach, known as the Chicago School of thought, resulted in more lenient and permissive merger and acquisition reviews.[3] Between 1980 and the mid-2000s, the number of fertilizer firms declined from 46 to 13.[4] As demand rose with biofuel policies that incentivized corn production (and subsequently fertilizer) and simultaneously natural gas prices (the main feedstock of nitrogen-based fertilizers) fell with the advent of hydraulic fracturing technologies, this pattern of consolidation did not slow, but instead continued on at an aggressive pace. This resulted in fewer firms owning and operating an increasing number of production facilities.[5]

Today, the industry is dominated by a handful of major players. In each of the major fertilizer input sectors (nitrogen, phosphorus, and potassium), only a handful of corporations dominate US production and supply. In 2019, only four corporations represented 75% of the production and sale of nitrogen-based fertilizer in the US: CF Industries, Nutrien Limited, Koch, and Yara-USA.[6] Today, just two companies supply the entirety of North America with potash, a potassium-based fertilizer: Nutrien Limited and Mosaic Company. In phosphorus, Mosaic Company is estimated to control approximately 90% of domestic production.[7]

Despite existing fertilizer cartels, corporations in this highly-consolidated industry are still on high alert for merger and acquisition opportunities — leading to further industry concentration while also driving expansion into specialized industries and retail markets.[8] In 2013, Mosaic purchased CF Industries' phosphate business in order to strengthen its dominance in the phosphorus sector, while simultaneously enabling CF Industries to increase its control over

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[2] Farm Action. 2022. Comments submitted to the FTC and DOJ re: Request for Information on Merger Enforcement. Available at: https://farmaction.us/wp-content/uploads/2022/04/Farm-Action-Merger-Guidelines-Comment-4.21.22.pdf

[3] Farm Action. 2022. Comments submitted to the FTC and DOJ re: Request for Information on Merger Enforcement. Available at: https://farmaction.us/wp-content/uploads/2022/04/Farm-Action-Merger-Guidelines-Comment-4.21.22.pdf

[4] Bekkerman, A., G.W. Brester, and D. Ripplinger. 2020. "The History, Consolidation, and Future of the U.S. Nitrogen Fertilizer Production Industry." Choices. Quarter 2. Available at: https://www.choicesmagazine.org/choices-magazine/submitted-articles/the-history-consolidation-and-future-of-the-us-nitrogen-fertilizer-production-industry

[5] Bekkerman, A., G.W. Brester, and D. Ripplinger. 2020. "The History, Consolidation, and Future of the U.S. Nitrogen Fertilizer Production Industry." Choices. Quarter 2. Available at: https://www.choicesmagazine.org/choices-magazine/submitted-articles/the-history-consolidation-and-future-of-the-us-nitrogen-fertilizer-production-industry

[6] Bekkerman, A., G.W. Brester, and D. Ripplinger. 2020. "The History, Consolidation, and Future of the U.S. Nitrogen Fertilizer Production Industry." Choices. Quarter 2. Available at: https://www.choicesmagazine.org/choices-magazine/submitted-articles/the-history-consolidation-and-future-of-the-us-nitrogen-fertilizer-production-industry

[7] Vasquez, J. 2020. "U.S. Fertilizer Prices Surge to Decade High." Farm Progress. Available at: https://www.farmprogress.com/fertilizer/us-fertilizer-prices-surge-decade-high

[8] Bekkerman, A., G.W. Brester, and D. Ripplinger. 2020. "The History, Consolidation, and Future of the U.S. Nitrogen Fertilizer Production Industry." Choices. Quarter 2. Available at: https://www.choicesmagazine.org/choices-magazine/submitted-articles/the-history-consolidation-and-future-of-the-us-nitrogen-fertilizer-production-industry

domestic nitrogen production.[9] In October of 2018, Yara announced that in order to "streamline" its phosphate production in Brazil, it would be acquiring 100% of the shares of Galvani Indùstria, Comércio e Serviços S.A., of which it had been a majority shareholder since 2014.[10]

Meanwhile, Nutrien has also been actively securing its position of market dominance by expanding into specialty fertilizers and vertically integrating into the retail market. In August of 2019, Nutrien received regulatory approval (via its Australia-based subsidiary, Landmark) to acquire its Australian rival RuralCO for $332 million, thus reducing major farm service corporations in Australia to two.[11] In February of 2019, Nutrien announced its intentions to buy California-based Actagro, a specialty fertilizer company, for $340 million.[12] Moreover, by the end of 2018, Nutrien had sold 24% of its stake in Chile's SQM (Sociedad Quimica y Minera) to China's Tianqi Lithium Corp and its 28% stake in Jordan's Arab Potash Company to China's state-owned SDIC Mining Investment Company. It then applied the revenue from these two sales to expand its network of U.S.-based farm retail outlets, which sell seeds and pesticides in addition to fertilizer.[13]

As a result of this period of rapid consolidation, today the fertilizer industry is controlled by a handful of corporations whose position of market dominance over the three major macronutrients (N-P-K) is deeply entrenched. These corporations are aggressively on the lookout to further strengthen their monopoly control, while expanding into specialty fertilizers, micronutrients, and the retail industry.

