

# Policy Partnership for Food Security

- I World Food Supply & Demand Projections to 2021
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- III Kazan Declaration & Establishing More Effective Information Network

Sep. 2012

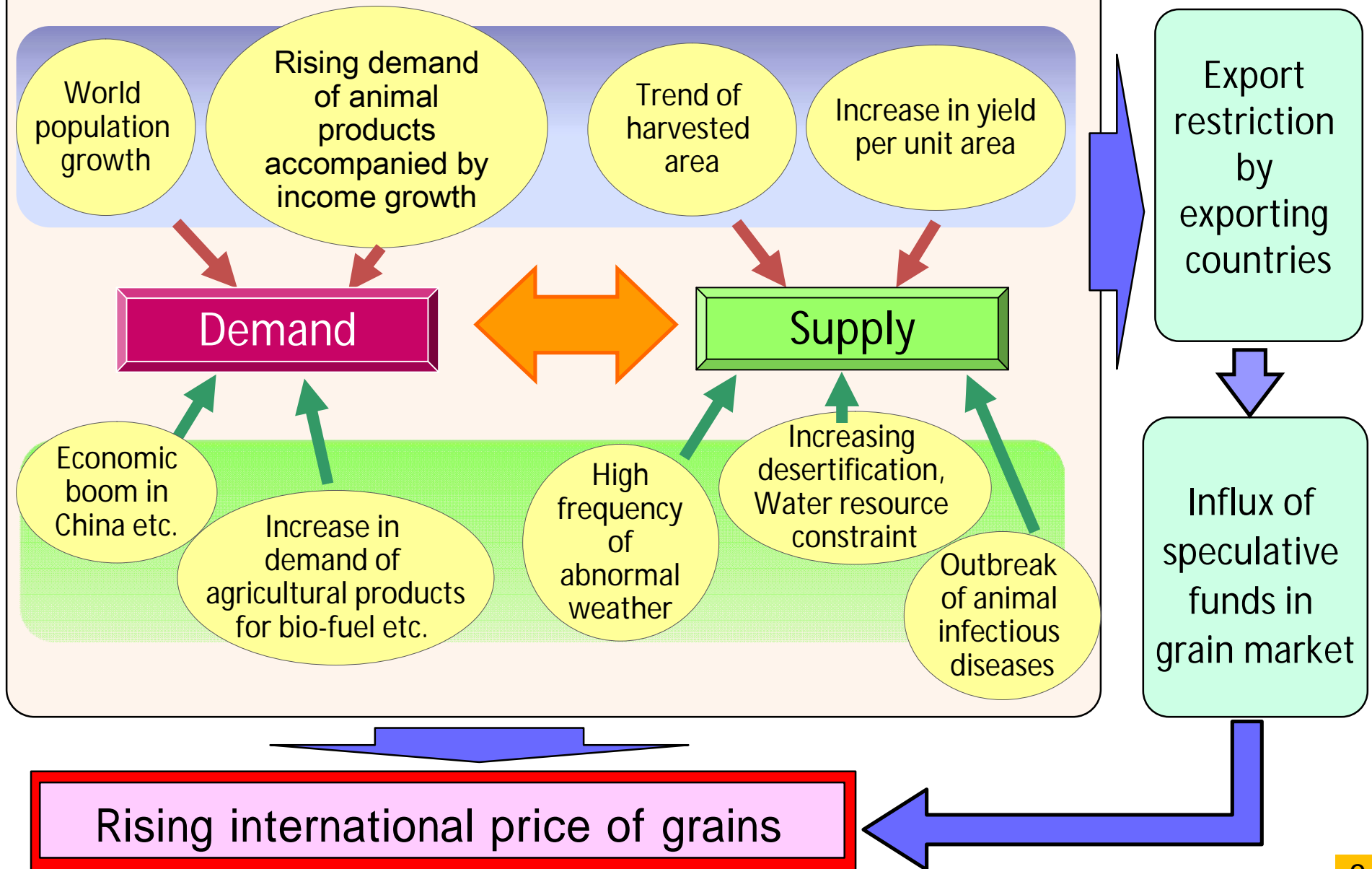
Japan

Ministry of Agriculture, Forestry and Fisheries (MAFF)

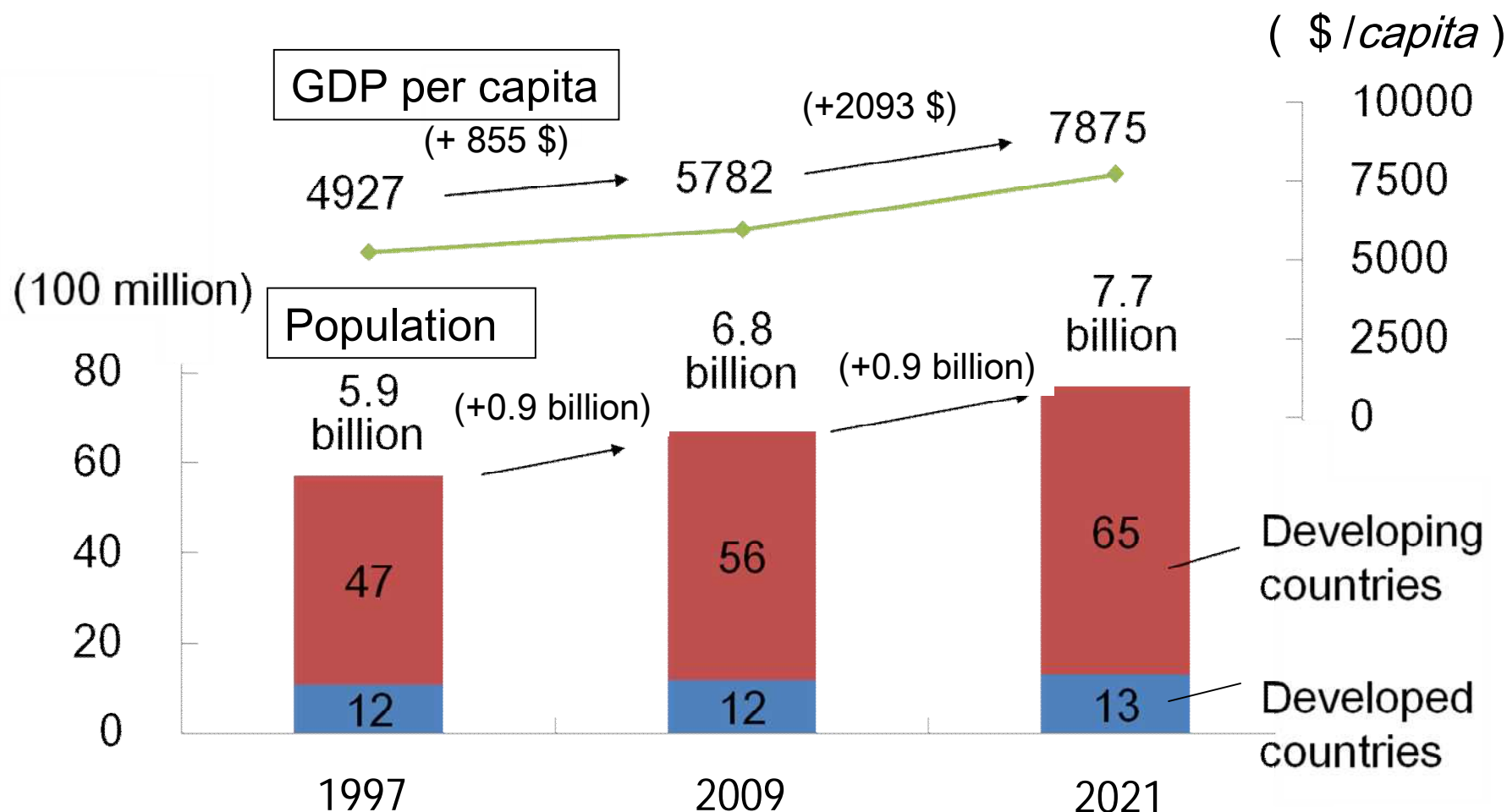
# I World Food Supply & Demand Projection to 2021

