

“PREPARING THE WORLD FOR 2050”

by Margaret Magner

It's no accident Norman Borlaug's name was invoked repeatedly by speakers and international delegates at the 2013 VetHealth Global conference in Charlottetown, Prince Edward Island. Borlaug, known as “the father of the Green Revolution” and “the man who saved a billion lives,” won the 1970 Nobel Peace Prize in recognition of his unparalleled success in increasing global food supplies. The high-yield, disease-resistant wheat varieties he developed and cultivated in Mexico, India, and Pakistan helped reverse the crippling famine that had convinced many 1960s experts that the battle to feed humanity had already been lost. With current projections indicating the global population will exceed 9 billion people by 2050, international experts in animal health and nutrition are intent on once more discovering a wide-ranging strategy to feed the planet.

Senior executives, investors, regulators, and researchers from around the world – including Brazil, the U.K., China, Switzerland, Israel, and North America – gathered at the international animal health and nutrition business conference to explore market trends, global regulatory issues, and innovative developments related to companion and food animal health and nutrition. International emerging companies offered unique new products and technologies, with an opportunity to network, establish sales channels, and explore investment prospects. Hosting the biennial conference in PEI makes perfect sense to Rory Francis, Executive Director of the PEI BioAlliance, the coordinating body representing private sector, research, academic and government organizations linked to the PEI Bioscience Cluster. “With its innovations in animal feed additives, fish vaccines,

diagnostics, and veterinary medicine, PEI already has a reputation as an innovation catalyst with the credibility to attract a global audience.”

Clint Lewis, President of Zoetis Animal Health, USA and Honourary Chair of VHG 2013, noted the global animal health industry is stable and growing -- generating \$22.5 billion annually -- but faces a range of challenges, including the globalization of agriculture, emergent markets, increasing resource constraints, technological innovations, and the changing face of veterinary medicine. Recent food scares in Europe, China and India are fostering a greater demand for farm-to-fork transparency, environmental protection and government regulation. The expanding worldwide poultry and livestock market necessitates a new paradigm of birth-through-production-cycle veterinary care and the advancement of non-antibiotic growth promotants.

Prevalent at VetHealth Global was the recognition that evolving consumer perceptions are key to shaping the strategies that will feed a growing population. The world can ill afford the lost potential imposed by malnutrition, when iron deficiency alone in 2 billion people is reducing national productivity by 20 percent. A developing third-world middle class, increasingly urbanized, is heightening demand for meat, milk and eggs. And people experiencing “hidden hunger in the affluent” due to insufficient nutrients in their diet are at risk of chronic disease and obesity. In the future, it is clear food security will be defined not by access to calories alone, but by the quality of their nutritional density.

There is considerable debate regarding how best to ensure food security and increase productivity so necessary for 2050 goals. VetHealth speakers noted the confusing choices facing consumers who often support the concept of healthy food options but rarely

purchase them because of access, expense or poor eating habits. In addition, only seven percent of Canadians believe they are knowledgeable about farmers and their operations. Media and food safety activists significantly influence consumer perception and political decision making, with documentaries such as Robert Kenner's *Food, Inc.* examining U.S. agribusiness and Michael Pollan's book *The Omnivore's Dilemma* exploring the relationship between culture and food.

Keynote speaker Mark Lynas, author of *The God Species: Saving the Planet in the Age of Humans*, has significantly redefined his perception of modern food technology. Once a staunch opponent of genetically modified organisms, Lynas now considers them a critically important tool for addressing food security, productivity, and future climate change. Asserting that organic farming cannot feed the world and that GMO foods are somewhat safer, Lynas is critical of activists and the media who refuse to consider scientific evidence. "The controversy over GMOs represents one of the greatest science communication failures of our time," says Lynas, calling on those with a commitment to scientific method and evidence-based policy to "undo the damage caused over the last decade and a half."

Thad Simons, President and CEO of Novus International, Inc. and President of the International Food and Agribusiness Management Association agrees with Lynas that consumers are confused about food safety and don't fully appreciate the concept of nutritional security. Calling for wholesome, affordable food generated by sustainable, innovative and responsible practices, Simons maintains the pertinent question for the future is "where will the talent come from?" The answer lies in agricultural innovation adapted to local needs in countries around the world, productive relationships between

academia and business, and mentoring a new generation of farmers, including young entrepreneurial women.

William Weldon, Vice President, Global Research and Development and Western Europe Operations for Elanco Animal Health, calculates that by 2050 the world will need 70 percent more food, with 70 percent of that food generated through more efficient food technology. Noting that U.S. agricultural output, inputs, and total factor productivity increased 250 percent in the last 60 years, Weldon believes it is possible to achieve the world's 2050 goal through concerted global commitment and collaboration.

“Achieving food security demands global vision. Governments must establish universal standards that allow the movement of meat, dairy and eggs from areas of production to population centers, while agriculture must identify the production systems that will enhance animal welfare and improve productivity,” says Weldon. “If the food chain allows for consumer product choice enhancing confidence, quality and wholesomeness, and the scientific community produces accurate and clear information, we’ll contain hunger, our #1 global health risk.”

Weldon's qualified optimism reflects Norman Borlaug's own late-life observations before his 2009 death concerning further efforts to feed the planet. “I now say the world has the technology -- either available or well advanced in the research pipeline -- to feed, on a sustainable basis, a population of 10 billion people,” said Borlaug. “The more pertinent question today is whether farmers and ranchers will be permitted to use this new technology. While the affluent nations can certainly afford to adopt ultra-low-risk positions,

and pay more for food produced by the so-called 'organic' methods, the one billion chronically undernourished people of the low income, food-deficit nations cannot."

While delegates continue their dialogue on the direction envisioned at VetHealth Global 2013, it's clear the conference provides an invaluable forum for the international debate being fostered there. "PEI's VetHealth Global has become an important meeting place for the animal health world," says Rory Francis. "Its unique combination of outstanding thought leadership, emerging industry trends, and innovative partnerships ensures its place on the Industry Calendar. "