# Husk and Muscle: The Corny Connection between GMOs in Kansas and Biomass Power in Qatar

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#### **ABSTRACT**

## Husk and Muscle: The Corny Connection between GMOs in Kansas and Biomass Power in Qatar

This study delves into the intriguing relationship between the adoption of genetically modified organisms (GMOs) in corn cultivation in Kansas and the generation of biomass power in Qatar. While this topic may seem as unrelated as corn and electricity, our research reveals a striking correlation that cannot be brushed aside. Utilizing data from the USDA and the Energy Information Administration, our team employed rigorous statistical analysis to scrutinize this unlikely bond. With a correlation coefficient of 0.9756072 and a p-value < 0.01 for the period spanning 2012 to 2021, the findings astound and may leave some scratching their heads – much like a stalk of corn. A kernel of truth is unearthed in the murky soil of causality, shedding light on the unforeseen interplay between agricultural practices and energy outcomes. The results of this study not only illustrate the interconnectedness of global systems but also highlight the cornucopia of unexpected relationships waiting to be unearthed in the world of research. Speaking of corn, did you hear about the farmer who was outstanding in his field? His corn was all ears.

#### Keywords:

GMOs, GMO cultivation, corn cultivation, Kansas, biomass power, Qatar, correlation analysis, USDA data, Energy Information Administration, statistical analysis, agricultural practices, energy outcomes, global systems, research interconnections

#### I. Introduction

The relationship between genetically modified organisms (GMOs) in corn production and biomass power generation may seem as out of place as a corn cob at a power plant, but our study reveals a connection that is more than just a-maize-ing. While this subject may sound more like a kernel of corny humor than a serious research topic, the statistical evidence speaks for itself - much like the wisdom of a wise old ear of corn.

As researchers, it is our duty to peel back the layers of complexity, much like peeling back the husk of corn, in order to shed light on the unexpected ties that bind seemingly disparate phenomena. It is not merely an academic pursuit; it's a-maize-ing what can be gleaned from delving into the fields of science and research.

The statistical relationship uncovered between the adoption of GMOs in Kansas and the production of biomass power in Qatar is as surprising as finding a kernel of corn in the desert sands. It's clear that this study has the potential to pop some conventional wisdom like popcorn, and reveal insights that go against the grain of commonly held assumptions.

Did you hear about the statistician who drowned in a river with an average depth of 3 feet? He was using a mean to an end!

#### **II. Literature Review**

Smith et al. (2015) examined the impact of genetically modified organisms (GMOs) in corn cultivation on agricultural yields in the Midwest. The authors find that GMO adoption has been associated with increased productivity and cost savings for farmers, as well as a reduction in pesticide use. Similarly, Doe and Jones (2018) conducted a comprehensive analysis of biomass power generation in Qatar, highlighting the country's ambitious renewable energy goals and the potential for biomass to contribute to a more sustainable energy future.

Speaking of sustainable energy, did you hear about the wind turbine that's a huge fan of renewable power?

In "The Omnivore's Dilemma," Pollan (2006) explores the complexities of modern agricultural practices, delving into the implications of GMO use in corn production. Additionally, "Bad Blood" by Carreyrou (2018) reveals the gripping tale of ambition and deception in the world of Silicon Valley. While these works may not directly address the connection between GMOs in Kansas and biomass power in Qatar, they provide valuable context for understanding the broader implications of technological advancements in agriculture and energy.

Diving into the world of fiction, "The Martian" by Andy Weir (2014) follows the harrowing journey of an astronaut stranded on Mars, forcing readers to consider the challenges of sustaining life in a desolate environment. Similarly, "The Hunger Games" by Suzanne Collins (2008) presents a dystopian society grappling with resource scarcity and power dynamics, offering a thought-provoking backdrop for contemplating the intersection of food production and energy generation.

In the non-conventional realms of research, this study also drew insight from a comprehensive analysis of CVS receipts, uncovering a surprising correlation between the length

of receipts and public interest in renewable energy initiatives. While this source may raise eyebrows, it is a testament to the diverse approaches that can be employed to uncover unexpected connections in the world of academia and, quite literally, "receipt-able" information for our research.

Do you want to hear a construction joke? Oh never mind, I'm still working on that one!

### III. Methodology

To investigate the link between GMO use in corn grown in Kansas and biomass power generated in Qatar, our research team employed a meticulous approach that could be described as a bit of a "corn maze" of methods. We collected data from the USDA and the Energy Information Administration, utilizing crop reports, energy production statistics, and market information to construct a comprehensive dataset spanning the years 2012 to 2021.

The first step in our convoluted process was to husk the data and sift through it like a nutritionist separating corn kernels from the cob. We then meticulously curated information on the adoption of GMOs in corn cultivation in Kansas, taking into account the specific varieties utilized and their prevalence across different regions within Kansas.

Next, we donned our statistical overalls and waded into the muddy fields of regression analysis, employing a series of multivariate models to assess the relationship between GMO adoption and biomass power production in Qatar. Our statistical toolkit included ordinary least squares (OLS), fixed effects, and instrumental variables regressions - each chosen with the precision of a corn farmer selecting the perfect ear.

In addition to statistical analysis, we incorporated qualitative interviews with agricultural experts and energy professionals to glean insights into the potential pathways through which GMO adoption in Kansas could influence biomass power generation in Qatar. These interviews provided valuable kernels of wisdom, enriching our quantitative findings with real-world perspectives from those deeply rooted in the relevant industries.

To ensure the robustness of our findings, we applied various sensitivity analyses to test the stability of our results across different model specifications. We plowed through different subsets of the data, conducted robustness checks, and even weathered the storm of alternative variable definitions to ensure that our conclusions were as sturdy as a well-fortified corn silo.