Evidence of illegal price-gouging in the fertilizer industry

Since the 1980s, weak antitrust enforcement has been justified by the "consumer welfare" approach — an idea introduced by a group of Chicago School economists during the Reagan administration. Traditionally, antitrust law was tasked with promoting competition and preventing corporations from amassing enough political power to threaten democracy. Under Reagan, the Department of Justice (DOJ) redesigned the scope of those laws to instead promote efficiency.[14] This was a radical digression from the existing antitrust law interpretations: the

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[9] Nickel, R. 2013. "Mosaic to buy CF's phosphate business for $1.2 billion." Reuters. Available at: https://www.reuters.com/article/us-mosaic-cfindustries/mosaic-to-buy-cfs-phosphate-business-for-1-2-billion-idUSBRE99R0QP20131028

[10] Yara news release, "Yara secures 100% of Galvani minority interests including Salitre phosphate project," 05 October 2018: https://www.yara.com/corporate-releases/yara-secures-100-of-galvani-minority-interests-including-salitre-phosphate-project/

[11] ETC Group. 2019. "Plate Tech Tonics: Mapping Coorporate Power in Big Food." Available at: https://etcgroup.org/sites/www.etcgroup.org/files/files/etc_platetechtonics_a4_nov2019_web.pdf

[12] ETC Group. 2019. "Plate Tech Tonics: Mapping Coorporate Power in Big Food." Available at: https://etcgroup.org/sites/www.etcgroup.org/files/files/etc_platetechtonics_a4_nov2019_web.pdf

[13] ETC Group. 2019. "Plate Tech Tonics: Mapping Coorporate Power in Big Food." Available at: https://etcgroup.org/sites/www.etcgroup.org/files/files/etc_platetechtonics_a4_nov2019_web.pdf

[14] United States Department of Justice, *1982 Merger Guidelines.* Washington: US DOJ. 1982. https://www.justice.gov/archives/atr/1982-merger-guidelines; Federal Trade Commission, *The Evolution of U.S.*

purpose of antitrust law would no longer be to promote competition through the maintenance of open markets, but would instead increase and maintain our access to cheap goods.[15]

And yet the high levels of consolidation seen in our fertilizer industry today have not led to the promised lower prices. Instead, we have seen record price spikes that are not reflective of increased production costs, but instead indicative of industry-wide collusive pricing behaviors and profiteering. In December of 2021, months before the Russian invasion of Ukraine, both Senator Grassley and Farm Action sent letters to the DOJ calling for an investigation into the highly-consolidated fertilizer sector on suspicion of anti-competitive practices.[16] Recent record-breaking fertilizer prices coincided suspiciously with an increase in income farmers were earning from commodity crops. While fertilizer corporations claimed these prices were the result of shortages and high natural gas prices, their own annual and quarterly reports refuted these claims.[17]

In 2021, and particularly in the last quarter of the calendar year, the price of all major nutrients used in crop production — Nitrogen, Phosphorus, and Potassium (NPK) — skyrocketed at record-breaking rates and levels. Compared to September 2020 prices, the main nitrogen-based fertilizers — anhydrous ammonia, urea, or liquid nitrogen — increased 210%, 155%, and 159% respectively. Phosphorus-based fertilizers, Diammonium phosphate (DAP) and Monoammonium phosphate (MAP), increased 100% and 125% respectively. Potash, the main source of potassium, rose over 134%.[18] Since the Russian invasion of Ukraine, these prices have only continued to rise. Today, of the eight major fertilizers the DTN index tracks, five of them (DAP, urea, anhydrous, UAN28, and UAN32) are at all-time record highs. Of the other three (MAP, potash, and 10-34-0), MAP and potash are precipitously close to their record high, leaving 10-34-0 as the only fertilizer not presently on track to break its own record.[19]

Fertilizer corporations have blamed the war in Ukraine, global shortages, and rising costs of production on these price increases; however, fertilizer companies' own financial statements indicate otherwise. As we have explained, fertilizer prices were rising at alarming rates far before

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Merger Law, Debra Valentine. Washington: US FTC, 1996, https://www.ftc.gov/public-statements/1996/08/evolution-us-merger-law

[15] Khan, Lina. 2012. "Obama's game of chicken." Washington Monthly. Available at: https://washingtonmonthly.com/2012/11/09/obamas-game-of-chicken/

[16] Farm Action. (2021, December 8). *Farm advocates call for doj-investigation into suspicious spike in fertilizer prices* [Press release]. Retrieved from https://farmaction.us/2021/12/08/farm-advocates-call-for-doj-investigation-into-suspicious-spike-in-fertilizer-prices/ ; Chuck Grassley. (2021, December 17). *Grassley to Garland: Investigation needed in the fertilizer industry* [Press release]. Retrieved from https://www.grassley.senate.gov/news/news-releases/grassley-to-garland-investigation-needed-in-the-fertilizer-industry

[17] Farm Action. (2021, December 8). *Farm advocates call for doj-investigation into suspicious spike in fertilizer prices* [Press release]. Retrieved from https://farmaction.us/2021/12/08/farm-advocates-call-for-doj-investigation-into-suspicious-spike-in-fertilizer-prices/

[18] Myers, S. and V. Nigh. 2021. "Too Many to Count: Factors Driving Fertilizer Prices Higher and Higher." Farm Bureau. Available at: https://www.fb.org/market-intel/too-many-to-count-factors-driving-fertilizer-prices-higher-and-higher

[19] Quinn, R. 2022. "DTN Retail Fertilizer Trends." Progressive Farmer. Available at: https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/04/13/fertilizers-look-set-price-records

Russia invaded Ukraine. As noted, these price spikes were sufficiently suspicious to prompt both Senator Grassley and Farm Action's calls for the DOJ "to investigate concerns raised by American farmers about possible anticompetitive activity and market manipulation in the fertilizer industry."[20] The Russian invasion of Ukraine has provided a convenient shield for fertilizer corporations to hide behind, as their attempts at pandemic-profiteering were beginning to attract attention prior to the invasion of Ukraine.

