

# STRATEGIC THREATS TO BIOSECURITY

Ministry for Primary Industries  
Manatū Ahu Matua



## SPREAD OF PESTS AND DISEASES GLOBALLY



Pests and diseases will spread across the world including to our current and future trading partners. How our trading partners manage their biosecurity system is likely to impact New Zealand's overall biosecurity risk.

## MOVEMENT OF VESSELS



Changing quantity, origin, type and movement of vessels may impact border resourcing and marine biosecurity risk management. Similarly, changes in the movement of vessels around New Zealand may affect the spread of established pests and diseases.

## ACCEPTANCE OF BIOSECURITY TREATMENTS



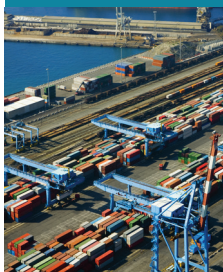
Domestic and international concerns about chemical and non-chemical pest and disease treatments – primarily for health, animal welfare or environmental reasons – could put pressure on New Zealand to find alternatives or face market losses.

## FOOD SECURITY



Food and water will become increasingly scarce, forcing countries to secure their food supply. This may have positive or negative impacts on global biosecurity depending on the value countries place on biosecurity cooperation in securing their long term food supply.

## PORT INFRASTRUCTURE



As container numbers increase, limited container storage capacity could put pressure on ports and transitional facilities. Planned port infrastructure developments face numerous challenges to implementation.

## DEMAND FOR EXOTIC PRODUCTS



Increasing demand for exotic products, including animal feed, is likely to place pressure on the biosecurity system to adapt quickly to changing consumer demand. Balancing the effectiveness of the biosecurity system with efficiency in facilitating trade is essential.

## CLIMATE CHANGE



Climate change will affect the distribution of some pests and diseases and the viability of some primary industries will change. Previously benign species could become a significant risk as conditions become more favourable for their growth and establishment.

## PASSENGER ARRIVALS AND DYNAMICS



Forecasted growth in passenger arrivals, new trade markets and changing demographics increases pressure at the border. Changes in the way passengers arrive, for example, cruise vessel arrivals will also have significant biosecurity implications.

## LAND-USE CHANGE



Demand driven land use conversions has an impact on the risk profiles of pests and diseases specific to the new land use. Large scale land use change, for instance the rapid conversions to dairy farming over the last 5 years, has significant implications for biosecurity risk.

## TRADE VOLUME AND DYNAMICS



Trade volumes will increase and this will put pressure on the border in the form of increasing cargo volume. Changes in the types of goods entering New Zealand and their country of origin will also affect biosecurity risk.

## ONLINE SHOPPING



The number of parcels entering New Zealand continues to grow, increasing pressure on the border. Growth in New Zealand based online shopping will also have implications for the traceability and management of couriered plants and food.

## MONOCULTURES



New Zealand primary production sectors are highly reliant on a relatively small number of monocultures. Although there are some positive biosecurity outcomes associated with monocultures, there are also considerable risks associated with low genetic diversity.