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The Greatest Challenge Facing Agriculture Over the Next Five Years

The food system is unique in that it impacts every single person on the planet. Though everyone must eat to survive, food is not treated as a basic human right, but rather, as a privilege. According to 2012 estimates, nearly one in eight people in the world suffers from chronic undernourishment due to lack of proper nutrition and food intake.¹ Therefore, the greatest challenge facing the agriculture sector in the next five years is to diminish both domestic and international rates of food insecurity and subsequent malnutrition.

Food insecurity is defined as reduced overall quality of food, multiple indications of disrupted eating patterns and/or reduced food intake due to lack of money or other resources.² While some individuals experience food insecurity because they cannot afford to purchase certain foods, others experience food insecurity due to a lack of access to food. Pertinent external factors of influence on agriculture and food insecurity may include: the state of the economy, climate change, food policy, resource depletion, a growing global population, erosion of farmland, transportation of food, availability of migrant workers, and the mass urbanization of the population in certain countries. Hence, the complexity of food insecurity poses many obstacles for the agricultural sector due to the plethora of elements that influence it.

Managing the aforementioned systemic and cyclical issues, while maintaining an adequate food supply to feed the global population of 7 billion people, is no simple feat. However, regulating resources by facilitating a change in the culture of food waste is a direct way to increase availability of food while decreasing the price. Therefore, the agriculture sector can begin to eradicate food insecurity now by supporting efforts to minimize food waste.

The trend in food, especially fruits and vegetables, is to purchase pristine, uniform food items. Grocery stores reject foods that are not a standard size, if they are bruised, or if they are not the perfect red hue. Large-scale farms often opt not to pick produce if they know stores will not buy from them, leaving acres of unpicked food left to rot or be turned under. In fact, it is estimated that around 40% of produce in the United States goes uneaten.³ Much of this uneaten food could feed the millions who experience hunger and malnourishment each year. Another estimate reports 25 million Americans³ could be fed per year if domestic food loss were reduced by a mere 15%.

A campaign in France recognized this issue of food waste and set out to increase the purchase of “ugly” fruits and vegetables. A French supermarket chain, Intermarche, launched “The Inglorious Fruits and Vegetables” campaign. This initiative aimed to highlight the issue of food waste while increasing the purchase of fruits and vegetables by selling the misshapen produce for up to 30% cheaper than “prettier” produce. The campaign marketed the produce as unique and capitalized on their grotesque or misshapen qualities, emphasizing that the uglier fruits still provided the same nutrients as the prettier ones. Within the first two days of the

campaign, they had sold 1.2 tons of the inglorious fruits and vegetables, produce that would have normally never been consumed.⁴

In addition to supermarkets rejecting produce based on appearance, consumers rebuff imperfect produce presented in grocery stores. The USDA estimates that supermarkets annually lose \$15 billion due to unsold fruits and vegetables. Realistically, while some of this may be attributable to produce unfit to consume, much of the unpurchased produce is looked over due to its lack of perfection. By realigning the beliefs surrounding what produce should look like with what food actually looks like, more food will be available in supermarkets, farmers markets, and other venues that sell food items. This may also contribute to a reduction in the price based on the increase in availability of food.

With the surplus of food going to waste, it is a wonder that misinformation pertaining to food shortages is so prevalent. A common misconception regarding the world's food supply and hunger is that there is simply not enough food in the world to feed everyone. Though the world's population has increased by 70% in the last 30 years, world agriculture has actually increased, producing 17 more calories per person than before. Using these facts, a 2002 estimate reported that this increase in production would still provide each individual with 2,710 kilocalories per day.⁵ However, estimates have forecasted that agriculture production will have to double by the year 2050 to keep pace with the growing population.

Though food is plentiful now, the rise in the world population in the near future is yet another reason to consider food waste as a top priority for the agricultural sector. While simultaneously providing an adequate amount of food for everyone and reducing the amount of food wasted, the agriculture sector can also reduce the amount of land needed to grow crops, reduce the amount of carbon emissions that contribute to global warming, and reduce the number of malnourished individuals globally.

Prioritizing food waste as a key component in the continued success of the agricultural sector has many benefits. Firstly, by reducing food waste, agriculture can begin to eradicate global food insecurity, which has many negative consequences. Food that is salvaged and subsequently reintroduced into the food supply via traditional supermarkets or grocery stores may reduce prices of foods. However, food insecure individuals with no access to food also require consideration. Efforts must be made to transport recovered food to populations without access who may live in food deserts or lack safe and reliable transportation to a food source. Second, reducing food waste has critical benefits for the climate, including a reduction in carbon emissions. Third, reducing food waste increases the amount of tillable land, a precious resource for agriculture. Finally, a reduction in food waste capitalizes on the available nutrients the land has to offer. Without an in depth investigation, reducing food waste may not appear to be the most impactful solution to diminishing food insecurity. However, its effect on prominent elements of agriculture makes it the optimal challenge to prioritize in the next five years.

References

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