Compiled by The Policy Research Institute  
Ministry of Agriculture, Forestry and Fisheries  
(PRIMAFF),  
Feb. 2012

# Highly-influential factors of recent years



# World population and GDP *per capita* increase steadily.

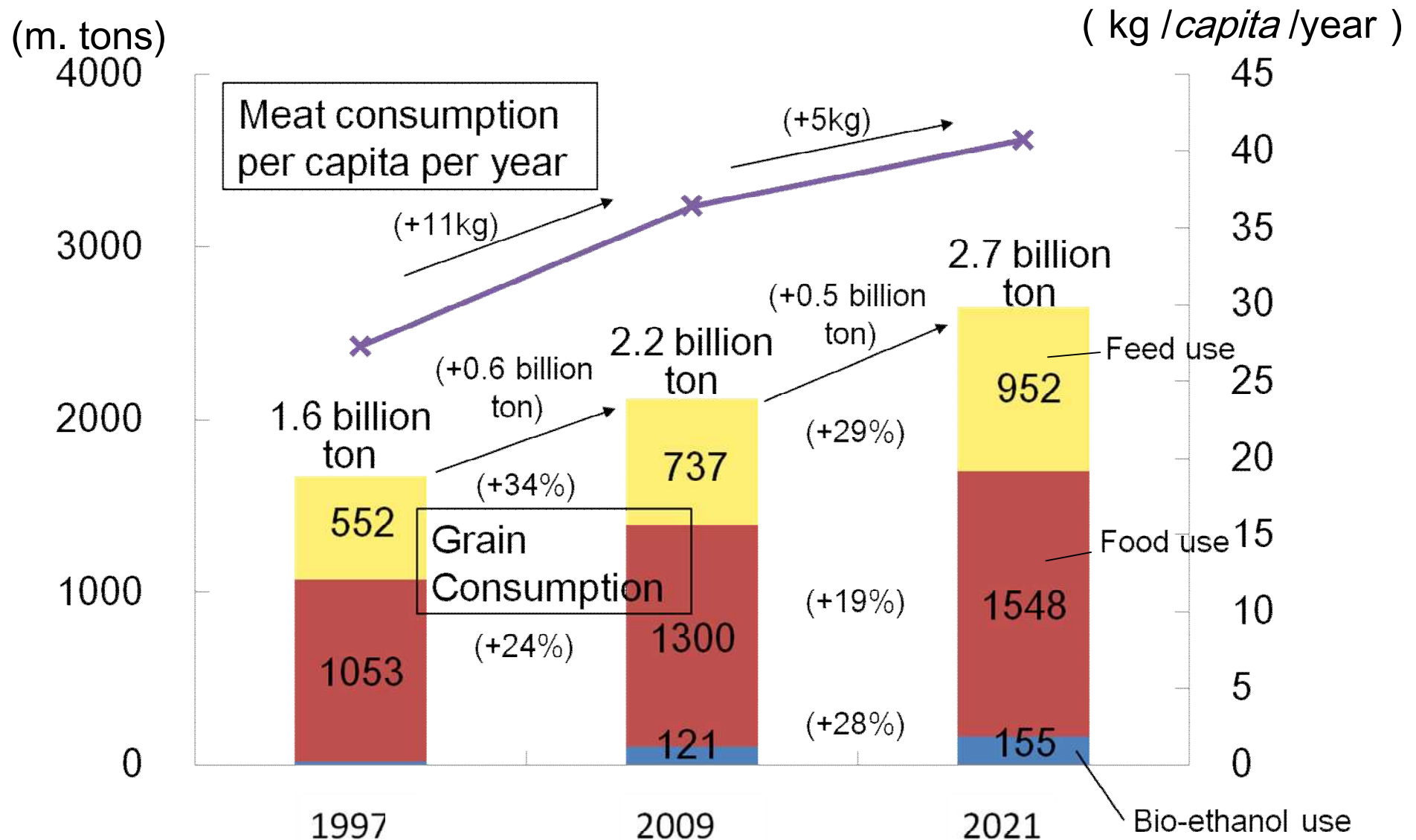


Source : Estimation based on World Bank 「World Development Indicators 2011」

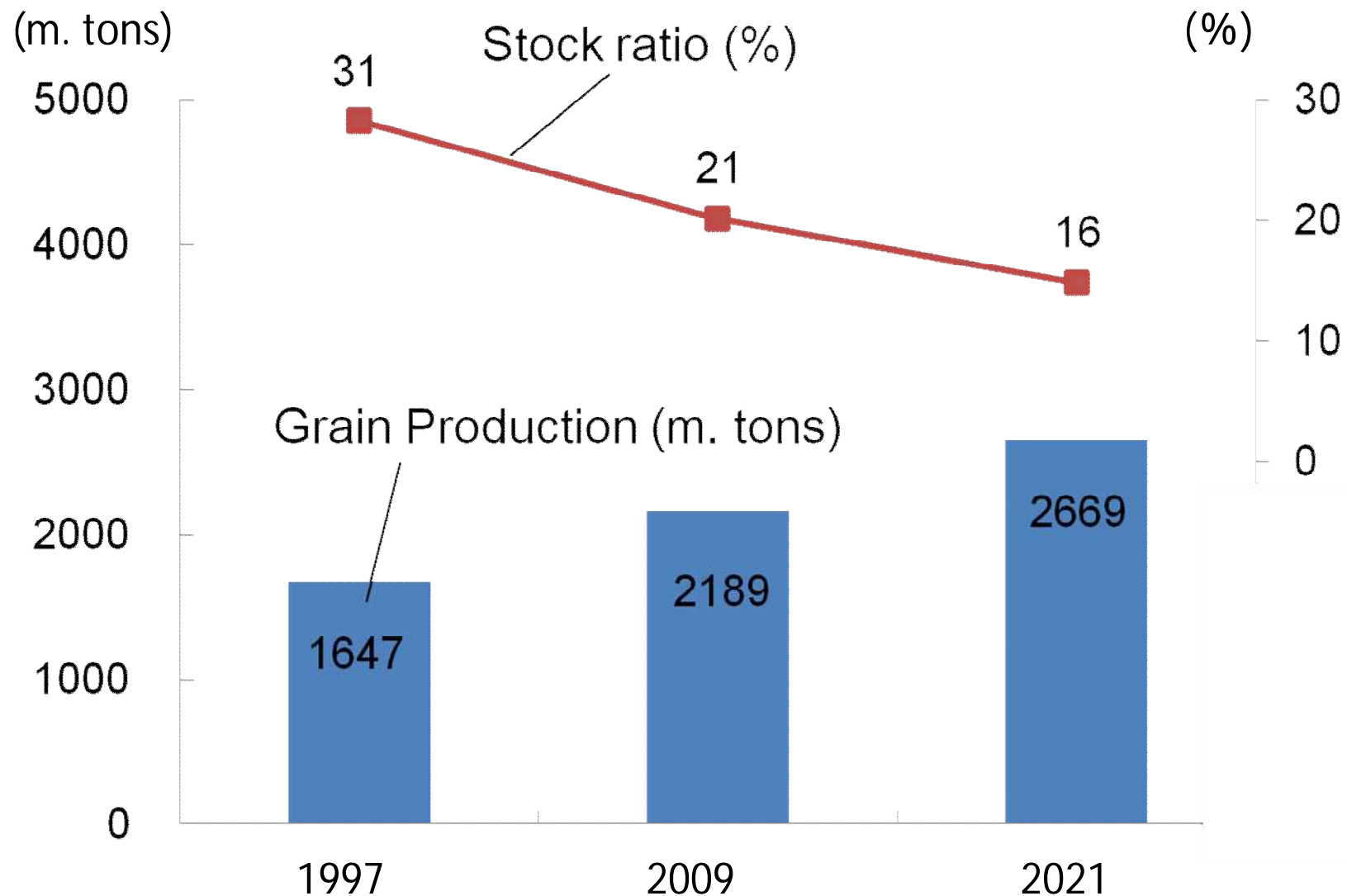
United Nations 「World Population Prospects : The 2008 Revision」

