Opportunities for Sustainable Animal Agriculture
Addressing Antibiotic Risk and Protecting Human Health
ABOUT ICCR:
Currently celebrating its 46th year, ICCR is the pioneer coalition of active shareholders who view the management of their investments as a catalyst for change. Its 300 member organizations with over $400 billion in assets have an enduring record of corporate engagement that has demonstrated influence on policies promoting justice and sustainability in the world.


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INTRODUCTION

The Interfaith Center on Corporate Responsibility (ICCR) in collaboration with the Farm Animal Investment Risk and Return (FAIRR) Initiative brought together restaurant and retail companies, meat producers, investors, trade associations, NGOs, and public health advocates on October 17, 2017 in New York City. This Multi-Stakeholder Roundtable on Opportunities for Sustainable Animal Agriculture addressed antibiotic risk and the importance of protecting human health from antibiotic-resistant bacteria.

While all present did not necessarily agree on all points and positions, the Roundtable demonstrated that dialogue between companies, investors, advocates and others who care about this public health crisis is vital. All Roundtable participants agreed to operate under the Chatham House Rule.1 This context allowed us to have a more meaningful and thorough discussion on the steps that suppliers and companies can take towards reducing excessive use of antibiotics in the meat supply chain.

This report summarizes the day’s discussions only, including key points, lessons learned, and actions for moving forward, and, for this reason, there are several important aspects on the use of antibiotics in meat production that are not addressed here. We are eager to address these important questions with you in the future. ICCR members recognize that this work is an ongoing journey, and we hope the Roundtable and this summary contribute to the process.

BACKGROUND

Antibiotic resistance is a growing public health crisis. Globally, at least 700,000 people die each year due to drug resistant illnesses such as bacterial infections, malaria, HIV/AIDS or tuberculosis.2 Deaths are expected to rise to 10 million per year worldwide by 2050.3 Because around 70 percent of all medically important antibiotics sold in the United States are intended for use in animal agriculture, this Roundtable focused on addressing opportunities and challenges to reducing antibiotics use in animals. In animal agriculture, antibiotics are often used to promote growth and prevent the spread of disease common in industrial farming conditions.

The World Health Organization (WHO) issued updated guidelines in November 2017 on antibiotic resistance, which included the following key facts for the agricultural sector:

- Only give antibiotics to animals under veterinary supervision.
- Do not use antibiotics for growth promotion or to prevent diseases in healthy animals.
- Vaccinate animals to reduce the need for antibiotics and use alternatives to antibiotics when available.
- Promote and apply good practices at all steps of production and processing of foods from animal and plant sources.
- Improve biosecurity on farms and prevent infections through improved hygiene and animal welfare.4

With the public health imperatives surrounding the issue, members of ICCR and FAIRR...
believe that the opportunities present in reducing antibiotics use can lead to better business outcomes, better management of long-term risk, and improved market share. The discussions at the Roundtable were designed to more fully explore these opportunities.

KEY TAKEAWAYS

Stakeholders from all sectors shared ideas to arrive at a mutual understanding of the current state of animal agriculture. There was a general consensus that:

- Independent farmers need incentives to implement responsible antibiotics policies for beef and pork, as the current market makes it prohibitively expensive to take that action voluntarily; and

- There is misunderstanding in the market about terminology such as “no antibiotics ever” (“NAE”), responsible use (use only when animals are sick or in a disease control situation), and judicious use (use of antibiotics under veterinary supervision so that they are used only when necessary for assuring animal health). These terms are not uniformly defined, creating difficulty for collective, industry-wide action.

These points of consensus led many Roundtable participants to voice the importance of a universal certification or labeling system as well as national policy on acceptable levels for antibiotic use. These efforts have the potential to provide clarity about where the line on acceptable antibiotic use should be drawn and to reward responsible producers with a higher price point in the market.

Roles for Addressing Antibiotic Resistance in the Meat Supply Chain

The discussion on current trends in the meat supply chain identified the following key roles for investors, companies, suppliers, and consumers:

- Investors need to encourage companies to drive improvements in investee companies, and their supply chains, to mitigate risk in their portfolios, since animal factory farming involves at least 28 environmental, social and governance (ESG) issues that
impact financial value. Investigators will need to find a balance between shorter-term profitability and long-term sustainability issues, since overuse of antibiotics can impact a company’s future bottom line;

• Companies must unite to develop a global vision on this issue, so a transition from overuse of antibiotics will be economically viable for the industry as a whole; and

• Consumers must continue to demand and be willing to pay a premium for high quality beef and pork to make this economically feasible for the suppliers. There is a sense that farmers are willing to reduce antibiotic use in their supply chain, but the market must give them security that these costly changes will pay off.