Fertilizer companies have also attributed these rising prices to global shortages, yet their own documents refute any shortage claims by revealing that they have additional capacity they are not utilizing. While it is true that natural gas prices are currently high, Yara's 2021 third quarter report explicitly states that this has had "[l]imited impact on finished fertilizer production to date."[21] Nutrien's annual reports of 2020 and 2021 reflect their own ability to adjust production levels to meet demand. Their 2020 report states that, "due to historically low global ammonia prices we curtailed production…while maintaining flexibility to respond to improvements in the market condition."[22] Furthermore, their 2021 annual report boasts of their increased potash production: "We responded to extremely tight global market fundamentals and safely and efficiently increased our production by nearly 1 million tonnes [of potash]. We ramped up production in a very short time showcasing the flexibility and superior asset quality of our low-cost, integrated six-mine network. This represented a small portion of our low-cost available production capacity."[23] In effect, they are boasting of how little global markets affect their own production and supply networks. From their very own reports, they tell us that there are no capacity shortages — and yet farmers across the country are grappling with fertilizer price increases that knock their feet out from under them.

Fertilizer corporations have also blamed increased production and operating costs on rising fertilizer prices. While their costs may be up, the enormous gains in their gross operating margins demonstrate that the rate of these price spikes is not justified by their increased expenses. In 2021, Nutrien's cost of goods sold did increase by 58% compared to 2020; however, their gross manufacturing margin was up 669% from 2020.[24] CF Industries saw their gross

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[20] Farm Action. (2021, December 8). *Farm advocates call for doj-investigation into suspicious spike in fertilizer prices* [Press release]. Retrieved from https://farmaction.us/2021/12/08/farm-advocates-call-for-doj-investigation-into-suspicious-spike-in-fertilizer-prices/ ; Chuck Grassley. (2021, December 17). *Grassley to Garland: Investigation needed in the fertilizer industry* [Press release]. Retrieved from https://www.grassley.senate.gov/news/news-releases/grassley-to-garland-investigation-needed-in-the-fertilizer-industry

[21] Yara International ASA. 2021. "Yara International ASA 2021 Third quarter results." Available at https://www.yara.com/investor-relations/latest-quarterly-report/

[22] Nutrien. 2020. "Leading Solutions for Sustainable Agriculture: Nutrien Annual Report 2020." Available at https://www.nutrien.com/investors/financial-reporting

[23] Nutrien. 2021. "Annual Report 2021." Available at: https://nutrien-prod-asset.s3.us-east-2.amazonaws.com/s3fs-public/uploads/2022-03/2021%20Nutrien_Annual%20Report_Enhanced_PDF.pdf

[24] Nutrien. (2022, February 16). *Nutrien Delivers Record Results and Expects Continued Growth in 2022* [Press release]. Retrieve from https://nutrien-prod-asset.s3.us-east-2.amazonaws.com/s3fs-public/uploads/2022-02/022-003%20-%20Nutrien%20Delivers%20Record%20Results%20and%20Expects%20Continued%20Growth%20in%202022_0.pdf

margin increase by 298% in 2021, though the cost of sales only accounted for 125% of that increase.[25] Yara's 2021 annual report admits that "increased price transparency can challenge fertilizer premiums;" the authors go on to attribute the 76% increase in U.S. earnings before interest, taxes, depreciation, and amortization (EBITDA) since last year to "high production margins in North America and slightly higher deliveries."[26] These corporations are well aware of their leverage and have used the cover of consecutive global crises to raise prices far beyond those demanded by necessity.

Given that the industry's own financial returns belie the myth that shortages, increased operating expenses, and the war in Ukraine are causing the fertilizer price hikes, they actually appear to be more closely aligned with the rising prices farmers are able to get for their grain harvests. In fact, in 2018, Yara stated that "[v]ariations in grain prices (corn or wheat) explain approximately 50% of the variations in the urea price, making grain prices one of the most important factors driving fertilizer prices."[27] The chart below of global grain and fertilizer prices demonstrates just how closely tied these two trends are.

On average, corn prices rose more than 24% in 2021 and are up nearly 60% today relative to January of 2021.[28] Wheat prices rose around 15% in 2021 and today are nearly double what they were in the beginning of 2021.[29] Grain prices have become the industry's standard way to signal pricing and avoid the appearance of collusion. In effect, these corporations are tying the price of their products to the farmer's ability to pay, rather than to supply and demand — which equates to an abuse of the market. Such abuses allow concentrated corporations to extract maximum profit out of the supply chain, leaving the farmer with no hope of profitability.

