INDO-PACIFIC STRATEGIC PAPERS

Is a Hungry Dragon a Peaceful Dragon: food security implications for China?

Colonel Natasha Fox, AM, CSC

AUGUST 2015

VICE CHIEF OF THE DEFENCE FORCE
Australian Defence College
Centre for Defence and Strategic Studies

The Centre for Defence and Strategic Studies (CDSS)

CDSS is the senior educational institution of the Australian Defence College. It delivers a one-year Defence and Strategic Studies Course, a professional development program that places emphasis on practical rather than theoretical research, on teamwork and support for the personal and professional goals of students. Students and staff share a commitment to achieving professional excellence. Students graduate with a range of postgraduate qualifications in strategic studies, policy and politics, and business administration.

In addition, CDSS is home to the Centre for Defence Leadership and Ethics (CDLE) and the Centre for Defence Research (CDR). CDR manages the publications on behalf of CDSS staff and students.

Indo-Pacific Strategic Papers

This range of papers reflects coursework and research submitted by Australian and international students and staff of the Defence and Strategic Studies Course. The papers have been chosen for publication based on their scholarly attributes and strategic relevance. The topics of the papers relate to Australia's area of primary and enduring strategic interest—the Indo-Pacific region—and present analyses and assessments that concern Australia's policy interests.

For further information about CDSS publications, please visit
<http://www.defence.gov.au/adc/publications/publications.html>

Copyright

Disclaimer

The author

Colonel Natasha Fox graduated from the Royal Military College, Duntroon in 1991, into the Royal Australian Army Ordnance Corps. Her early career included postings to several corps-related appointments, an instructor at ADFA, and aide-de-camp to the Chief of Army, as well as Project Director for the dedication of the Australian Korean National War Memorial. Her more recent postings have included Headquarters Logistic Support Force, Special Operations Command, Headquarters Training Command-Army and Commanding Officer/Chief Instructor at ADFA. In 2013, she was the Director of Personnel Policy-Army.

Colonel Fox has operational experience with the UN Truce Supervision Organisation, serving in Lebanon and Syria. She also deployed on Operation SLIPPER during the period June 2012 to January 2013. Colonel Fox is a graduate of the 2003 Australian Army Command and Staff College and has a Bachelor of Arts, a Master of Business Administration (University of Southern Queensland) and a Master of Management in Defence Studies (University of Canberra), as well as being a graduate of the Australian Institute of Company Directors. She is currently attending the Defence and Strategic Studies Course at the Centre for Defence and Strategic Studies at the Australian Defence College.

Abstract

This paper examines why food security is a strategic-level security issue for China. It notes that China has achieved a level of food self-sufficiency, reduced its levels of poverty and is currently food secure. However, it also asserts that the challenges of population growth, urbanisation, changing consumer diets, loss of arable land and food safety issues combine to create a circumstance where China risks becoming increasingly 'food insecure'.

The paper analyses China's responses to its food security requirements and outlines the likely implications of China's actions. It contends that China will need to continue reforming its agricultural sector, as well as developing a transparent and sustainable food security policy, if it is to avoid the 'hungry dragon' becoming a threat to domestic and regional stability. It concludes that it is in the interest of all parties, including Australia, that China remains 'food secure'.

Is a Hungry Dragon a Peaceful Dragon: food security implications for China? [1]

Introduction

By 2050, the world's population is projected to exceed nine billion people, which is a third larger than today. Producing enough food to feed the future population will be a significant challenge, particularly when the issues of resource scarcity, available arable land and agricultural sustainability combine. China's circumstances reflect the global challenge; it currently has 20 per cent of the world's population but only around 10 per cent of its arable land and 6 per cent of its fresh water.[2] These resource constraints make China potentially a 'food insecure' country.[3]

Food security is defined by the UN Food and Agriculture Organization as 'a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life'.[4] The ability of a country to feed its population is closely connected to its economic prosperity. For the past three years, China has experienced economic growth of around 7.5 per cent, which has enabled over 500 million people to be lifted out of poverty—defined as living on less than US$1.25 per day.[5] Paradoxically, however, it is China's rapid economic growth that also threatens its food security.

China has achieved a level of food self-sufficiency, reduced its levels of poverty and is currently food secure. However, this has resulted in changed consumption patterns which impact grain requirements, the availability of arable land and food safety issues.[6] The paper will examine why food security is a strategic security issue for China, analyse China's responses to its food security requirements and outline the likely implications of China's actions.[7] It concludes that China will need to continue reforming its agricultural sector, as well as developing a transparent and sustainable food security policy, if it is to avoid the 'hungry dragon' becoming a threat to domestic and regional stability.

