

世界糧食危機與國際的共同因應¹

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摘要

2011年6月10日美國芝加哥期貨市場的玉米價格再度刷新二次世界大戰後的最高價位。2010年來新一波國際食品價格的暴漲再次造成糧食淨進口國特別是低所得國家對糧食安全的恐慌。糧價、核心物價的急漲進而觸發如埃及等北非國家的社會不安及政治動盪。過去國際農產品市場價格穩定時，增加糧食進口比提高自給率或安全庫存更有利。但是2006年以來國際穀物價格暴漲帶動的糧食危機背景下，糧食對外依存度高的國家面臨必須從新檢討糧食安全保障對策的關鍵時刻。而其中國際穀物市場價格的高度波動及穀物貿易的管制措施等深刻威脅國家糧食安全保障的問題必須透過國際協商途徑才可能獲得解決或緩和的契機。

關鍵詞：世界糧食危機、糧食安全、糧食自給率、農業市場資訊制度、東亞緊急稻米儲備

1

壹、前言

2011 6 10
CBOT

Chicago Board of Trade,
2008

2010

2010

2006

20

Group of Twenty Finance Ministers and Central Bank Governors,
G20

貳、非傳統安全與糧食安全

一、非傳統安全

(Human Security)

2

(international regimes)

(Comprehensive Security)

(Cooperative Security)

² United Nations, *Human Development Report 1994* (New York: Oxford University Press, 1994), p. 24.

Public Private Partnership,

PPP

二、糧食安全

3

4

3

2006 203

⁴ The World Bank, *Poverty and Hunger: issues and options for food security in developing countries* (Washington, DC: The World Bank, 1986), p. 1.

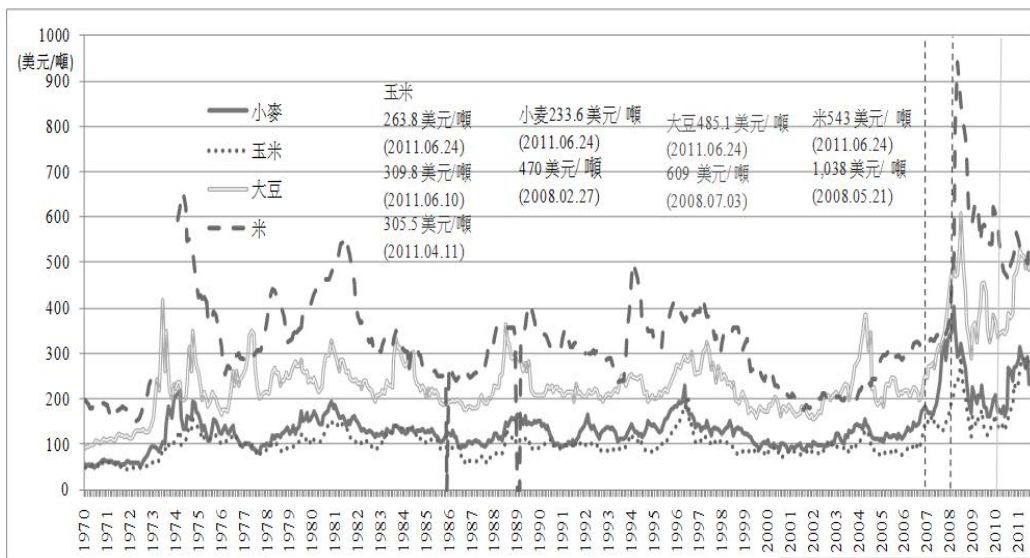
(food system)

FTA

參、世界糧食危機及原因

一、國際主要穀物價格的暴漲

	1990	2006	2006	2006
		1	1970	
		2006	2006	
	2008	2	27	
470	5	21		Free On Board,
FOB		1,038	6	27
	297	7	3	
609				
			2010	
		2011	4	11
			6	10
	305.5	309.8		



1 1970 1 -2011 6 2
 100% FOB

<http://www.maff.go.jp/j/zyukyu/jki/j_zyukyu_kakaku/index.html> 2011 7 25

2010

8 5

15

10%

5

2008

二、國際主要穀物價格暴漲的原因

2006

1970

Organization of Petroleum Exporting Countries,

OPEC

1990

1

2006

5

1

(1970 1990 2006-2010)