I M F 「World Economic Outlook 2011」

# Grain & Meat Consumption significantly increase.



## Grain Production increases, but Stock ratio decreases.

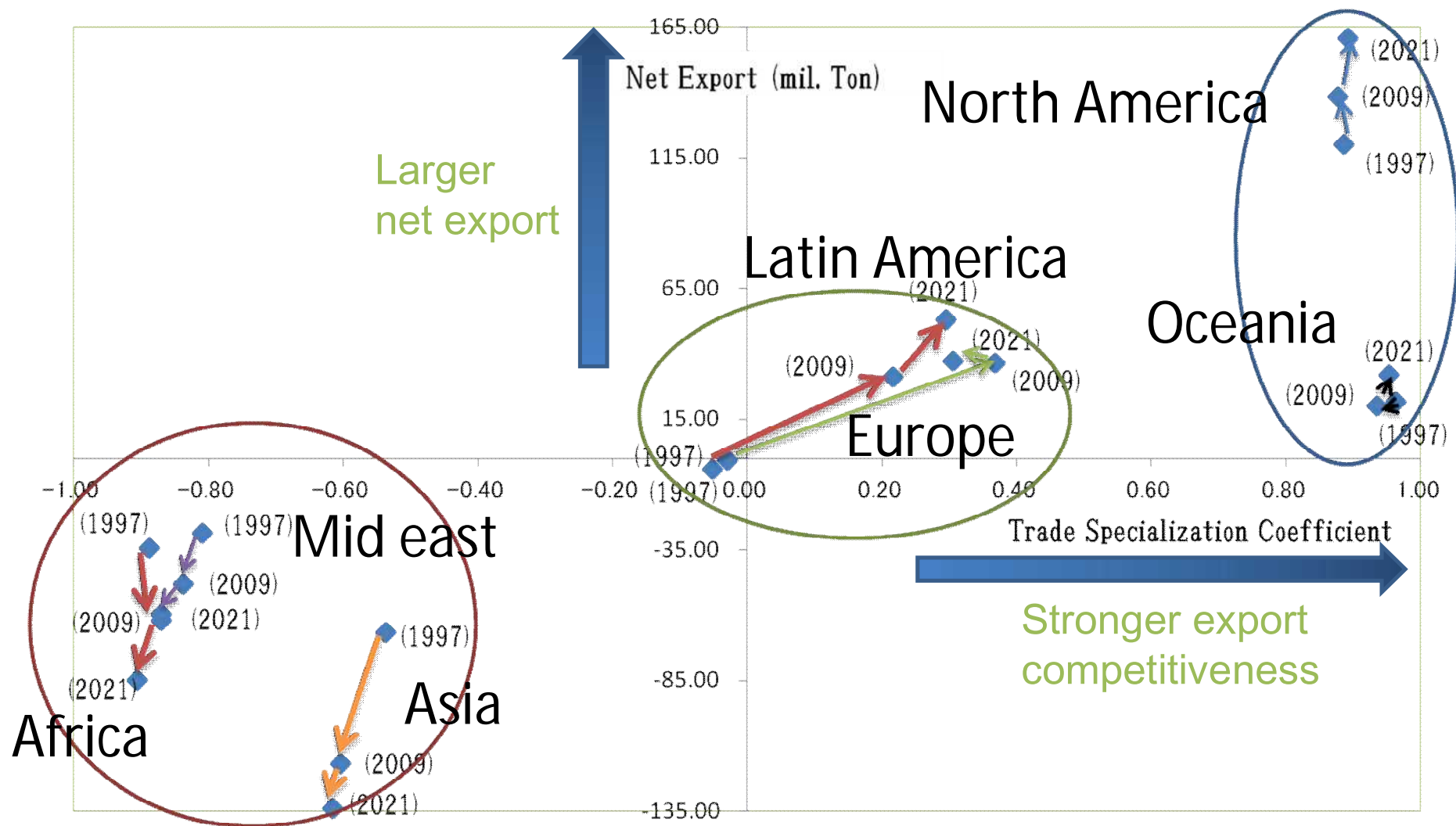