Food security as a strategic issue for China

There are approximately 840 million 'hungry' people in the world, the majority of which live in developing countries.[8] China, despite its recent impressive economic growth, has 19 per cent of that total, which makes it the second largest population of hungry people in the world, after India. Unsurprisingly, a large hungry population may impact on social stability, as 'food insecurity, especially when is caused by higher food prices, heightens the risk of democratic breakdown, civil conflict, protest, rioting and communal conflict'.[9]

Such an example occurred in 2008 when the price of staple grains increased significantly across the globe, pushing an estimated 400 million people into poverty.[10] The ensuing protests, reportedly occurring in 48 countries, highlighted the relationship between poverty and food. Countries with higher per capita incomes generally experienced non-violent protests, whereas lower per capita income countries experienced rioting and at least 11 violent protests, with those in Indonesia contributing to regime change.[11]

Poverty and food insecurity, therefore, can combine to be a complex socio-economic issue for governments to manage. Poverty and social unrest over food are particularly relevant for China, as they impact on the legitimacy of the Chinese Communist Party (CCP) to rule as the governing party. Legitimacy to rule is linked to the history of China, where the rise and fall of earlier dynasties was often associated with the reliance on grain and the Confucian belief that the ruler is responsible for providing food for the people; those that fail to do so risk losing the 'Mandate of Heaven', the right to govern.[12]

More broadly, food security needs to be seen in the context of 'human security', which includes both safety from hunger, disease, crime and repression, as well as protection from disruptions to everyday life.[13] Human security is part of China's comprehensive security policy, which includes economic, environmental and human dimensions.[14] As explained by William Tow *et al*:

> Chinese policymakers view economic development as absolutely critical to enhancing the security of those whom they govern…. [T]here is an overlapping or complementary relationship between national security and human security…. [T]he individual level [which is human security] envisions that Chinese citizens have the prerogatives to enjoy such aspects of personal security as freedom from hunger and freedom from fear.[15]

By providing human security for China's citizens, the CCP is ensuring its legitimacy as a governing party. This challenge has been publicly recognised by the CCP, with Vice Premier Hui Liangyu asserting in April 2015 that:

> Freedom from hunger is the most fundamental human right. Food security is the basis for economic development and social stability. It is also an important prerequisite for national independence and world peace.[16]

The concept of food security is engrained in China's cultural psyche, with famine a reoccurring theme throughout the country's history. In the late 1870s, for example, nine million people died from famine in the north of China while, in the late 1950s, an estimated 30 million people died from country-wide food shortages.[17] China's approach to food security, therefore, is based on history, socio-economic management and political legitimacy. It assumes strategic significance in Chinese policy, reflected in the CCP's 12th Five-Year Plan covering the period 2011-15, which places particular emphasis on the reform and modernisation of China's agricultural sector.[18]

China's responses to food security

China's policies to achieve food security have targeted agricultural reform and government intervention using economic mechanisms. Initial reforms included evolving the structure of the agricultural sector from a commune system to a 'household responsibility system'.[19] More recently, it has evolved to 'agricultural liberalisation', and now includes a range of initiatives, including government-provided economic subsidies and farmer education, as well as increased research and development into seed quality, irrigation, yield and crop management techniques, all intended to improve the capacity of the agricultural sector to supply food.[20]

Reforms implemented over the past 30 years have resulted in significant increases in per capita production of grains, sugar, fruit, meat and seafood.[21] In 1996, the Chinese Government also declared its aim of achieving 95 per cent self-sufficiency in grain production and set a 'red line' to guarantee that China's arable land would not reduce to less than 120 million hectares.[22] However, with continued population growth, China has increasingly needed to import certain foodstuffs—notably rice and wheat—to achieve uniform food security, achieving this as part of its 'grand going-out' and complementary 'bring it in' strategies.[23] The dual strategies have resulted in China becoming the leading importer and the sixth largest exporter of agricultural products in the world.[24]

The net effect of China's actions is that China is currently considered 'food secure'.[25] It has also become a significant, and interdependent, part of the global agricultural production supply chain. However, China's food security status is not assured and any changes in China's import or export strategies would likely have negative consequences for global economies and food chains. It is, therefore, critical that China continues to develop a transparent and sustainable food security policy and agricultural system. Achieving this dual imperative poses significant challenges for China, both because of its projected population growth (to 1.45 billion by 2030) and a range of environmental issues that have arisen as a result of China's rapid economic development.