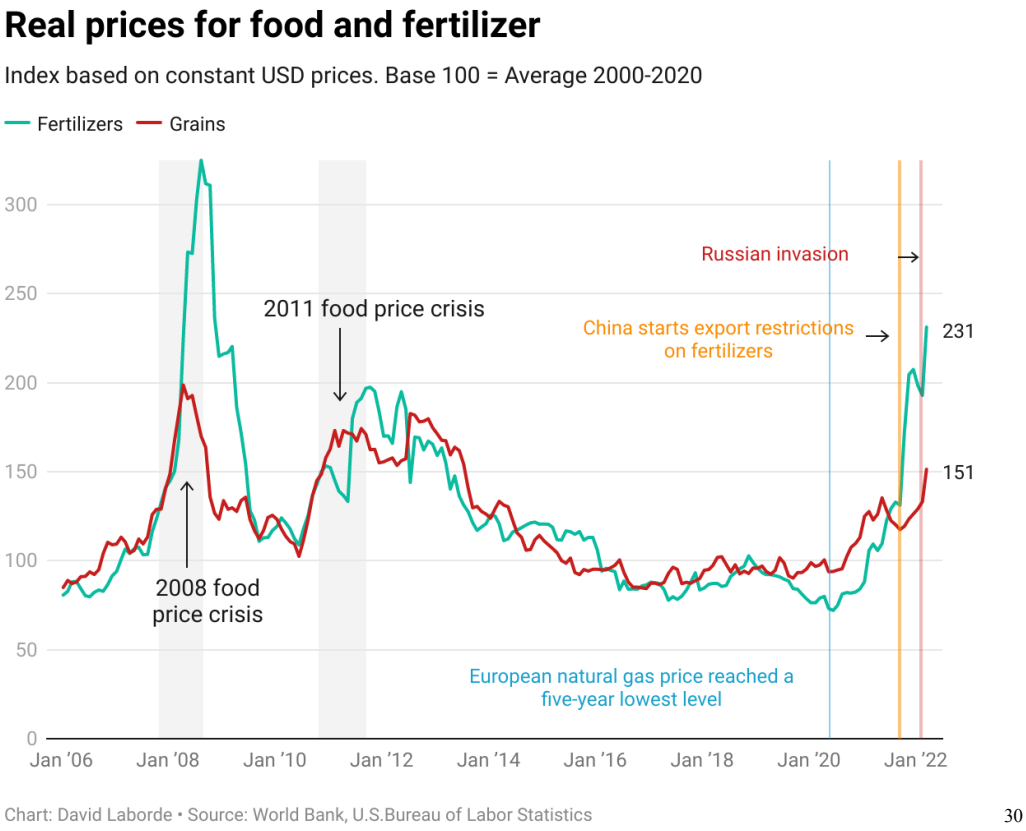
[25] CF Industries. 2021. "Annual Report 2021." Available at: https://www.cfindustries.com/globalassets/cf-industries/media/documents/reports/annual-reports/cfindustriesannualreport2021.pdf

[26] Yara. 2021. Yara Integrated Report 2021: Growing a Nature-Positive Food Future." Available at: https://www.yara.com/siteassets/investors/057-reports-and-presentations/annual-reports/2021/yara-integrated-report-2021.pdf/

[27] Yara International. 2018. "Yara Fertilizer Industry Handbook." Available at: https://www.yara.com/siteassets/investors/057-reports-and-presentations/other/2018/fertilizer-industry-handbook-2018 -with-notes.pdf/

[28] "Corn Prices - 59 Year Historical Chart." Macrotrends. Available at: https://www.macrotrends.net/2532/corn-prices-historical-chart-data

[29] "Wheat Prices - 40 Year Historical Chart." Macrotrends. Available at: https://www.macrotrends.net/2534/wheat-prices-historical-chart-data



[30]

Farmers robbed of their profits

When fertilizer companies use their positions of market dominance to collude and tie prices to the commodity market, they not only rob the farmer of their profits but also of their livelihoods. The farmer is simply unable to get ahead. Furthermore, rising fertilizer prices are forcing farmers to make farm management decisions that are not in the best interest of their land, their crop yields, the environment, or their communities — but instead are driven by the financial restrictions imposed by such significant increases in expense.

As fertilizer prices spiked at the end of 2021 in concert with rising commodity prices, several studies indicated these ballooning fertilizer prices would consume farmers' profits and predicted that net income would fall. The Agricultural and Food Policy Center (AFPC) at Texas A&M has maintained a farm-level policy simulation model for over 30 years. Their model predicted fertilizer expenses would go up in 2022 (Nitrogen at 9.94% and Potash and Phosphorus at 13.61%); however, their model did not predict increases at the rates we saw in 2021. Their

[30] Hebebrand, C. and D. Laborde. 2022. "High fertilizer prices contribute to rising global food security concerns." International Food Policy Research Institute. Available at: https://www.ifpri.org/blog/high-fertilizer-prices-contribute-rising-global-food-security-concerns

study ran two models, one at the predicted fertilizer rate and a second at adjusted rates of 55.43% for Nitrogen and 50.84% for Potash and Phosphorus, based on the most recent fertilizer data at the time. A comparison of the two scenarios resulted in substantial net farm income reductions and significantly higher fertilizer expenses for farmers. Specifically, in feed corn farms, their models showed an average loss of income of $94,000 per farm due to increased fertilizer expense of $39.55 per acre.[31]

Another study from the University of Illinois predicted similar, if not more substantial, impacts on net farm income due to rising fertilizer costs. It projected that increasing fertilizer costs would lower farm incomes by 34%. At the baseline price of $5.00/bu of corn and $12.00/bu of soybeans, which at the time was considered high, this meant a drop in farm income from 2020 and 2021 levels. Prior to the global food shortage triggered by the war in Ukraine, USDA long-term price predictions for corn and soy were $4.80/bu and $10.50/bu, respectively. This study modeled that if those price predictions were accurate, then net farm income would drop to $64,600 — a reduction of more than $20,000 from the 2013-2019 average of $85,000, and nowhere near 2020 and 2021 income levels.[32]

Farming is a risky business: no two years are the same and the combined effects of the volatility of nature and global pricing has led us to spend billions of U.S. taxpayer dollars supporting farmers through the bad years. By tying their pricing to commodity markets and consequently stealing farmers' profits, fertilizer corporations are increasing American farmers' dependence on federal support programs. When commodity prices are low, they farm for the government programs, but as they go up and fertilizer companies rob them of their profits, they once again rely on these support programs. Instead of being able to use these profits to pay off heavy debt-loads or invest in updated equipment, American farmers are forced to continue to take on increasingly untenable levels of debt and source significant portions of their incomes from government support programs. Farm debt-load has been steadily rising since 1991[33] and in 2019, government payments made up approximately one fifth, at 20.6%, of all farmer income.[34]