# Grain & Soybean Prices remain higher.



# Changes in World Trade Structure

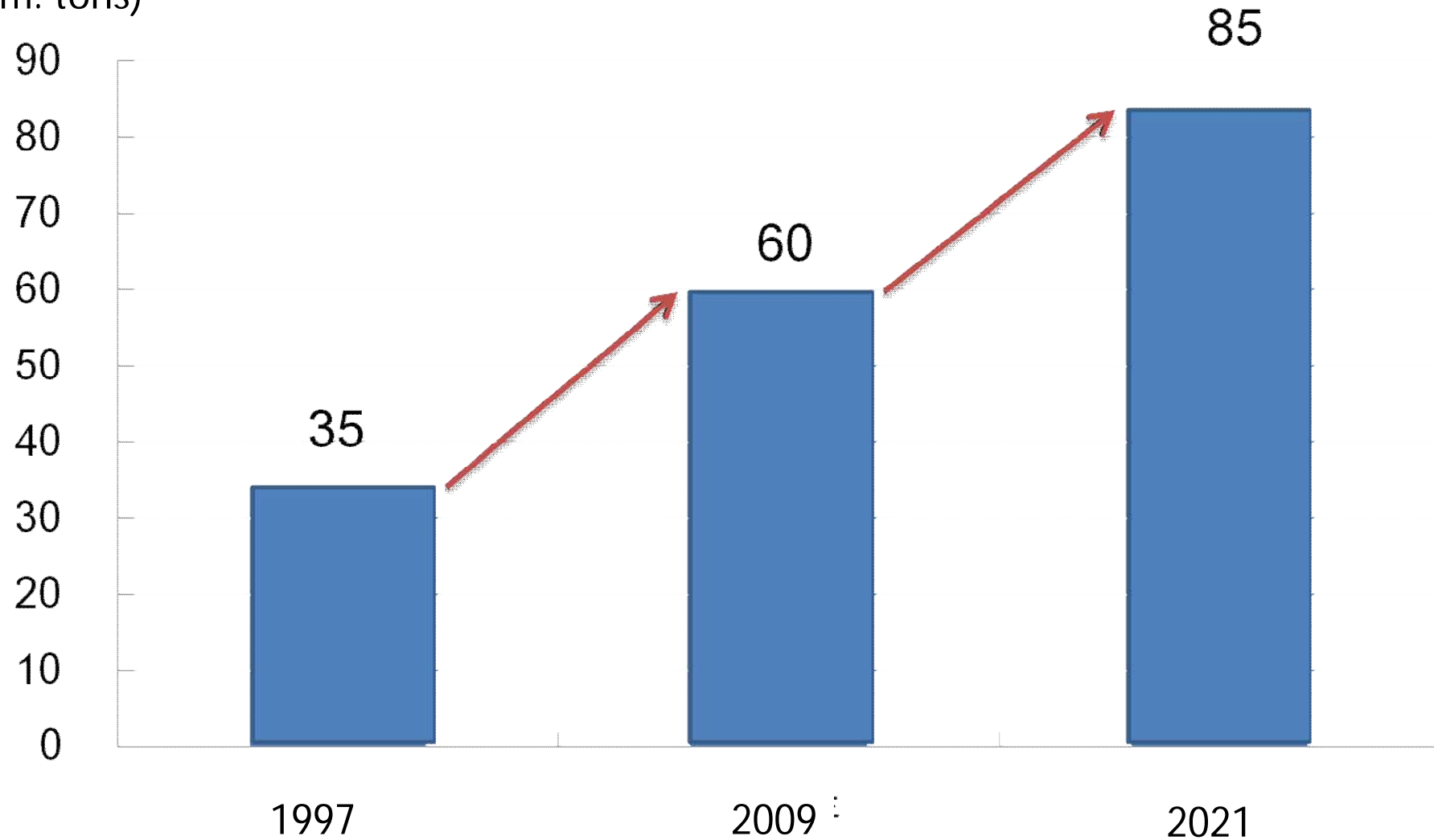


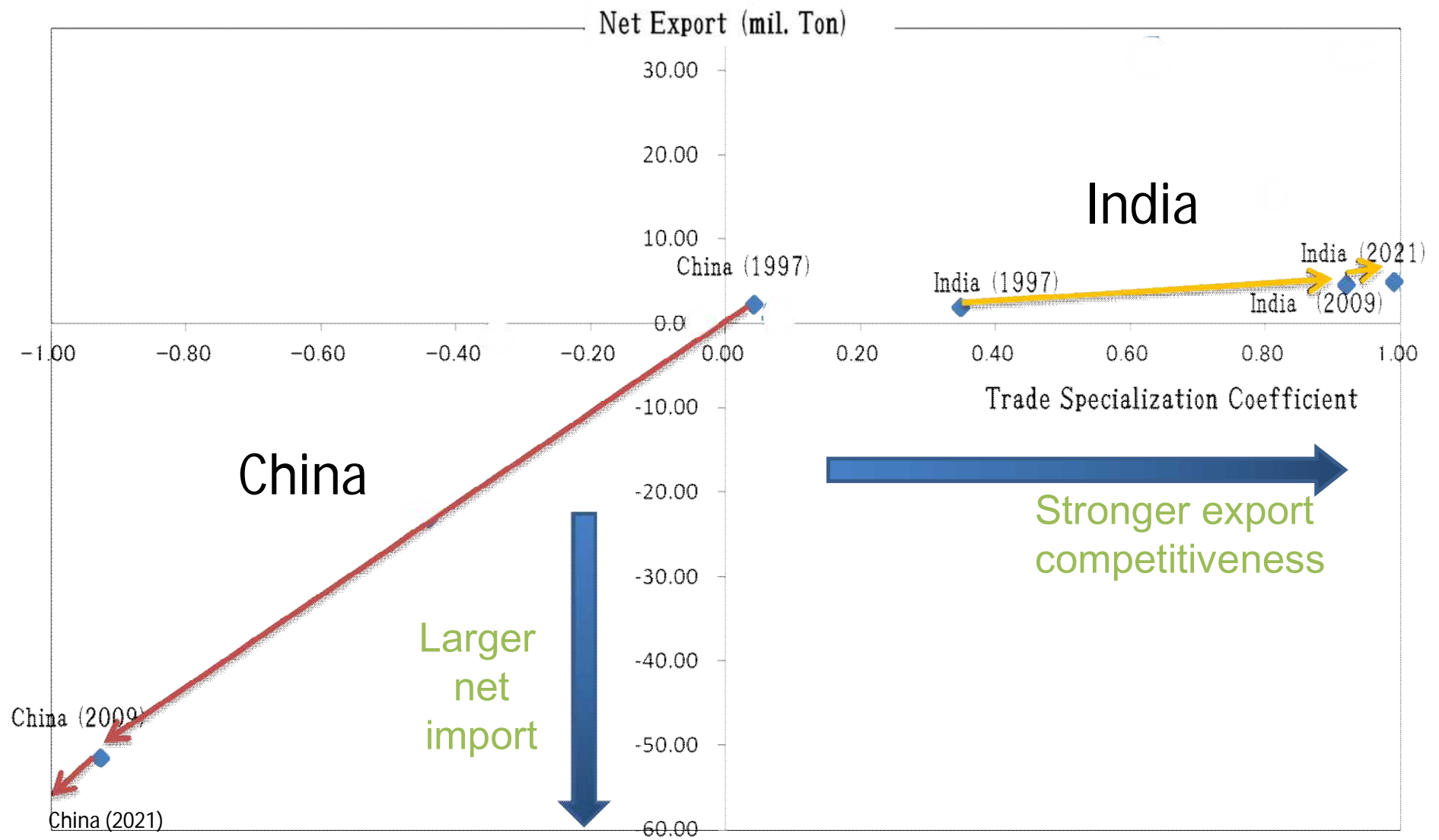