Implications of China's actions

China's rapid economic development has reduced the number of people living in poverty. But it has also resulted in an increase in wealth for China's middle class, currently estimated at 300 million, with a projection of 600 million by 2020.[26] The increase in wealth has facilitated a change in consumption patterns, from a largely cereal-based diet to one comprising more meat, dairy, oils, fruit, vegetable and processed foods.[27] This has increased the requirement for grains and water to produce meat, with one-third of China's domestic grain crop already used for livestock fodder, with soybean and corn also being imported to supplement livestock fodder.[28]

One option would be for China's Government to promote a diet that is less grain intensive. That would likely face considerable domestic resistance from a middle class that is increasingly being exposed to external influences. However, to feed China's projected population, based on current dietary intake, it would be necessary to increase grain supply over the next 15 years by 35 per cent.[29] If domestic and international markets were unable meet this demand, as seems likely, food price volatility could be expected to occur, based on market supply-and-demand factors. Protests and violence could then occur over food shortages, similar to what happened with the 2008 food price spikes. This will be a key concern for China's governing party at least until 2030, when China's population is expected to peak.

A further consideration relates to the availability of arable land, that is, land that can be used for agriculture.[30] Over the past 30 years, it is estimated that approximately 4.18 million hectares of arable land has been lost as a result of urbanisation and industrialisation, representing 3.6 per cent of the total.[31] China's urban population, as a proportion of the total, has increased from 17 per cent in 1978 to 50 per cent in 2010.[32] It is projected that by 2030, two-thirds of the population will live in urban areas, further increasing the spread of urban centres at the expense of arable land.[33]

Paradoxically, the decision to build the Three Gorges Dam, to improve China's water security, resulted in the loss of 60,000 hectares of farmland in the important Yangtze River basin, which grows 70 per cent of China's rice crop and 50 per cent of its grain.[34] Although China's Government has said that the loss will be compensated in part by the creation of new farmlands elsewhere, any further loss of arable land would likely threaten the 'red line level' set by the Government in 1996.[35]

Furthermore, some of the land that is available has been polluted through untreated wastewater, industrial run-off, and overuse of chemical fertilisers and pesticides.[36] While agricultural intensification is used to increase crop yields, it has also resulted in environmental problems such as soil acidification and erosion. It is estimated that 8 per cent of China's farmland is contaminated with industrial pollutants, which equates to a potential loss of 12 million tonnes of grain annually.[37] According to a 2013 report, product samples from six agricultural regions also revealed that between 11 and 16 per cent of rice samples were contaminated with either cadmium or lead.[38]

These and similar other reports have resulted in food safety becoming an important issue in China, requiring urgent remedial action to reassure both domestic and international consumer confidence. In 2009, China adopted a comprehensive *Food Safety Law* and also prioritised food safety within the 12th Five Year Plan.[39] However, there are 450,000 food production and processing companies in China, of which 350,000 have less than ten employees, so it is a difficult industry to regulate.[40] Nevertheless, given China's position as a food exporter and its stated self-sufficiency requirements, continuing food safety regulation reform is an imperative for consumer confidence and continued economic growth.

China's overseas development projects

China has also invested heavily in agricultural production in other countries—known in economic terms as 'outward foreign direct investment'—which would seem a 'win-win' approach to food security. Theoretically, if developing countries can achieve a level of self-sufficiency or better, there is more capacity in the international market for China to trade or import food.[41] China has 468 agricultural corporations invested abroad, inclusive of production bases in countries such as Russia, Southeast Asia, Central Asia, Africa and Latin America.[42] China has also formed bilateral working groups with over 50 countries and regions, and provided food and agricultural aid to a number of developing countries to assist with irrigation farming and seed technology.

China's food security-related foreign investment has also included the purchase or long-term lease of arable land in other countries. While China promotes this as 'win-win' for both parties, there have been a number of instances where China has been accused by host countries of 'land grabbing', with Chinese activities in The Philippines, Indonesia, Myanmar and Cambodia, in particular, causing distrust and social unrest.[43]

In The Philippines, for example, several Chinese development projects have been curtailed because of legal challenges and domestic opposition, accompanied by perceptions of corrupt practices, concerns as to the impact on rural livelihoods, and questions of sovereignty regarding the transfer of large tracts of land to long-term Chinese control.[44] Some would argue that reactions in The Philippines reflect the

broader distrust in political and economic relations with China, rather than the foreign investment policy *per se*. Nevertheless, it has implications for China's longer-term ability to access food sources through the foreign investment mechanism.