Smaller independent farms are further disadvantaged by the kinds of spikes in price we are seeing today because they do not have access to the kind of capital industrial operations do. Without the capital required to purchase fertilizer, they will be forced to adjust their crop plans in

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[31] Agriculture and Food Policy Center. 2022. "Economic Impact of High Fertilizer Prices on AFPC's Representative Crop Farms." Texas A&M University. Available at: https://www.afpc.tamu.edu/research/publications/files/711/BP-22-01-Fertilizer.pdf

[32] Schnitkey, G., C. Zulauf, K. Swanson, N. Paulson and J. Baltz. 2021. "2022 Grain Farm Income Projections Negatively Impacted by Fertilizer Cost Increases." farmdoc daily (11): 156, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign. Available at: https://farmdocdaily.illinois.edu/2021/11/2022-grain-farm-income-projections-negatively-impacted-by-fertilizer-cost-increases.html

[33] U.S. Department of Agriculture Economic Research Service. 2022. "Assets, Debt, and Wealth." Available at: https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/assets-debt-and-wealth/

[34] Jansen, D. L. Liu, and A. Rettenmaier. 2021. "U.S. Farm Subsidies: A Prime Example of Crony Capitalism." Texas A&M University Private Enterprise Research Center. Available at: https://perc.tamu.edu/PERC-Blog/PERC-Blog/U-S-Farm-Subsidies-A-Prime-Example-of-Crony-Capita

ways that may have a series of detrimental effects, and then further miss out on the high grain prices we are seeing today.

Forced into even tighter financial constraints, farmers are forced into four courses of action: to plant less acreage, to reduce fertilizer applications, to adjust crop plans to favor less fertilizer-intensive crops (such as shifting from corn/wheat to soy), or to consider less-conventional forms of fertility. The first two options both lead to lower yields and lower incomes at a time when a global food crisis is brewing and the USDA is even being asked to consider removing sensitive acreage from the Conservation Reserve Program to help address growing food shortages.[35] Not only will reducing fertilizer applications affect yields, but they could also lead to lower quality in existing yields — both of which will exacerbate rising food prices and global food shortages.[36] If ever there was a time that we should be supporting our farmers to maximize their yields and produce as much food as they can, it should be now. Instead, fertilizer companies are forcing farmers to reduce the potential of their harvests before they have even begun.

The third option — to adjust their crop plans so that they rely more heavily on crops that have reduced fertility demands — has led to a record-high number of acres reportedly being planted in soybean this year, which require less fertilizer than other commodity crops.[37] Higher than average soybean acreages imply that there will be an increase in acres that have been double-cropped in soybean. In other words, instead of rotating between crops to reduce pest and disease pressure, many fields that were planted in soybean in 2021 will be planted again in soybean in 2022. While this may help farmers manage their input expenses, the SCN Coalition has issued an advisory to farmers to consider the economic and agronomic impacts that could occur in fields infested with soybean cyst nematodes (SCN).[38] In normal years, economic losses attributed to yield losses caused by SCN exceed $1 billion annually in the US.[39] Following soybean with a non-host crop (such as corn or wheat) is one of the most effective ways to reduce SCN populations, so increasing pressure on farmers to follow soy crops with consecutive soy crops will likely have longer-lasting impacts, such as increased SCN population densities and

[35] Clayton, C. 2022. "USDA Rejects Opening Up CRP Acres." Progressive Farmer. Available at: https://www.dtnpf.com/agriculture/web/ag/news/article/2022/04/07/ag-secretary-vilsack-rejects-open-2

[36] Elkin, E. and S. Gebre. 2022. "Can the World Feed Itself? Historic Fertilizer Crunch Threatens Food Security." Bloomberg. Available at: https://www.bloomberg.com/news/articles/2022-05-01/farmers-are-struggling-to-keep-up-food-supply-as-fertilizer-prices-surge?sref=IVPsl6pg

[37] United States Department of Agriculture. (2022, March 31). *US Farmers expect to plant more soybeans and less corn acreage* [Press release]. Retrieved at: https://www.nass.usda.gov/Newsroom/2022/03-31-2022.php

[38] Grant, D. 2022. "Plan for record soy acres enhances SCN risk." Farm Week. Available at: https://www.farmweeknow.com/crop_conditions/plan-for-record-soy-acres-enhances-scn-risk/article_63a21aa0-bb63-11ec-b9ce-03ad052bd729.html

[39] Grant, D. 2022. "Plan for record soy acres enhances SCN risk." Farm Week. Available at: https://www.farmweeknow.com/crop_conditions/plan-for-record-soy-acres-enhances-scn-risk/article_63a21aa0-bb63-11ec-b9ce-03ad052bd729.html

pesticide-resistant varieties.[40] As fertilizer companies profiteer and gouge farmers, they are not only robbing them of their profits, but also preventing them from implementing smart and responsible farming practices that improve their property and safeguard their future viability.

Finally, farmers' only other recourse is to consider alternative forms of fertility — such as animal manure or cover cropping; however, transitioning to these systems is a longer-term process that requires substantially different management plans, different equipment, and sometimes higher upfront costs. All of this yields longer-term benefits, but it is not a decision that farmers can make quickly in such a volatile market. Despite these hurdles, some farmers are clearly exploring these options as we hear reports that demand for inputs such as chicken manure is increasing and driving the price of chicken manure to a record high.[41]

Farmers are not the only ones affected by fertilizer cartels

The impact on the farmer is just the tip of the iceberg when it comes to the consequences of corporate monopoly control in fertilizer. Consolidation in the fertilizer industry has fueled the consolidation of U.S. farmland (and the associated rise in corporate absentee ownership), contributed to the hollowing-out of rural America, and burdened the American public with rising food costs.