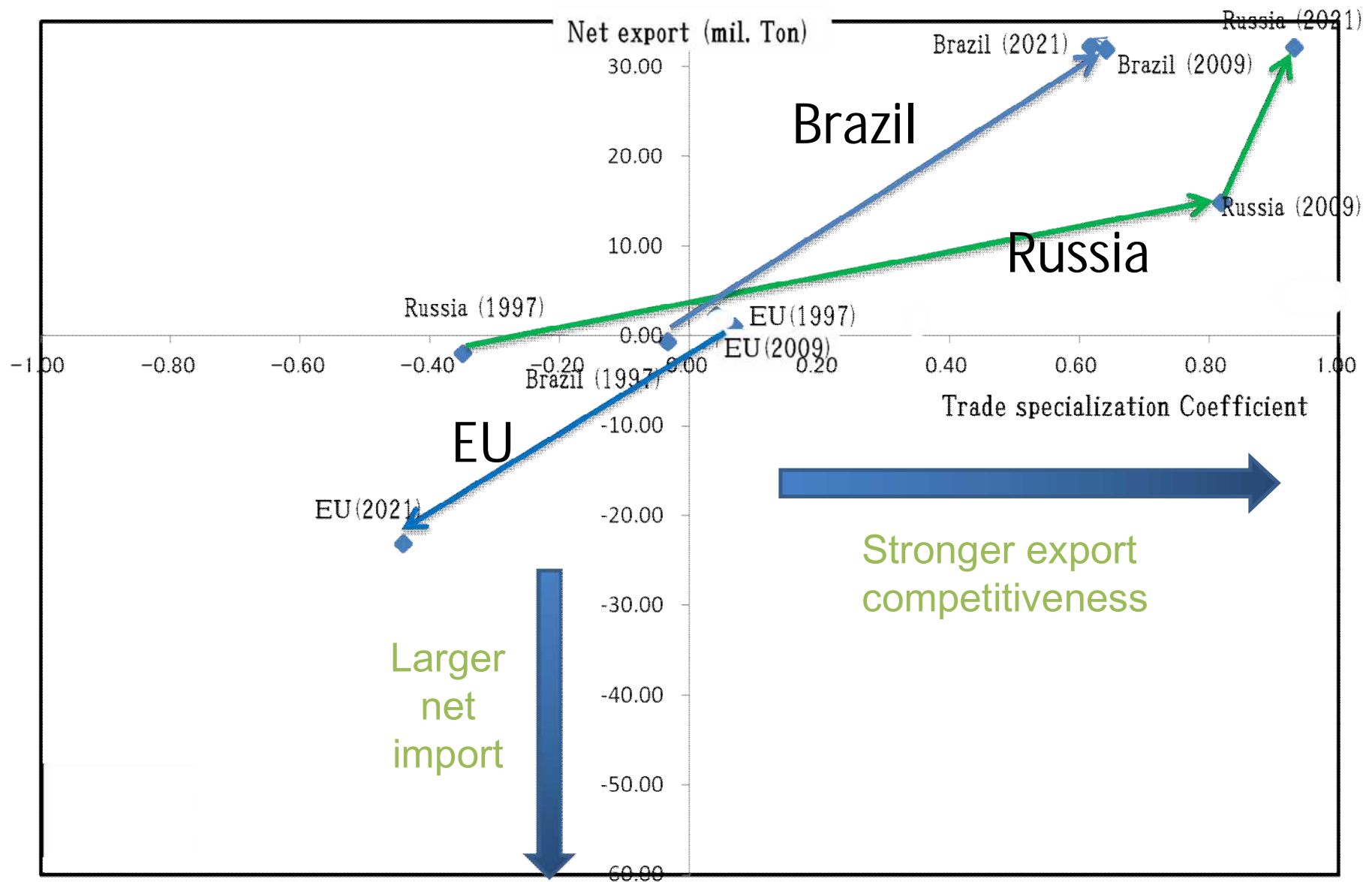
$$\text{Trade Specialization Coefficient} = \frac{\text{Export} - \text{Import}}{\text{Export} + \text{Import}}$$