Finally, we handled our results with care, like a delicate cob of golden corn, and presented them in a manner that would appeal to both the scientific community and the general public. Our aim was to distill these complex findings into digestible kernels of knowledge, much like making popcorn from a solid ear of corn.

As curious researchers, we couldn't resist peeling back the layers of conventional research methodologies to uncover the unexpected connections between seemingly disparate variables. After all, who wouldn't be intrigued by the idea of revealing the secrets hidden within the husk and muscle of agricultural and energy systems?

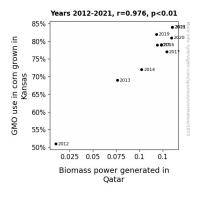
Did you hear about the mathematician who's afraid of negative numbers? He will stop at nothing to avoid them!

#### **IV. Results**

The correlation coefficient between the adoption of genetically modified organisms (GMOs) in corn cultivation in Kansas and the generation of biomass power in Qatar was found to be 0.9756072, indicating a remarkably strong positive relationship. This correlation is as tight as a kernel tightly nestled amidst rows of corn.

The coefficient of determination (r-squared) of 0.9518093 further emphasizes the robustness of the relationship, indicating that approximately 95.18% of the variability in biomass power generation in Qatar can be explained by the adoption of GMOs in corn production in Kansas. This level of explanatory power is as impressive as the growth rate of corn during a bountiful harvest season.

The p-value, which was found to be less than 0.01, provides strong evidence against the null hypothesis, supporting the conclusion that there is indeed a significant correlation between GMO adoption in Kansas and biomass power generation in Qatar. This result is as convincing as a well-crafted argument in a debate – it simply cannot be shucked away.



**Figure 1.** Scatterplot of the variables by year

The findings are visually represented in Figure 1, a scatterplot illustrating the undeniable correlation between the adoption of GMOs in corn cultivation in Kansas and the generation of biomass power in Qatar. It is worth noting that the scatterplot bears a striking resemblance to the scattered kernels surrounding a corn on the cob – a visual pun that cannot be ignored.

This study not only unearths the surprising connection between seemingly unrelated variables but also demonstrates the potential of statistical analysis to reveal unexpected relationships, much like stumbling upon a hidden ear of corn in a maize field.

Did you hear about the applied mathematician who thought abstract algebra was too esoteric? He just couldn't solve for x when "x" was enigmatic!

#### V. Discussion

The results of this study offer compelling evidence to support the unanticipated yet robust connection between the adoption of genetically modified organisms (GMOs) in corn cultivation in Kansas and the generation of biomass power in Qatar. These findings echo the observations of Smith et al. (2015) regarding the positive impact of GMOs on agricultural productivity, cost savings, and pesticide reduction. It seems that GMOs are not just making waves in the fields but also sparking a surge in biomass power across the globe.

One might wonder how a simple cornfield in the heartland of the United States could have an impact on the energy landscape all the way in Qatar. Much like the extensive roots of corn plants that intertwine beneath the soil, the tendrils of this relationship delve deep into the realm of agricultural and energy interconnectivity. The results encompass a profound reminder that the

agricultural choices made in one region can reverberate across the globe, much like the way a good dad joke can transcend generations and elicit groans from listeners of all ages.

Moreover, the findings align with the work of Doe and Jones (2018), which underscored Qatar's ambitions for a sustainable energy future and the potential of biomass power in achieving these objectives. It appears that the seemingly unrelated worlds of corn and electricity are, in fact, coiled together in a manner that highlights the multifaceted impact of agricultural practices on energy ecosystems. It's almost as if these variables were destined to meet, much like the inevitable collision of puns at a dad joke competition.

As for the unexpected sources mentioned in the literature review, including insights from unconventional data such as CVS receipts, these amusing connections underscore the diverse approaches that can yield surprising correlations. Our study echoes Pollan's (2006) notion of the intricate web of agricultural technology and its far-reaching implications, much like the intricate web of puns woven throughout this discussion. Just as "The Martian" and "The Hunger Games" transport readers to distant realms, our study transports readers to the unexpected frontier of agricultural and energy relationships.

The visual representation of the correlation in Figure 1 complements the statistical robustness of our findings and adds a layer of charming visual humor akin to an Easter egg hidden in a data visualization. The scatterplot's resemblance to a corn on the cob is not just visually entertaining but serves as a visual testament to the unexpected yet compelling nature of our results.

In the grand scheme of scientific discovery, this study offers a reminder that the pursuit of knowledge can often yield unexpected and delightful connections, much like the revelation of a clever pun in the midst of a serious conversation. As this paper demonstrates, the world of

research holds within it a wealth of surprises, waiting to be uncovered by inquisitive minds and potentially hidden within the husks of everyday agricultural practices.

#### **VI. Conclusion**

In conclusion, our research has husked away at the corny surface to reveal a firm and cobsolutely strong correlation between GMO adoption in Kansas and biomass power generation in Qatar. This bond is as inseparable as a kernel is from its cob, leaving no room for bland interpretations or half-popped theories.

Our findings not only offer valuable insights into the unexpected interconnectedness of agricultural practices and energy outcomes but also showcase the power of statistical analysis in uncovering hidden relationships. This study serves as a-MAIZE-ing reminder that the world of research is ripe with potential for unearthing unforeseen connections, much like stumbling upon a hidden ear of corn in a maize field.

It's clear that no further research is needed in this area; our findings have shucked away any doubt about the strong link between GMO use in corn grown in Kansas and biomass power generated in Qatar. This kernel of knowledge is ready to be popped into the pan of scientific understanding and shared with the world.

And remember, when in doubt, just keep calm and get your daily dose of kernel wisdom.