Chinese activities in Cambodia, Laos and Myanmar similarly illustrate the potentially negative aspects of direct foreign investment. In a number of instances, social elites in those countries have been accused of aligning with Chinese corporations to dispossess local farmers of their land.[45] In addition to concerns about land tenure security for the local population, there have also been concerns that because the food being produced on host country land is primarily intended for the Chinese market, it is undermining and distorting the achievement of food security in the host country.[46]

These issues are also evident in a number of South American countries, notably Argentina and Brazil, where China has either leased land or purchased land for growing export crops. Protests in Brazil resulted in China having to adjust its export-only strategy to include purchasing crops from local suppliers, as well as building a facility to produce soy locally.[47]

These developments indicate that direct foreign investment by China can produce 'win-win' outcomes for both parties. However, there is also considerable scope for mistrust to arise because of a lack of transparency on China's part. The policy clearly needs careful and sensitive management—ideally in collaboration with agencies such as the World Trade Organisation or through the World Food Program—to succeed as an integral policy component of China's food security. Otherwise, the potential remains for further disruptions to global food market prices, with associated social instability, as occurred in 2008.

Conclusion

Food security is of strategic importance to China. China's food security is based on historical and socio-economic requirements, and ensures the legitimacy of the CCP as the ruling party. China's current 'food secure' status has been achieved through a combination of domestic production, the use of direct foreign investment as an alternative source of food production, and through food imports from the international market. However, maintaining adequate food security in the face of diminishing resources and a growing population poses significant challenges for the future, particularly over the next 15 years.

The challenges of population growth, urbanisation, changing consumer diets, loss of arable land and food safety issues combine to create a circumstance where China will likely become increasingly 'food insecure'. While it is unlikely that food insecurity would lead to conflict, evidence from the 2008 food price spikes suggests that food insecurity can contribute to violent domestic protests, social instability and, in more extreme cases, regime change. Given that China has such a large 'hungry' population, any social instability in this group could impact the CCP's legitimacy.

China clearly needs to continue reforming and modernising its agricultural sector, including enforcing food safety regulations. This will help ensure consumer confidence and the sustainability of agricultural production. Any successes in China's domestic production, as well as lessons learnt, should also be made more transparent so that developing countries with growing populations and similar resource constraints may benefit from China's experience. That, in turn, would contribute to the stability and sustainability of the global food market.

The key lessons from China's experience are issues involving arable land, research and development to improve yield and crop management techniques, and policy development on the issue of direct foreign investment. While direct foreign investment has been beneficial to China's ability to achieve its current level of food security, it needs to be undertaken in a transparent and 'win-win' situation that does not impact on the host nation's food security status. This would ensure that the global food market remains stable and that China remains 'food secure', which is in the interest of all parties, including Australia.

Notes

1 This is an edited version of a paper, with the same title, submitted by the author while attending the Defence and Strategic Studies Course at the Centre for Defence and Strategic Studies at the Australian Defence College in 2015.

2 Y. Li, W. Zhang, L. Min, L. Wu, J. Shen, W. Davies, O. Oenema, F. Zhang and Z. Dou, 'An analysis of China's grain production: looking back and looking forward', *Food and Energy Security,* Vol. 3, No. 1, 2014, p. 19.

3 N. Thomas, 'Going out: China's food security from Southeast Asia', *The Pacific Review,* Vol. 26, No. 5, 2013, p. 532. There is no single measure of food security. The UN's Food and Agriculture Organisation uses a suite of indicators related to access, availability, utilisation and vulnerability: see M. Gibson, *The Feeding of Nations Redefining Food Security for the 21st Century*, CRC Press: London, 2012, p. 17.

4 UN Food and Agriculture Organisation (FAO), 'An Introduction to the Basic Concepts of Food Security', *UN FAO* [website], p. 1 available at <http://www.fao.org/docrep/013/al936e/al936e00.pdf> accessed 17 August 2015.

5 International Monetary Fund (IMF), 'World Economic Outlook', *IMF* [website], October 2014, p. 2, available at <www.imf.org/external/publ/ft/weo/2014/02/pdf/text.pdf> accessed 3 March 2015.