Fertilizer corporations' price manipulations are driving farm consolidation and leading to increased rates of absentee corporate ownership. Robbed of their profits, which they need to invest in farm upgrades, reduce debt loads, and lay away financial buffers for the the harder years, farmers' prospects are growing increasingly bleak. This is further exacerbated by the limited credit smaller farms can access compared to the much larger amounts of capital that bigger, consolidated operations enjoy. As a result, we have seen dramatic changes in farm size and structure over this period of industry consolidation. The midpoint in farm size has grown from 650 acres in 1987 to 1,445 acres in 2017.[42] As farms grow and consolidate, their structures change dramatically, from the traditional family-owned and -operated model to an industrialized operation model — which comes with corresponding increases in absentee corporate ownership and vertical integration.[43]

Fertilizer corporations continue to consolidate and hunt aggressively for new merger and acquisition opportunities; for example, Nutrien has vertically integrated into the retail market. In 2021, Nutrien reported $1.9 billion in its adjusted retail earnings (EBITDA), which amounts to

[40] Grant, D. 2022. "Plan for record soy acres enhances SCN risk." Farm Week. Available at: https://www.farmweeknow.com/crop_conditions/plan-for-record-soy-acres-enhances-scn-risk/article_63a21aa0-bb63-11ec-b9ce-03ad052bd729.html

[41] Venesky, T. 2022. "Fertilizer Costs Fuel Demand for Chicken Manure. Lancaster News. Available at: https://www.lancasterfarming.com/news/main_edition/fertilizer-costs-fuel-demand-for-chicken-manure/article_f1ab8c6a-8304-11ec-bc8b-57fedb954cdf.html

[42] Hendrickson, M., P. Howard, E. Miller, and D. Constance. 2020. "The Food System: Concentration and its Impacts." Special Report for Farm Action. Available at: https://farmaction.us/concentrationreport/

[43] Stofferahn, C. 2006. "Industrialized Farming and its Relationship to Community Well-Being." Report prepared for State of North Dakota.

27% of its total adjusted earnings.[44] It now operates more than 2,000 retail locations, through which it markets fertilizer, seeds, and other crop inputs, as well as other grower services.[45] The corporation is investing heavily in this sector, and its 2021 Annual Report boasts that, "Nutrien has the leading Retail businesses in North America and Australia and…[is] growing significantly in South America."[46]

The growth of Nutrien's retail sector has come at the expense of independent rural businesses around the country. Multinational corporations like Nutrien are driving out competition through a number of different pricing mechanisms. They move into areas where independent businesses have existed for generations, supporting local farming operations, and offer below-market prices for their products. They can take short term losses while they wait for the local competition to inevitably go under. They can even make up some of these losses by increasing prices at other retail locations where they have no competition. By driving up wholesale prices, as we see today, they can also stretch smaller independent businesses' credit limits — which do not rise along with the rising cost of fertilizer — and force them to operate on increasingly restrictive budgets.

The most recent nail in the coffin has been the reported manipulation of credit terms. One independent operator reported to us that his credit terms are being reduced by his suppliers from 45 days to an inoperable ten. Unable to impose these kinds of terms on his local farming clients, he predicted this new tactic would drive out all local competition before the year's end.[47]

As local independent farm supply and service operators disappear from communities, they take with them an essential revenue stream. The income generated by these local suppliers once stayed within the community — held in local banks, invested in local real estate, spent at local stores and restaurants — but is now moving out of those communities and into the pockets of Nutrien executives.

Beyond robbing farmers of their profits and taking down local businesses, consolidation in the fertilizer industry is also contributing to the hollowing-out of rural America by extracting wealth and opportunity. When smaller independent farms are absorbed by large conglomerate entities or Wall Street investors, and independent businesses are replaced by multinational outlets, rural communities lose job opportunities, experience depopulation, and face decreased tax revenue streams. Loss in tax revenues leads to school closures and the shuttering of critical-care infrastructure, further driving depopulation trends and adding to mounting levels of poverty.

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[44] Nutrien. 2021. "Annual Report 2021." Available at: https://nutrien-prod-asset.s3.us-east-2.amazonaws.com/s3fs-public/uploads/2022-03/2021%20Nutrien_Annual%20Report_Enhanced_PDF.pdf

[45] Nutrien. 2021. "Annual Report 2021." Available at: https://nutrien-prod-asset.s3.us-east-2.amazonaws.com/s3fs-public/uploads/2022-03/2021%20Nutrien_Annual%20Report_Enhanced_PDF.pdf

[46] Nutrien. 2021. "Annual Report 2021." Available at: https://nutrien-prod-asset.s3.us-east-2.amazonaws.com/s3fs-public/uploads/2022-03/2021%20Nutrien_Annual%20Report_Enhanced_PDF.pdf

[47] G. Hamilton, personal communication, April 22, 2022.

Today, many communities have little to no access to basic services, such as banks or healthcare, and other critical infrastructure for self-determination. Rural communities face higher rates of poverty[48] and higher rates of food insecurity[49] than urban areas. Up to forty percent of rural Americans have reported struggling with routine medical bills, food, or housing; nearly half of rural Americans have stated that they could not afford to pay an unexpected $1,000 expense of any type.[50]

Higher fertilizer prices cause food insecurity

Not to be overlooked is fertilizer's impact on our nation's escalating food insecurity problem. Domestically, food prices are up 8.8% from March 2021 to March 2022[51] and global food prices have jumped 20.7%.[52] Fertilizer, which accounts for approximately 15% of total cash costs in the U.S.,[53] is undoubtedly driving food prices up both in the States and abroad.