Challenges for Implementation

A recurring concern was how to capture value from this change and communicate it to the market. Again, definitions were identified as a critical challenge for all stakeholders, since consumer understanding (or misunderstanding) drives market trends.

Industry-specific challenges involve the following:

• Producers and farmers must be assured that making significant efforts to reduce antibiotic use in the supply chain will be compensated. Farmers worry about the unintended consequences (such as higher costs to producers and consumers) of changing antibiotics practices throughout the supply chain. However, while the transition towards responsible use will inevitably raise food costs, it is important to consider that Americans typically spend a significantly smaller percentage of their income on food than other nations. This could be a societal/cultural barrier as consumers are confronted with more costly meat products. It was also acknowledged that farmers are already working hard to balance several issues including animal welfare, environmental footprint, air, water, quality and uniformity of product, food safety, and involvement in community, so reducing antibiotics is yet an additional effort.

• There is a significant gap in information regarding the FDA Guidance for Industry (GFI) on antibiotics use in animal agriculture, which was implemented on January 1, 2017. Guidance 209 and 213 calls for the “judicious use of therapeutic antimicrobi- als,” and provide a framework for voluntary action on the elimination of antibiotics use in food-producing animals for growth promotion. The FDA only had six regional meetings to educate farmers on the GFIs, and for this reason, many small farmers and other local stakeholders in the industry were unaware of the implications of the FDA guidance. An additional obstacle for action is the scarcity of veterinarians in some localities.

• At the Roundtable, participants discussed the need to have more regional and local
representation to educate farmers on the ground. The Farm Foundation has made efforts to fill this education gap by hosting twelve regional meetings for producers on the FDA guidance; however, continued outreach is necessary to educate more farmers.

Challenges for other stakeholders:

• Companies that would phase out the use of medically important antibiotics for growth promotion and disease prevention in their meat and poultry supply chains must be assured that there is significant customer demand and that customers will be willing to pay higher prices for these meats in order for the transition to be economically viable.

• Investors stated that corporate policies are a strong indicator of how a company is governed, and since corporate responsibility issues are interconnected, antibiotics governance cannot be disconnected from other issues. For example, if a company has good animal welfare practices in place, such as better living conditions for animals, there is less of a need for antibiotics.

• Government has a significant role in this issue yet has made minimal effort towards establishing a national policy. Several attendees at the Roundtable believe that a stronger federal policy that prohibits risky antibiotics uses is essential to level the playing field and spur companies to act.

Opportunities for Implementation

Despite the difficulties described above, innovative ideas and opportunities were discussed:

• Reducing the need for antibiotics by improving farm conditions and business models as well as developing alternatives to antibiotics, such as probiotics or enzymes.

• Spreading the burden of reducing antibiotic use across several stakeholders in the supply chain (farmers, distributors, animal health companies, drug companies), so the cost isn’t borne by one party alone.
• Increasing collaboration between stakeholders in the supply chain to enhance understanding, since producers have been willing to work with suppliers in the past.
• Linking the antibiotic transition to other corporate policy change efforts, such as going from conventional to organic.

Participants acknowledged that there is a higher risk of illness, skin and soft tissue problems, and repeat infection for workers in the meat industry.

Some ideas for future action by each stakeholder group include the following:

• Shareholders should encourage companies to require antibiotics reporting data from their suppliers.
• Companies should create reporting requirements on antibiotics use for their suppliers to increase transparency. Companies should ensure suppliers have the capabilities necessary to report on antibiotics use. By doing so, companies would take some of the burden that producers are unwilling and/or unable to bear.
• Government should be involved in the development of a certification process and labelling system that utilizes a uniform public dataset and can serve as an industry-wide solution that the USDA can verify.

Impact on workers and opportunities to support worker health and safety from antibiotic resistance

Participants acknowledged that there is a higher risk of illness, skin and soft tissue problems, and repeat infection for workers in the meat industry; however, there is limited information on this subject. Non-profit organizations have tried to interview workers, but workers have been unwilling to speak because of immigration and job security concerns. Roundtable participants also felt there is a lack of understanding of how immigration might be hampering efforts to educate workers on this topic. One effort that was discussed is limiting line speeds to mitigate risks of overexposure, but the industry is pushing back and some are calling for increased line speeds.10

In addition to increased information and research on worker safety and health, further future action for each sector includes:

• Companies should look at this issue in terms of the health care costs, the cost of lost productivity, and the public relations benefits good stewardship initiatives could bring.
• Investors should be aware of health care risks to workers, and request that companies do research to assess risks within corporate supply chains and demand transparency and action.

• Government should enact a policy that sets stewardship guidelines that address worker safety.

The nature of the supply chain for pork and beef presents many additional challenges for phasing out the use of medically important antibiotics for growth promotion and disease prevention. The poultry supply chain, by contrast, is more streamlined.