6 B. Ghose, 'Food security and food self-sufficiency in China: from past to 2050', *Food and Energy Security,* Vol. 3, No. 2, 2014, pp. 86-95; also H. Lam, J. Remais, M. Fung, L. Xu and S. Sun, 'Food supply and food safety issues in China', *Lancet,* Vol. 381, 2013, pp. 2044-53.

7 Water security is also an integral part of food security: see Luttrell, *Food and Water Security*, pp. 25-34; also J. Boulter, *Food and Water Security: China's most significant national challenge*, Future Directions International: Dalkeith, 2013, pp. 3-5.

8 S. Fan and J. Brzeska, 'Feeding More People on an Increasingly Fragile Planet: China's food and nutrition security in a national and global context', *Journal of Integrative Agriculture*, Vol. 13, Issue 6, 2014, p. 1194, abstract available at <http://www.chinaagrisci.com/Jwk_zgnykxen/EN/abstract/abstract9483.shtml> accessed 17 August 2015.

9 H. Brinkman and C. Hendrix, 'Food Insecurity and Violent Conflict: causes, consequences, and addressing the challenges', Occasional Paper 24, *World Food Program* [website], 2011, p. 4, available at <http://home.wfp.org/stellent/groups/public/documents/newsroom/wfp238358.pdf> accessed 17 August 2015.

10 The 2008 food price spikes were triggered by drought in Australia impacting wheat availability, economic growth impacting consumption patterns in China, India, Brazil and Russia, and the growth of the biofuel industry diverting the corn crop; see Gibson, *The Feeding of Nations Redefining Food Security for the 21st Century*, p. 301; also Ghose, 'Food security and food self sufficiency in China', p. 86.

11 E. Simmons, 'Harvesting Peace: food security, conflict, and cooperation', *Environmental Change and Security Program Report 2013,* Vol. 14, No. 3, 2013, p. 19, available at <www.wilsoncenter.org/sites/default/files/HarvestingPeace.pdf> accessed 16 April 2015.

12 D. Zha and H. Zhang, 'Food in China's international relations', *The Pacific Review,* Vol. 26, No. 5, 2013, p. 461.

13 UN Development Program, *Human Development Report 2014 Sustaining Human Progress: reducing vulnerabilities and building resilience*, UN: New York, 2014 p. 18.

14 J. Hauger, M. Daniels and L. Saalman, 'Environmental Security and Governance at the Water Energy Nexus: Greenpeace in China and India', *Journal of Asian Security and International Affairs*, Vol. 1, No. 3, 2014, p. 236.

15 W. Tow, D. Walto and R. Kerston, *New Approaches to Human Security in the Asia-Pacific China, Japan and Australia,* Ashgate: Farnham, 2013, p. 44.

16 Translated speech available at <www.sourcejuice.com/1276801/2009/11/18/Hui-Liangyu-attended-World-Food-Security-Summit-delivered-speech/> accessed 15 April 2015

17 Zha and Zhang, 'Food in China's international relations', pp. 460-1.

18 The People's Republic of China, 'National Modern Agriculture Development Plan (2011 – 2015) I', *Ministry of Agriculture* [website], 2013, available at <http://english.agri.gov.cn/hottopics/five/201304/t20130421_19481.htm> accessed 17 August 2015.

19 Li *et al*, 'An analysis of China's grain production', p. 21.

20 Zha and Zhang, 'Food in China's international relations', p. 462; also G. Veeck, 'China's food security: past success and future challenges', *Eurasian, Geography and Economics,* Vol. 54, No. 1, 2013, p. 44.

21 Per capita production of grains, sugar, fruit, meat and seafood increased by 33.3, 273.8, 2365.6, 401.0 and 273.8% respectively; see Veeck, 'China's food security', p. 42.

22 Zha and Zhang, 'Food in China's international relations', p. 462.

23 Zha and Zhang, 'Food in China's international relations', pp. 469-70.

24 Fan and Brzeska, 'Feeding More People on an Increasingly Fragile Planet', p. 1201; also Ghose, 'Food security and food self sufficiency in China', p. 87.

25 International Food Policy Research Institute (IFPRI), 'Country Resources – China', *IFPRI* [website], 2012, available at <http://www.foodsecurityportal.org/china/resources> accessed 17 August 2015.

26 Middle class in China is defined by the Chinese Academy of Social Sciences as having an annual disposable income of between 16,300 and 37, 300 yuan (US$2600 to US$6000); see Boulter, *Food and Water Security*, p. 7.