There are well-founded concerns these prices will increase as the season advances and farmers are unable to apply fertilizer at their usual rates. Independent groups are estimating not only reductions in yields but also in quality, leading to even higher grocery prices for everything from dairy, to meat, to packaged foods for months or even years to come.[54]

Undoubtedly, global crises have contributed to some of the rising fertilizer expenses, but as we have demonstrated, fertilizer corporations are reporting record-high profit margins that do not reflect their increased expenses. Instead, fertilizer companies are using global crises as an excuse to inflate their prices at the expense of farmers, rural communities, and consumers.

Solutions

Given the wide scope of established harms inflicted by a consolidated fertilizer industry, we urge the USDA to support the decentralization of fertilizer production. There are a number of

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[48] Hunger in Rural Communities. FEEDING AMERICA. https://www.feedingamerica.org/hunger-in-america/rural-hunger-facts (last visited Apr. 19, 2022).
[49] Hunger in Rural Communities. FEEDING AMERICA. https://www.feedingamerica.org/hunger-in-america/rural-hunger-facts (last visited Apr. 19, 2022).
[50] Neel. J. and P. Neighmond. 2019. "Poll: Many Rural Americans Struggle with Financial Insecurity, Access to Health Care." NPR. Available at: https://www.npr.org/sections/health-shots/2019/05/21/725059882/poll-many-rural-americans-struggle-with-financial-insecurity-access-to-health-ca.
[51] USDA ERS. 2022. "Food Price Outlook." Available at: https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/
[52] Reuters. 2022. "Food prices jump 20.7% yr/yr to hit record high in Feb, U.N. agency says." Available at: https://www.reuters.com/world/food-prices-hit-record-high-february-un-agency-says-2022-03-04/
[53] Myers, S. and V. Nigh. 2021. "Too Many to Count: Factors Driving Fertilizer Prices Higher and Higher." Farm Bureau. Available at: https://www.fb.org/market-intel/too-many-to-count-factors-driving-fertilizer-prices-higher-and-higher
[54] Elkin, E. and S. Gebre. 2022. "Can the World Feed Itself? Historic Fertilizer Crunch Threatens Food Security." Bloomberg. Available at: https://www.bloomberg.com/news/articles/2022-05-01/farmers-are-struggling-to-keep-up-food-supply-as-fertilizer-prices-surge?sref=IVPsl6pg

ways the USDA could approach this. The $500 million investment USDA announced in May to support domestic production of fertilizer is an important step in the right direction.[55] The U.S. needs to build up greater production capacity. Investment capital is one of the main barriers to entry into the fertilizer industry — mineral mining can require billions of dollars in capital[56] — and so the USDA should increase this investment at minimum to the same $1 billion level they made in meatpacking. In distributing these funds, the USDA must be vigilant to ensure that its investment does not end up in the pockets of the same players who have been dominating this industry. The distribution should be restricted to independent firms which do not control significant portions of any fertilizer market. Furthermore, recipients of these grants should be restricted from selling their companies to large fertilizer conglomerates for twenty years following the receipt of funds. It is also crucial that USDA financial support of domestic fertilizer production should be restricted to operations that actively minimize the environmental impact of their operations and meet certain environmental standards.

The government also needs to play a greater role in assessing price gouging. While we should continue to pursue and encourage domestic production, trade tariffs cannot be used as a protectionist measure. Increased dependence on domestic fertilizer production should mean that farmers have access to more reliable and reasonably-priced fertilizer; it should not enable corporations to use the further elimination of competition to price-gouge American farmers.

The USDA, along with the FTC and DOJ, should also work towards more aggressive merger enforcement. As demonstrated, multinational fertilizer conglomerates already have monopoly control over the major fertilizer nutrients. We support the passage of antitrust legislation such as the Prohibiting Anticompetitive Mergers Act (S.3847), which includes a lookback provision that empowers antitrust enforcers to examine all mega-mergers since 2000. In the meantime, we encourage antitrust enforcement to be vigilant in its examination of all future mergers and acquisitions by large fertilizer corporations. Nutrien's expansion into retail is particularly concerning, and any measures that strengthen its anti-competitive position should be prohibited.

Corporate expansion into specialty or alternative fertilizers, such as micronutrients and organic or regenerative fertilizer products should also be limited. The market for organic and regenerative fertilizer products is quickly expanding, and competition in this market should be protected. The USDA has repeatedly expressed interest in supporting and encouraging farmers to pursue this market, and protecting competition in organic fertilizers is one critical way that the USDA can support organic and regenerative farmers.

In addition to working to decentralize the conventional fertilizer industry, the USDA should expand its support of alternative fertility management programs, such as organic

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[55] USDA. (2022, May 11). *FACT SHEET: President Biden Announces New Actions to Address Putin's Price Hike, Make Food More Affordable, and Lower Costs for Farmers* [Press release]. Retrieved from: https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/11/fact-sheet-president-biden-announces-new-actions-to-address-putins-price-hike-make-food-more-affordable-and-lower-costs-for-farmers/

[56] ETC Group. 2019. "Plate Tech Tonics: Mapping Coorporate Power in Big Food." Available at: https://etcgroup.org/sites/www.etcgroup.org/files/files/etc_platetechtonics_a4_nov2019_web.pdf

fertilizers, composts, and cover-cropping. Helping farmers transition to regenerative forms of farming would not only benefit the environment, but it would build resiliency within our food system and reduce farmers' dependence on fertilizer cartels.