**Barriers to phasing out antibiotics use in the supply chain and the support companies need to find more responsible meat suppliers, especially for beef and pork:**

The nature of the supply chain for pork and beef presents many additional challenges for phasing out the use of medically important antibiotics for growth promotion and disease prevention. The poultry supply chain is more streamlined, which is why there has been significant progress; however, below are some of the major barriers for limiting antibiotic use in beef and pork supply chains:

• The monetary value of hogs and cows is greater than that of chickens; therefore, there is a much greater cost risk for experimentation. Presently, cost risks are borne solely by the independent farmer. For example, if a farmer reduces antibiotic use too quickly and his whole herd falls ill, he will have to deal with the costs of lost productivity and/or associated treatments. There is also the risk that if a company makes the investment for a NAE cow that falls ill and needs antibiotics, it can no longer sell the meat at the premium. However, many voices at the Roundtable were calling for “responsible use,” i.e., use only when animals are sick or in a disease control situation.

• The supply chain and lifespan for beef and pork is much longer than that of chicken; therefore, there is simply a greater opportunity for cows and pigs to fall ill. Furthermore, pigs and cows are often relocated to different facilities during their lives, which increases stress and disease risk. Because the beef supply chain is less vertically integrated, producers have less control over their suppliers, as is the case in the more consolidated poultry industry. For example, large buyers like McDonald’s will only buy a few cuts of beef, so a single purchaser has less power to influence the
supply chain. On the other hand, international food standards, such as those in the European Union (EU), have required beef exporting countries to “implement traceability systems,”\textsuperscript{11,12} which may be driving the industry to increased transparency throughout the supply chain.

- There isn’t accountability or any incentive for farmers to raise a very healthy calf because they receive the same price down the supply chain no matter what: the cost of changing practices (i.e. later weaning age to prevent disease) is not rewarded in the market. Without policy or other incentives from purchasers there’s not an economically viable way for producers to switch practices.

- The market for beef and pork is such that companies want certain cuts of meat and do not buy the entire animal. The company that wants the highest value part of the animal will shoulder the largest part of the cost. If responsible use is practiced, increasing the overall cost, there would likely be challenges in determining the appropriate prices for lower value parts.

Opportunities to lower antibiotic use in agriculture

Participants weighed in with their ideas for opportunities and innovations that could lower antibiotic use in animal agriculture by discussing:

- The need to research alternatives to antibiotics as well as best practices in the industry. Participants suggested using vaccines and genome modifications to genetically create stronger immune systems or bioengineering. Some participants mentioned that the USDA provides $14 million in grants to universities, veterinarians, drug companies and other related stakeholders for research. Additionally, one participant noted that their company had visited Denmark to learn best practices,\textsuperscript{13} which may serve as a model for other companies.

- The critical importance of setting targets and benchmarks to reduce antibiotic use as a starting point.

- The potential for corporations and companies to partner with independent farmers to implement innovations in the supply chain, which would spread risk and make innovation more palatable for smaller farmers.

- The possibility of establishing an electronic public market where meat raised responsibly could be bought and sold at a premium. This idea received some criticism because of the complicated nature of beef and pork production as stated above (i.e. that most producers do not use the entire animal). It was noted that this idea would likely also require a certification or label.

Perspectives on a changing meat production system

The final panel showed that there is significant consensus around major issues pertaining to antibiotics in the meat industry, but further research and discussion is needed to determine how all stakeholders can develop solutions. This panel highlighted the importance
of direct engagement with farmers and producers, since they are critical players in this process.

Using an online system during this session, panelists and participants were asked whether they Agreed, Disagreed, or were Unsure about the following 9 statements:

Q1: Producers need significant financial incentives to eliminate routine antibiotic use
Q2: Public health challenges associated with antibiotic use are a material risk to brands and retailers
Q3: Modern agriculture is a major contributor to global antibiotic resistance
Q4: Animal welfare is a major concern when reducing antibiotic use
Q5: “Raised without antibiotics” will become an expectation within the next 5 years
Q6: Gov action is necessary to drive industry-wide change in antibiotic use practices
Q7: Pharma companies have a part in reducing farm-level antibiotic use
Q8: Retailers and brands should require producers to report on antibiotic use
Q9: Certification systems are an answer to the overuse problem

Roughly 80 percent of respondents agreed with question one (Producers need significant financial incentives to eliminate routine antibiotic use) and question two (Public health challenges associated with antibiotic use are a material risk to brands and retailers). Seventy-five percent also agreed with question seven (Pharma companies have a part in reducing farm-level antibiotic use).