		1970s	1990s	2006-2010
供給面				
長期因素	農業生產成長減緩		X	X
	農業研發投資減少		X	X
	世界糧食穀物庫存的持續減少			X
	農地休耕		X	X
短期因素	出口禁止、限制(糧食安全政策)	X	X	X
	生質能源原料轉作的急增			X
	地球暖化異常氣象對穀物收成的損害			X
需要面				
長期因素	人口增加	X	X	X
	新興國經濟成長的糧食需求增加		X	X
	出口需求增加	X	X	X
	生質能源原料新需求驟增			X
短期因素	緊急大量進口採購(糧食安全政策)	X	X	X
國際總體經濟因素				
	石油出口國及新興國的外匯存底累增	X	X	X
	美元貶值	X	X	X
	原油價格上漲	X		X
	世界同時性金融危機			X
	G-20同時性財政擴張措施			X

2006

1970

1990

2007

2008 9

G20

2008

2006

2008

2006

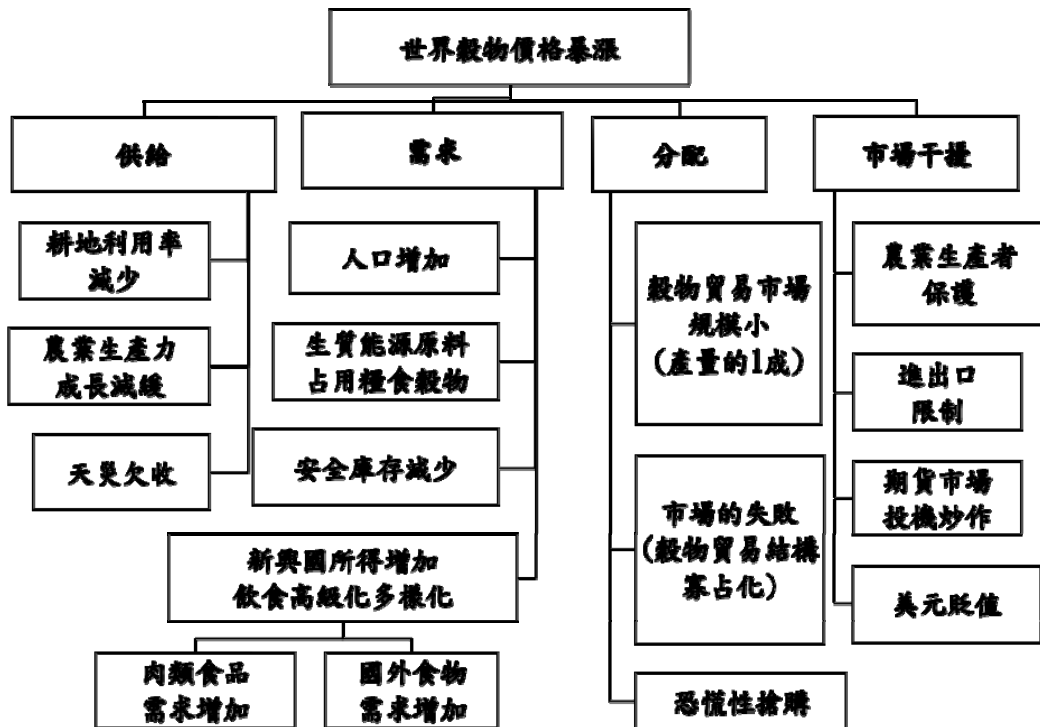
2008

2008

2

2006

2008



2 2008

21

		1990		2000	
				1990	
		Total factor productivity,		TFP	
		1990		⁶ 2000	
	2000				
2002	2007				32.3%
25.6%	31.4%				11.5%
					10.2% ⁷
				2000	60
8,000		2011		70	2050
90					2005
2010	4,100	1999-2005			2050
					70%

⁶ Joachim von Braun, "Food and Financial Crises: Implications for Agriculture and the Poor," *International Food Policy Research Institute*, <<http://www.ifpri.org/pubs/fpr/pr20.pdf>> (December, 2008), p. 7.