## Net imports of Grain by Africa

(m. tons)



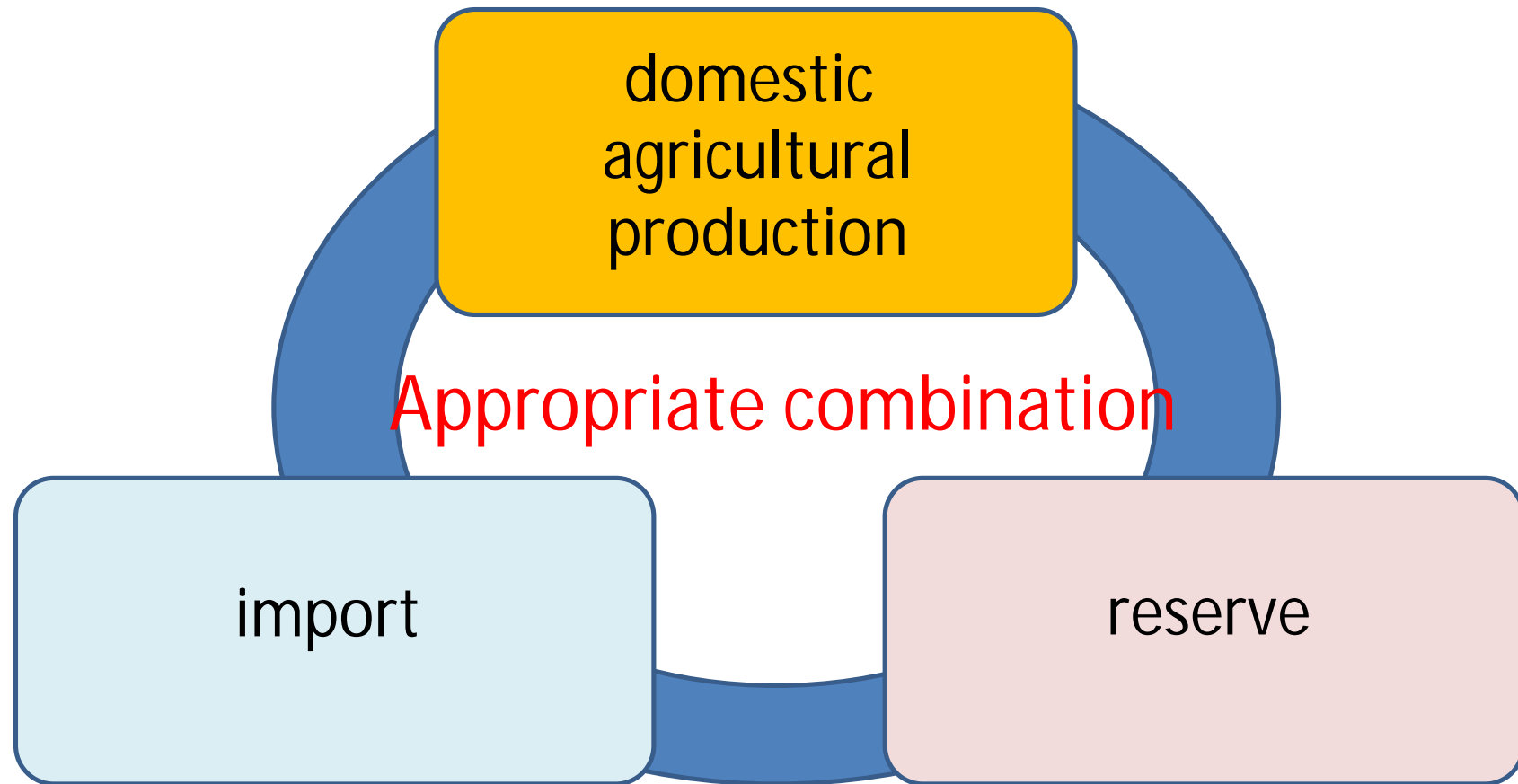




# Food Security in Japan

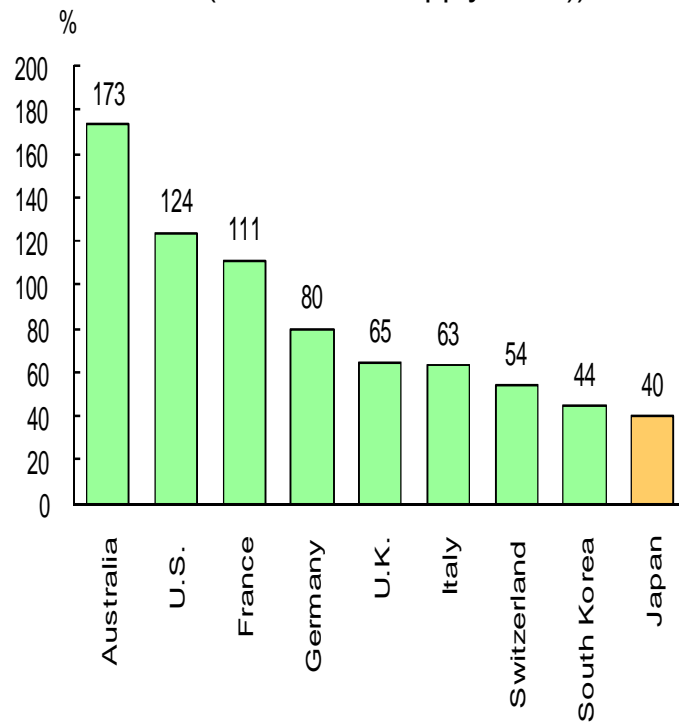
# Establishing Holistic Food Security in Japan

Stable food supply to the citizens shall be secured by increased domestic agricultural production as a base together with appropriate combination of import and reserve. (Article 2; Food, Agriculture and Rural Areas Basic Act)