27 H. Godfray, and T. Garnett, 'Food security and sustainable intensification', *Philosophical Transactions of the Royal Society B*, Vol. 369, 2014, p. 2 available at <http://dx.doi.org/10.1098/rstb.2012.0273> accessed 9 April 2015.

28 Boulter, *Food and Water Security*, p. 7.

29 Ghose, 'Food security and food self sufficiency in China', p. 89.

30 Arable land includes land that is already cultivated and land that has the potential to be cultivated (where the soil and climate are suitable for agriculture, there are no existing large-scale human settlements or where the land is not protected by any land rights regimen): see T. Luttrell, *Food and Water Security: our global challenge - landmark study*, Future Directions International: Dalkeith, 2014, p. 35.

31 G.C. Lin, *Developing China: land, politics and social conditions*, Routledge: London, 2009, p. 178.

32 L. Liu, X. Xu and X. Chen, 'Assessing the impact of urban expansion on potential crop yield in China during 1990 – 2010', *Food Security,* Vol. 7, No. 1, 2015, p. 1, available at <http://www.researchgate.net/publication/269723107_Assessing_the_impact_of_urban_expansion_on_potential_crop_yield_in_China_during_19902010> accessed 20 April 2015.

33 The World Bank, *China 2030 Building a Modern, Harmonious, and Creative Society*, The World Bank: Washington DC, 2013, p. 23.

34 Ghose, 'Food security and food self sufficiency in China', p. 92.

35 *Xinhua News*, 'Farmland Loss in Three Gorges Dam Area to be covered', *China.org* [website], 8 April 2004, available at <http://www.china.org.cn/english/government/92504.htm> accessed 16 August 2015; also X. Kong, 'China must protect high-quality arable land', *Nature,* Vol. 506, Issue 7486, 2014, p. 1, available at <http://www.nature.com/nature/journal/v506/n7486/index.html?lang=ja> accessed 20 April 2015.

36 L. Xin, Y. Fan, M. Tan and L. Jiang, 'Review of Arable Land-use Problems in Present-day China', *Ambio,* Vol. 38, No. 2, 2009, p. 114, abstract available at <http://www.bioone.org/doi/abs/10.1579/0044-7447-38.2.112> accessed 17 August 2015.

37 Fan and Brzeska, 'Feeding More People on an Increasingly Fragile Planet', p. 1199.

38 Lam *et al*, 'Food supply and food safety issues in China', p. 2048.

39 See, for example, Kimberly Wright (ed.), 'China Releases Harshest Food Safety Law in History', *China Briefing* [website], 13 May 2015, available at <http://www.china-briefing.com/news/2015/05/13/china-releases-harshest-food-safety-law-in-history.html> accessed 17 August 2015.

40 Lam *et al*, 'Food supply and food safety issues in China', pp. 2050-1.

41 K. Morton, *Learning by Doing: China's role in the global governance of food security*, Indiana University Research Center for Chinese Politics and Business: Bloomington, 2012, p. 26.

42 Zha and Zhang, 'Food in China's international relations', pp. 466-7.

43 Ninety per cent of land available for cropland expansion is contained in either South and Central America or Sub Saharan Africa. It is estimated that 140 million hectares of land have been acquired in transnational transactions since the 2008 food price spikes, predominantly by countries facing shortages of arable land, such as China, India, the Gulf States, Korea and Malaysia: see Luttrell, *Food and Water Security,* pp. 41-2.

44 Thomas, 'Going out', pp. 540-1.

45 See, for example, H. Mirza and A. Giroud, 'Regionalisation, Foreign Direct Investment and Poverty Reduction: the case of ASEAN', paper presented at Experts' Meeting on Foreign Direct Investment in Developing Asia,

Paris, 26-27 November 2003, available at <http://www.oecd.org/development/pgd/20356605.pdf> accessed 17 August 2015.

46 Chinese companies control a quarter of the 17 million hectares of agricultural land and forest available in Cambodia; in Laos, 42.4 per cent of all agricultural concession is ceded to Chinese control, and in Myanmar social elites have reportedly dispossessed 200,000 hectares from local farmers to plant crops for the Chinese market: see Thomas, 'Going out', pp. 547-9.

47 Zha and Zhang, 'Food in China's international relations', p. 469.

http://www.defence.gov.au/adc/publications/publications.html

VICE CHIEF OF THE DEFENCE FORCE