⁷ Donald Mitchell, "A Note on Rising Food Prices," *World Bank*, <http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/07/28/000020439_20080728103002/Rendered/PDF/WP4682.pdf> (July, 2008), pp. 5-6.

4 1
3.5

International Monetary Fund,	IMF				
70%	40%				8
	International Food Policy Research Institute,				IFPRI
2000	2007			70%	
	39%	21%	22%	⁹	
2007/2008	22.2%	2010/2011	33.7%	2015/2016	36.1%
2017/2018	36.9%	¹⁰		2008	

⁸ John Lipsky, "Commodity Prices and Global Inflation," *International Monetary Fund*, <<http://www.imf.org/external/np/speeches/2008/050808.htm>> (May 8, 2008).

⁹ Mark W. Rosegrant, "Biofuels and Grain Prices: Impacts and Policy Responses," *IFPRI*, <<http://www.ifpri.org/pubs/testimony/rosegrant20080507.pdf>> (May 7, 2008), p. 2.

¹⁰ <<http://www.maff.go.jp/primaff/koho/press/pdf/090130.pdf>> 2009 2

2-3%¹¹

2000

2007

2000

30% 17.6%

Organization, FAO 17-18%

Food and Agriculture

13% 20% 2%

(shallow dish market)

¹¹ “Press Briefing on Food Aid by OMB Deputy Director Steve McMillin, CEA Chairman Ed Lazear, and Deputy National Security Adviser for International Economic Affairs Dan Price,” *The White House Office of the Press Secretary*, <<http://georgewbush-whitehouse.archives.gov/news/releases/2008/05/20080501-23.html>> (May 1, 2008).

2006

2007

2008

32% ¹²

13

2008 9

2010

3

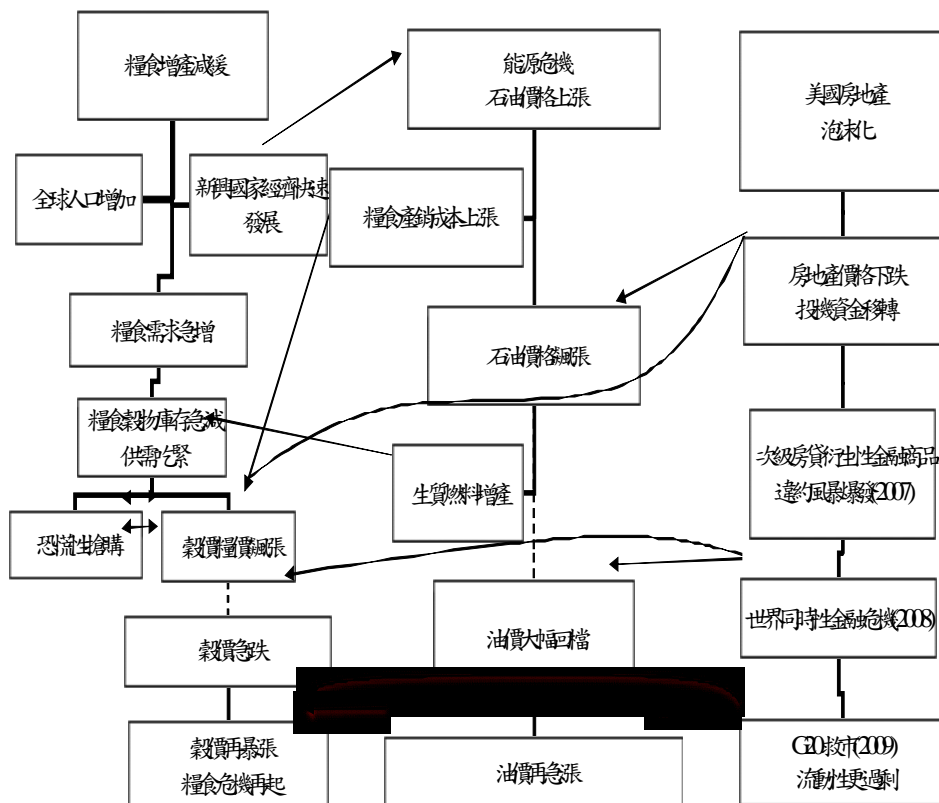
2008

¹² “A Global Trading Summary of Grain and Oilseed Markets,” *Chicago Board of Trade*, <http://www.cmegroup.com/trading/agricultural/files/2008-3_MAGU_v4-21-08.pdf> (March, 2008).