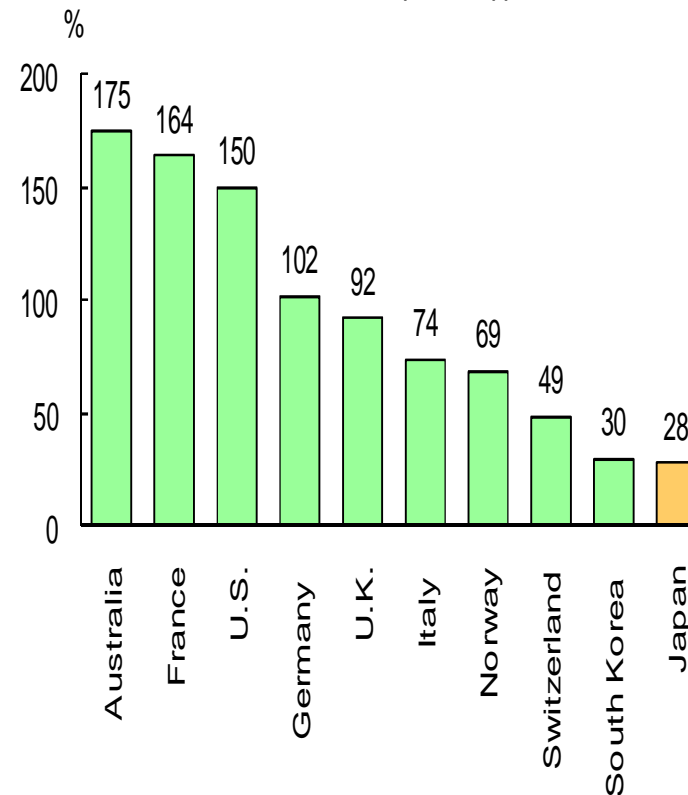


# Very Low Self-Sufficiency Rates for Japan

(Food self-sufficiency rates in major foreign countries  
(on a calorie supply basis))



(Grain self-sufficiency ratios in major countries (2007))



# Japan's Target : 50%

## Current State

The dangers of the food supply

The dangers of sustainable agriculture for industry

## Achieving a target 50%\* food self-sufficiency in three main areas

\* Calorie based target for 2020

### ○ Introduction of income subsidies by household

Arranging an environment for agricultural management so that workers wanting to work in agriculture can do so safely

### ○ 6th industry in rural areas

Increase management income by improving sales price (processed food, direct sales) and increasing sales volume (exports, uncovering new markets in energy and other areas)

### ○ Shift of production system to suit consumer needs

Promote agricultural production to suit consumer needs such as quality, food safety and peace of mind, and environment, and improve the superiority of domestic agricultural produce





# Economies' Self-Sufficiency Targets

## South Korea

- Ministry for Food, Agriculture, Forestry and Fisheries sets targets for the calorie-based total food self-sufficiency ratio as well as for self-sufficiency ratios by each food category, the staple grain and grain in general in its basic plan for agricultural and rural development. [2015 target: 47% (on a calorie supply basis, with feed imports taken into account\*)]
- The *Korea Rural Economic Institute* publishes the food self-sufficiency ratio on a calorie supply basis. [2008: 49% (on a calorie supply basis\*)]

## Switzerland

- The Federal Office for Agriculture publishes both calorie-based and value-based total food self-sufficiency ratios and self-sufficiency ratios by each food category.
  - 2008: 62% (on a calorie supply basis, with no feed imports taken into account\*)
  - 55% (on a calorie supply basis, with feed imports taken into account\*)
  - 68% (on a value basis\*)

## Norway

- The Norwegian Agricultural Economics Research Institute (a research institute at the Ministry of Agriculture) publishes the food self-sufficiency ratio on a calorie supply basis.
  - 2008: 52% (preliminary) (on a calorie supply basis, with no feed imports or exports taken into account\*)

## Taiwan

- The Council of Agriculture publishes calorie-based and value-based total food self-sufficiency ratios and self-sufficiency ratios by each food category.
  - 2009: 32% (on a calorie supply basis, with no imported feeds taken into account\*)
  - 69% (on a value basis\*)

## U.K.

- The Department for Environment, Food and Rural Affairs publishes the food self-sufficiency ratio on a value basis. [2009: 59% (preliminary) (on a value basis) \*]

## China

- The medium to long-term national food security plan outline (2008–2020) sets food self-sufficiency ratio targets for grains, etc.
  - 2020 target: 95% or more for grains, etc. (including rice, wheat, corn, beans and potatoes) (on a weight basis)

## Russia

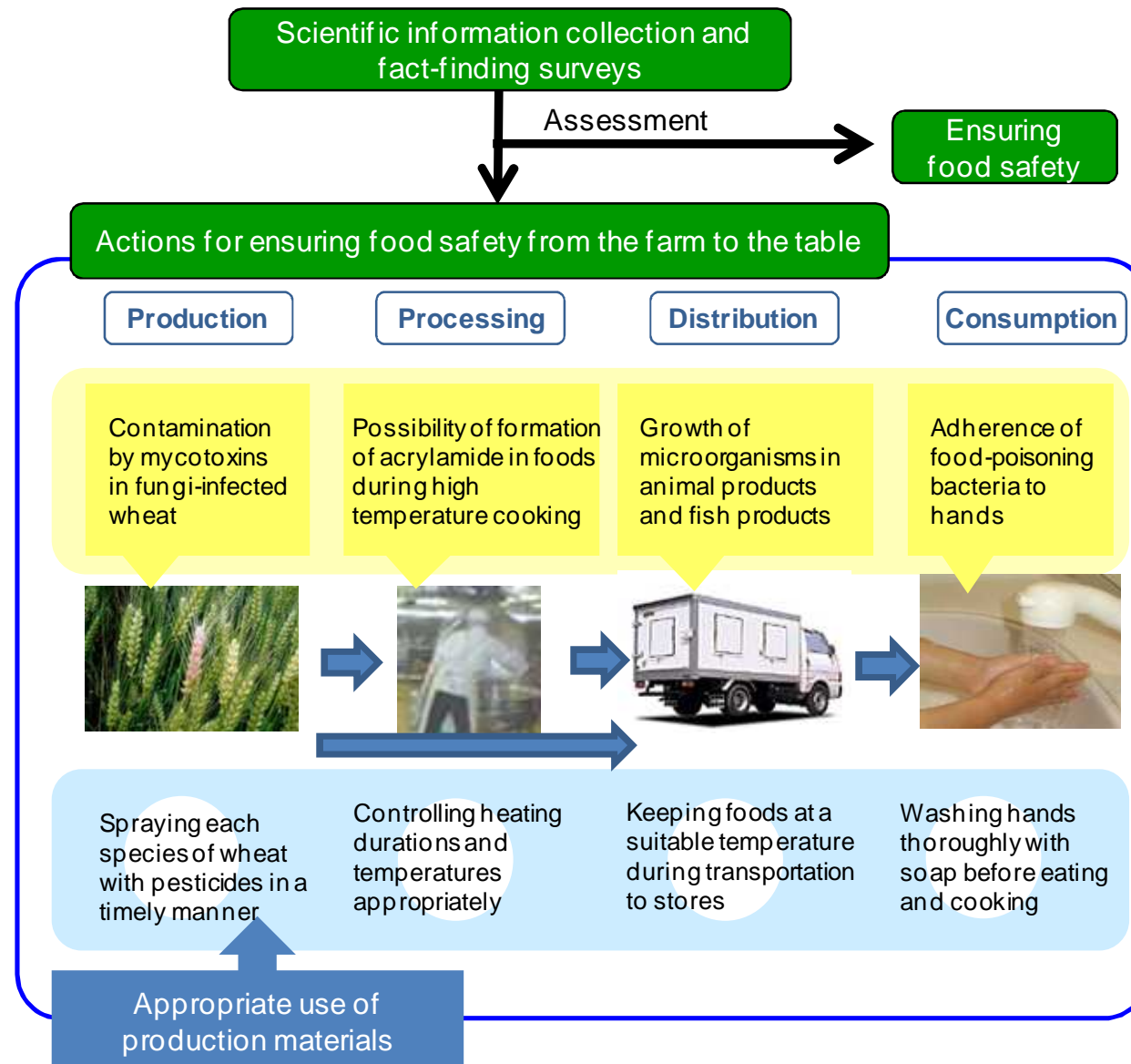
- The Russian food security doctrine sets category-by-category food self-sufficiency ratio targets.
  - 2020 targets: 95% or more for grains, 80% or more for sugar, 85% or more for meat and processed meat products, 90% or more for milk and dairy products, 95% or more for potatoes, etc. (on a weight basis)

