

## PREFACE

The main concerns regarding barriers to trade have historically been that they reduce opportunities for firms wishing to engage in international commercial transactions, inhibit the efficient use of resources, and reduce the welfare of societies able to engage in trade. The agri-food sector remains one of the sectors where barriers to trade abound. Trade barriers can arise from two major sources. The first, and the one that has received the most attention, is those barriers put in place by governments responding to requests for economic protection from domestic firms. The second arises in the form of, often unintentional, friction in the trading system. This friction raises the costs for firms, thus reducing incentives to engage in international trade. While unintended, these barriers to trade can often be mitigated by proactive activities of governments either singly or acting together through international fora. A failure to act in these circumstances can have just as significant an effect on trade and societal welfare as the purposeful erection of trade barriers motivated by a desire to provide economic protection.

While the problem with unintended barriers to trade has a long history, what is new in the case of trade in agri-food products is the looming threat to global food security. Global population is forecast to increase from 6.7 billion people to 9 billion by 2050. This is a 35% increase in less than 35 years. Furthermore, rising incomes among a considerable proportion of the globe's poorest consumers will mean increased demand for food. The combination of more mouths to feed and rising incomes will mean a doubling of food demand over this

short time-span. At the same time, the rate of increase in agricultural productivity is slowing and climate change is likely to adversely affect agricultural output in areas of the world where food is most needed. The bottom line is that increasing agricultural production sufficiently to prevent a deterioration in food security represents a major challenge for the first half of the twenty-first century.

While efforts to increase local production will form a major component of achieving food security goals, in many areas of the world, this strategy will not be successful in terms of being able to maintain levels of food security. Much of the growth in population is slated to take place in areas of the world where agricultural production levels are already not environmentally sustainable. Attempts to increase production will lead to erosion of the agricultural resource base and declining food security. Hence, the additional supplies required to maintain food security will have to come through international shipments from food surplus areas to food deficit areas. Any friction in the trading system that inhibits the movement of agri-food products internationally in a systematic way warrants investigation as to its causes and how its effects can be mitigated.

One of the frictions in the international movements of agri-food products coming to the forefront of concern is the increase in asynchronous maximum residue limits (MRL) for pesticides on imported food products. Divergence in these standards leads to the turning back of cross border food shipments in the short run and inhibits investment in food trade infrastructure over the longer run. While other instances of asynchronous regulatory regimes, such as those governing genetically modified organisms, have received considerable attention, the issue of MRLs has not. Given that these chemicals are used to enhance agricultural production on a truly global scale, the impact of trade restrictions due to regulatory divergence in this area can be extensive and has the potential to make the achievement of food security goals going forward much more difficult. Furthermore, the problem of asynchronous MRLs is worsening.

This serious and deteriorating situation provided the motivation for undertaking this research. It is a clear case of governments either being relatively indifferent to the problem or unable to effectively coordinate their efforts to solve the problem—because it could be solved. The book delves into the source of the problem, the role of MRLs in domestic agricultural production and trade in food products, the motivations of governments and the incentives for policy makers and administrators,

and international initiatives to harmonize MRLs internationally, and provides suggestions as to how to move forward to resolve the issue.

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Saskatoon, Canada  
Saskatoon, Canada  
Ottawa, Canada  
Seattle, USA  
Sacramento, USA

May T. Yeung  
William A. Kerr  
Blair Coomber  
Matthew Lantz  
Alyse McConnell



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Regulation

Frittering Away Food Security

Yeung, M.T.; Kerr, W.A.; Coomber, B.; Lantz, M.;  
McConnell, A.

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