¹³ Miguel Robles, Maximo Torero, & Joachim von Braun, “When Speculation Matters,” *IFPRI*, <<http://www.ifpri.org/sites/default/files/publications/ib57.pdf>> (February, 2009), p. 6.

G20

2010 19.5% 2011 18.6% FAO



3 2010

三、國際金融風暴的影響

2008

2000 2008 12

1.6 74% 40%

ILO 2009 International Labour Organization,

2007 29.4-58.8

9-26.2 ¹⁴ 1.25

589

2 Dessus et al (2008) 2005 2008

¹⁴ "ASIA: Unemployment could top 100 million people," *ADBI*, <<http://www.adbi.org/e-newsline/090601.html>> (2009).

2

(2005-2008)

	CPI 物價指數 (%)	糧食物價指數 (%)	糧食與非糧食物價的差 (%)
巴基斯坦	33	42	18
坦桑尼亞	32	39	14
波利維亞	23	38	30
埃及	24	38	28
印度	16	22	12
哥倫比亞	13	22	18
孟加拉	17	21	8
智利	12	20	16
奈及利亞	18	17	-2
墨西哥	9	15	12

Consumer price index, CPI

50%

Sebastien Dessus, Herrera Santiago, & Rafael de Hoyos, "The Impact of Food Inflation on urban Poverty and Its Monetary Cost: Some Back-of-the-Envelope Calculations," *The World Bank*, <http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2008/07/14/000158349_20080714104851/Rendered/PDF/WPS4666.pdf> (2008), p. 8.

(Engel's law)

2

15

2007 2008
 61
¹⁶ 2008

2011 2010
 FAO

IFPRI 2020

2005 5% ¹⁷

2009 4 G20
 G20

V

2011 3 23

¹⁵

¹⁶ Joachim von Braun, "Food and Financial Crises: Implications for Agriculture and the Poor," *op. cit.*, p. 7.

¹⁷ *Ibid.*, p. 9.

	2008	9	26	106.89
105.75	4	11	6	10

United Nations Economic
and Social Commission for Asia and the Pacific, UNESCAP (2011)

2010	19.4
3.7	2011
4.6%	2011
	2
	14%
	34%
	107%
	6%
	17%
34%	2011

18

UNESCAP

2007 2008

¹⁸ "Rising food prices and inflation in the Asia-Pacific region: causes, impact and policy response," *UNESCAP*, <http://www.unescap.org/pdd/publications/me_brief/mpdd-pb-7.pdf> (March, 2011).

UNESCAP

肆、國際共同因應

2009 4 G8
 2010 10 Asia-Pacific Economic
 Cooperation, APEC G20
 2011 6
 G8 G20

一、2011 年 G20 農業部長巴黎會議的成果與問題

19

2011 6 22 23

G20

²⁰(Action Plan on Food Price

Volatility and Agriculture)

()

()

()

()

()

56 12 25

26 32

33 41

42 51

52 55

Agricultural Market

²⁰ “Ministerial Declaration of the Meeting of G20 Agricultural Ministers: Paris, Action Plan on Food Price Volatility and Agriculture,” *Commodities-now*, <<http://www.commodities-now.com/component/attachments/download/343.html>> (June 22 and 23, 2011).

Information System, AMIS

AMIS

AMIS G20

FAO World Food Programme,

WFP International Fund for Agricultural

Development, IFAD

-

FAO's Global Information and Early

Warning System on food and Agriculture, FAO-GIEWS

- United States Agency for International

Development Famine Early Warning System Network,

USAID-FEWS-NET -

WFP's Vulnerability Analysis and Mapping, WFP-VAM

AMIS FAO (the World Bank)

Organisation for Economic Co-operation and Development,

OECD United Nations High

Level Task Force of the Global Food Security Crisis, UN HLTF

United Nations Conference on Trade and

Development, UNCTAD IFPRI WFP IFAD

World Trade Organization, WTO

FAO 21

(Group on Earth Observation) AMIS (Global
Agricultural Geo-Monitoring Initiative) 22

