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Examination of New Zealand's Agricultural Sector in Response to Economic Growth and Changing Trade Relations with China

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EXAMINATION OF NEW ZEALAND'S AGRICULTURAL SECTOR IN RESPONSE TO ECONOMIC GROWTH AND CHANGING TRADE RELATIONS WITH CHINA

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ABSTRACT***

China's growth performance over the last three decades has stood at a phenomenal nine percent per annum and shows little sign of abating despite challenging market conditions in recent times. With ever increasing demand and limited land availability this is set to have an increasing impact on New Zealand which has a comparative advantage in land-intensive agricultural products. Already this is observable in recent trade statistics. Using GTAP (global trade analysis project), a computable general equilibrium (CGE) model, this research estimates the future effects of Chinese growth to New Zealand's agricultural sectors and its economy in general. Almost all primary industries in New Zealand can expect to benefit from China's growth, most notably wool and forestry. Modest gains in gross domestic product and economic welfare also benefit the country on the whole. Chinese growth also complements the well documented gains of the recently signed free trade agreement between the two nations.

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SUMMARY

Introduction:

China has experienced rapid economic growth and trade expansion over the last thirty years which has been well documented. Economic growth since 1978 has averaged approximately nine percent per annum and shows little sign of abating. This has seen per capita income in China double approximately every decade. Given that increased demand for land-intensive agricultural products is set to rise, it is anticipated that New Zealand may have a major role to play.

Key Research Questions:

- How is agricultural consumption in China likely to evolve with sustained growth?
- How reliant will China be on imports to satisfy demand for agricultural products?
- What impact will China's growth have on key New Zealand agricultural export markets?

Hypothesis:

Given the strong economic growth in China and the expectation that this will continue into the foreseeable future it is expected that an increasing number of Chinese consumers will spend more on food as well as diversifying their diets. Following the trends of the other 'Asian Miracle' countries I would expect that this diversification would head towards a more Western-type carbohydrate and high energy fuelled diet. This would include such products as red meats, dairy products, seafood, and a wider range of fruit and vegetables. With New Zealand having a comparative advantage in land intensive agricultural products, combined with stronger demand for these products resulting from income growth in China with its large population, I would anticipate there will be strong implications for major New Zealand agricultural industries, most notably in dairy, sheep and beef, fishing, and potentially wine. Furthermore, the recently signed free trade agreement is expected the complement the gains from Chinese growth. It is important to consider more than just bilateral trade between New Zealand and China, but also consider the effects on New Zealand's agricultural trade with the rest of the world; some trade-off is to be expected and must be evaluated to determine overall welfare.

Methodology:

The major tool in this research is the GTAP (Global Trade Analysis Project) computable general equilibrium (CGE) model. This is used to examine the effect of changes in Chinese economic growth and trade relations on the New Zealand economy. Such a method is ideal as it incorporates the many interrelationships within the global economy to define a solution.

Key Results:

- New Zealand's wool and forestry industries are the major winners from Chinese growth.
- Modest gains expected for the dairy and horticultural industries.
- Meat prices to rise slightly – however output displaced by more profitable agri-industries