Looking ahead at the role of antibiotics in a changing meat production system, animal welfare practices must be assessed. Farming practices are important considerations; however, there are economic implications when changing current practices (i.e. fewer birds in the house means less money for farmers). Panelists agreed this is a major obstacle in the transition, but there is a significant need to look at the future cost if changes are not made now. Under current practices, antibiotic resistance is growing in the veterinary sector too. Because antibiotics are no longer as effective as they were in the past due to decades of over-use, more drugs and/or other interventions are necessary to keep animals healthy. Increased drug use carries a real cost, which impacts investors and a
company’s bottom line. Investors are also looking at this issue as an indicator of overall management competency and feel that current practices carry a reputational and material risk for companies.

Panelists discussed the additional uncertainty around consumer demand for meat -- how it is changing, should demand be managed, and if so, how? Although market research has assessed consumer preferences, suppliers noted that there is a difference between thoughts and consumer action. Panelists also discussed what a sustainable protein system could look like in the future and the rise of non-meat protein sources.

Finally, panelists discussed the food justice implications for people who cannot afford the higher price point of meat raised without antibiotics. Efforts must be made to ensure that meats raised with fewer antibiotics don’t become a “niche” product available only to the wealthy. Companies can address this concern by rethinking their overall budget and business strategies and by making wholesale changes to production practices rather than continuing to feature responsibly raised meat as “niche” product lines. Although meats raised without antibiotics cost more for vendors to source, leading to a potentially decreased profit margin, if companies make access to meats raised with reduced antibiotics a priority, they can utilize creative business strategies to make it viable.14

CONCLUSION
Panelists discussed the need to connect food industry leaders with medical and health communities to stress that this is a public health issue above all else. Stakeholders from all parts of the food and agriculture supply chain need to discuss and work through the different perspectives on antibiotic use to identify solutions and understand the consequences of various options.

The Roundtable provided a platform for rich discussion and respectful debate around key topics, trends, opportunities, challenges, and perspectives on the future of animal agriculture. In all, participants agreed on the importance of this issue and the need for action. Discussions throughout the day highlighted major obstacles towards success; however, these conversations informed stakeholders of other perspectives and illuminated opportunities for action in the future.
As part of the outcome of the day’s discussions, we encourage participants to join us and endorse:

**PRINCIPLES FOR APPROPRIATE LIVESTOCK AND POULTRY ANTIBIOTIC USE**

Antibiotic resistance is a global public health crisis. Institutions such as the Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics (AAP) and the World Health Organization (WHO) have warned of an impending post-antibiotic era. Antibiotic use in both humans and animals are contributing to the problem. Yet approximately 70% of medically important antibiotics in the U.S. are currently sold for use in food-producing animals, not people. CDC notes that “[s]cientists around the world have provided strong evidence that antibiotic use in food-producing animals can harm public health.”

In August 2017, a commission of experts in human and veterinary medicine, microbiology and public health released a report that outlines key steps for policymakers, food companies and food purchasers, and medical groups, to help tackle the antibiotic resistance crisis.15

The following principles for the appropriate use of antibiotics in food animals are in alignment with these expert recommendations:

1. Antibiotics should only be used to treat the diagnosed presence of disease in animals, and in limited circumstances to control disease outbreaks. Antibiotics should not be used to promote animal growth or for routine disease prevention.
2. Antibiotic use should be supervised by a veterinarian familiar with the premises and the animals.
3. Livestock producers should report their use of antibiotics so that oversight agencies and the public can track progress in meeting use reduction goals and identify resistance risks and trends.
4. Livestock producers should rely on better husbandry practices to improve animal health and welfare, and to minimize the need for routine antibiotics use on farms.

The following companies and organizations endorse these principles:

Natural Resources Defense Council
Interfaith Center on Corporate Responsibility
Sisters of St. Francis of Philadelphia
FAIRR Initiative
U.S. PIRG
Antibiotic Resistance Action Center, Milken Institute School of Public Health, George Washington University
Health Care Without Harm
Green Century Capital Management
As You Sow
Notes

1. Per the Chatham House Rule, after the event participants are free to use the information received, but neither the identity nor the affiliation of the speakers, nor that of any other participant, can be revealed.
2. In 2014, Lord Jim O’Neill and his team published a review commissioned by the United Kingdom government entitled, “Antimicrobial Resistance: Tackling a crisis for the health and wealth of nations” (the AMR Review). The review estimated that more than 700,000 people die each year from antibiotic-resistant infections.
5. https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm448446.htm
7. https://www.fda.gov/AnimalVeterinary/SafetyHealth/AntimicrobialResistance/JudiciousUseofAntimicrobials/
10. Additional information about line speeds includes a NCC petition against “arbitrary line speed limitations” and a report by the Northwest Arkansas Workers’ Justice Center on the risks and dangers of increased line speeds in chicken production.