Consider the practice of cover cropping. In addition to a slew of other benefits, incorporating cover cropping into a farm's management practices can substantially reduce the need for fertilizer, in addition to raising soil's organic matter and levels of bioactivity. For example, a crimson clover cover crop can add between 70 and 150 lbs of nitrogen per acre to the soil.[57] With Urea's average price today at $954/ton,[58] this equates roughly to an average of $114 per acre savings in nitrogen expenses. Furthermore, cover crop seed production can be developed into a source of local revenue for communities. Instead of relying on industrial production of natural gas, local independent farmers can produce and save or sell their cover crop seed to their neighbors, strengthening bonds and keeping wealth within the community — rather than seeing it extracted by multinational corporations.

The USDA must reduce our food system's dependence on synthetic fertilizers by promoting such alternatives. The upcoming farm bill presents a significant opportunity for the USDA to encourage and incentivize cover cropping and other alternative fertility management practices. They can do so by investing in farmer awareness and education, increasing technical assistance, providing financial support and incentives, and by tying regenerative fertility programs to federal support programs, such as crop insurance and disaster relief.

First, we call on the USDA to advocate for the expansion of and permanent funding for the Pandemic Cover Crop Program (PCCP) in the upcoming farm bill. The PCCP offers a $5/acre crop insurance discount to farmers for acres that have been put into cover crops. Of the roughly 290 million acres enrolled in crop insurance in 2021, only 12.2 million acres (roughly 4.2%) participated in the PCCP. We would like to see the participation rate increased to 25%, and suggest a more substantial discount of $10/acre to help further incentivize the program. Tying regenerative farming practices like cover cropping to federal support programs is an effective incentive that simultaneously reduces both our food system's dependence on the highly-consolidated fertilizer industry and agriculture's contribution to climate change and other environmental damages.

The USDA should also seek to permanently fund and expand its recent pilot EQIP Cover Crop Initiative in the next farm bill. This program presently provides financial and technical cover cropping assistance to 11 states. In 2021, the Natural Resources Conservation Service (NRCS) provided financial and technical assistance to help producers plant 2.3 million acres.[59] USDA should seek to increase this number to 20 million acres within the next five years, and accordingly will need to substantially increase its funding.

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[57] SARE. 2007. Managing Cover Crops Profitably, 3rd Edition.
[58] Quinn, R. 2022. "DTN Retail Fertilizer Trends." Progressive Farmer. Available at: https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/03/23/nitrogen-fertilizer-prices-keep-new
[59] USDA NRCS. 2022, January 10. *USDA Offers Expanded Conservation Program Opportunities to Support Climate Smart Agriculture in 2022* [Press release]. Retrieved at: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/releases/?cid=NRCSEPRD1867846

The USDA should also pursue increased funding for agricultural research programs that focus on soil health development through cover cropping, alternative fertility sources, and other regenerative management practices, as outlined in the Climate Stewardship Act. Programs that demonstrate the soil health improvements achieved by these environmentally-beneficial practices would educate farmers and potentially liberate them from an industry with a history of price-gouging and corruption.

In order to consider changing practices that have been passed down for generations, however, farmers need access to the necessary information. The majority of extension offices are woefully undereducated about alternative farming practices. The USDA needs to build an outreach network of agents to whom farmers can turn for information and technical assistance on fertility alternatives. Organic fertilizers, manures, and composts require different application management practices than synthetic fertilizers. Cover cropping effectively requires a tremendous amount of information, including estimated nutrient input, management practices, and seeding rates. Not only do these kinds of practices reduce farmers' dependence on fertilizer cartels, but they also reduce the environmental burden, such as fresh-water system contamination and soil erosion, that agriculture can place on the land.

Conclusion

To many, the fertilizer industry's rampant price-gouging and other anti-competitive behaviors may seem like a remote problem that only affects the measly 1.3% of the American population who identify as farmers.

This is a dangerously incorrect assumption. The impacts of the sky-high prices imposed by fertilizer cartels will be felt for years to come: in the form of fewer farmers staying afloat, depopulated and impoverished rural communities, increasingly consolidated farmland, rising food prices, and empty grocery shelves both here and abroad.

The USDA must act immediately to address the lack of competition in the fertilizer industry by decentralizing domestic production and supporting alternative fertility management practices that reduce our reliance on synthetic fertilizer cartels. We acknowledge this will require long-term and large-scale shifts in policy; however, the 2023 Farm Bill presents a substantial and much more imminent opportunity to reduce producers' dependence on fertilizer cartels by expanding current cover crop programs and increasing funding for research around soil health and cover crop demonstration trials.

Sincerely,

Farm Action
Alabama State Association of Cooperatives
Alianza Nacional de Campesinas

American Agriculture Movement
American Federation of Government Employees Local 3354
American Grassfed Association
American Indian Mothers Inc. (AIMI)
Center for Food Safety
Climate Crisis Policy
Community Food and Justice Coalition
Compañeras Campesinas
Dakota Rural Action
Family Farm Defenders
Farmworker Association of Florida
Indiana Farmers Union
National Latino Farmers & Ranchers Trade Association
Ohio Farmers Union
Oklahoma Black Historical Research Project, Inc.
Rural Advancement Fund of the National Sharecroppers Fund
Rural Coalition
Rural Development Leadership Network
Sooner Food Group
Wisconsin Farmers Union
Women Involved in Farm Economics