2011 9 AMIS (Global Food
Market Information Team)

2

2012

2012 3

2012 4 5 AMIS

2012 6

AMIS

The Committee on World Food Security, CFS
(Rapid Response Forum)

23

21	27-31	2
22	32	3
23	36	4

International Research Initiative for Wheat Improvement,

IRIWI

24

(Agriculture and food security risk management tool-box) ²⁵

(emergency

humanitarian food reserves system)

WTO

II

WFP

48

26

G20

24	13-16	1
25	47-48	5
26	50	6

WTO

2008

G20

2011 12

WTO

27

G20

2010

G20

Principles for Responsible Agricultural

Investments,

PRAI

28

G20

27

37-40

28

22

29

2006

2011 2

G20

6 G20

4 14-15 G20

2011 9

4

International Organization of

Securities Commissions,

ISOCO

30

G20

2010 11

G20

2011 2 G20

4

9

2011 9

29

41

30

54-55

³¹(Principles for the Regulation and Supervision
of Commodity Derivatives Markets Final Report)

(Market Authority)

(Contract Design Principles)

(Principles for Surveillance of Commodity Derivatives Markets)

(Principles to Address Disorderly

Commodity Derivatives Markets)

(Principles for

Enforcement and Information Sharing)

(Principles for Enhancing Price Discovery on Commodity
Derivatives Markets)

³¹ “Principles for the Regulation and Supervision of Commodity Derivatives Markets Final Report,” *IOSCO*, <<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD358.pdf>> (September, 2011).

G20

(OTC)

Principle: Information Sharing, Commodity Derivatives Market
Transparency, OTC Transparency

(Principle: Authority to Access information)

(Principle: Intervention
Powers in the Market, Position Management Power, the Power to Set
Position Limits)

(Principle: Powers
and Capacity to Respond to Market Abuse, Disciplinary Sanctions Against
Market Members)

二、東亞的區域合作因應

2004

(East Asia Emergency Rice Reserve Pilot Project)

(East Asia Emergency Rice Reserve)

2010

2007

2010

2011 4

		787,000		87,000
	250,000	300,000	150,000	

400

8 2007

SAARC South Asian Association for Regional Cooperation
Food Bank, SAARC Food Bank

伍、小結

1970

2000

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2006

38 2 2009 4 90-103

<http://www.maff.go.jp/j/zyukyu/jki/j_zyukyu_kakaku/index.html>
2011 7 25

<<http://www.maff.go.jp/primaff/press/PDF/090130.pdf>> 2009 2

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“Ministerial Declaration of the Meeting of G20 Agricultural Ministers: Paris, Action Plan on Food Price Volatility and Agriculture,” *Commodities-now*, <<http://www.commodities-now.com/component/attachments/download/343.html>> (June 22 and 23, 2011).

Mitchell, Donald, “A Note on Rising Food Prices,” *World Bank*, <http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/07/28/000020439_20080728103002/Rendered/PDF/WP4682.pdf> (July, 2008), pp.5-6.

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the Press Secretary, <<http://georgewbush-whitehouse.archives.gov/news/releases/2008/05/20080501-23.html>> (May 1, 2008).

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Von Braun, J., “Food and Financial Crises: Implications for Agriculture and the Poor,” *International Food Policy Research Institute*, <<http://www.ifpri.org/pubs/fpr/pr20.pdf>> (December, 2008), p. 7.

Global Food Crisis and International Coordination for Food Security

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Abstract

Corn price of Chicago future market has reached historical high after WWII in 10th June, 2011. The new surge of commodity prices since 2010 has made low income food deficit countries in great anxiety again. Soaring food prices accounted for high core CPI, and that triggered socio-political shocks. The increase of food importation was more favorable than the increase of food self-sufficiency ratio or safety reserve for the food deficit countries in the stable price situation of international food market for the past 30 years. Under the soaring food prices since 2006, the high food import-dependent countries are forced to adjust food security policies. Collective action and mutual assistance system through international coordination and corporation is a pivot to support national food security and to mitigate the food and commodity price volatility.

Keywords: Global food crisis, food security, food self-sufficiency ratio, Agricultural Market Information System, East Asia Emergency Rice Reserve