## II Policy Partnership Activities

1. Ensuring Food Safety & Building Consumer Confidence
2. Promoting “Sixth Industry”
3. Against Global Warming

# 1. Ensuring Food Safety and Building Consumer Confidence

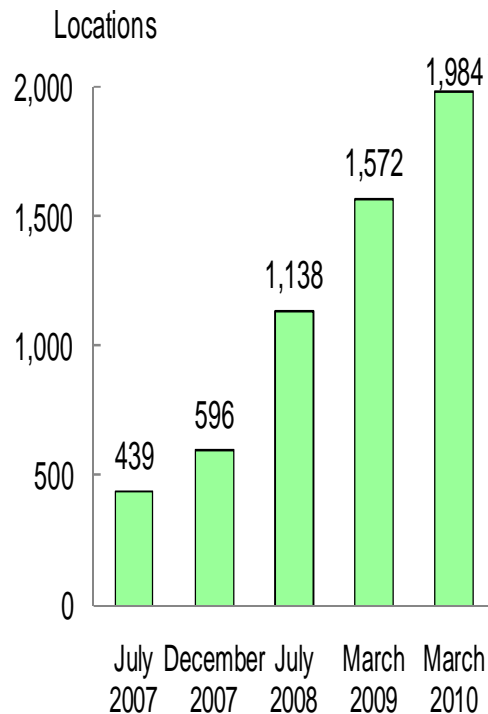
## - Enhancing Food Safety throughout the Food Chain -



## - Good Agricultural Practice (GAP) and Rice Traceability System -

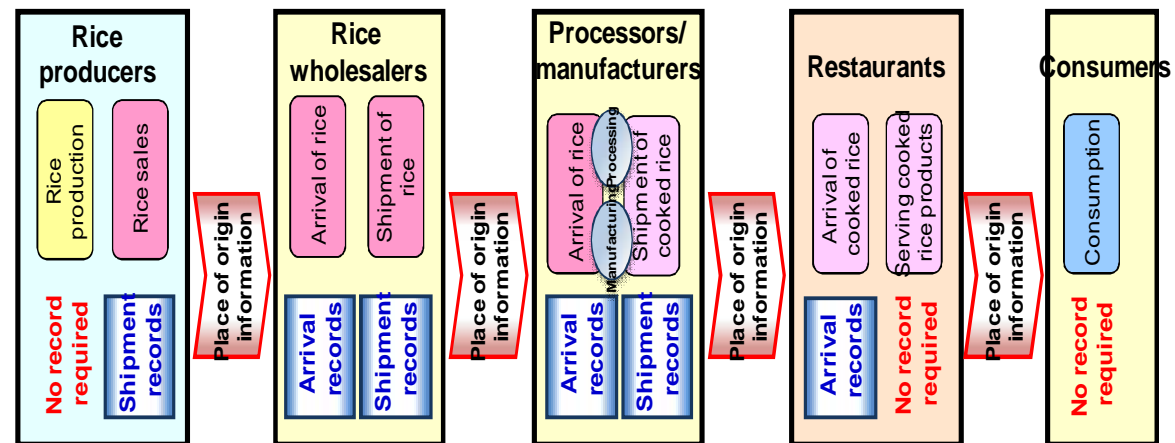
GAP system was developed to accurately implement, record and check necessary measurements at each process in agricultural production, according to check lists based on laws and regulations concerning food safety improvements, environmental conservation and the like.

(Trends of GAP introducing agricultural production locations)



45% of 4,418 locations, which have been developed preparatory plans called Agricultural Locations Intensifying Plan

(Requirements for business entities under the Rice Traceability Act)



All business entities that deal with rice and processed rice products are required to keep transaction records on these products.

When selling or serving products to other business entities or consumers, these business entities are required to provide place of origin information of rice and rice ingredients.

## 2. Promoting “Sixth Industry”

The term “sixth industry” is derived by multiplying the industrial sectors as follows. First (primary) × second (secondary) × third (tertiary) to come up with the “sixth industry.” The sixth industry is expected to synergistically create new added-value through effective use of agricultural, forestry and fishery products, as well as land, water and other resources in farming, mountain and fishing villages, by integrating production, processing and distribution activities.

**(page 30; FY2010 Annual Report on Food, Agriculture and Rural Areas in Japan; 2011)**

### An Illustration:

A restaurant run by a farmers' cooperative which manages a farm complex including not only agricultural farm but a meat factory, agro-experience classes, shops and restaurants providing the own products, as well as internet sales. It created 280 employment, 500,000 visitors and 57 million USD sales in 2009.



### 3. Against Global Warming - Food Mileage -

“Food mileage” is a quantitative index that is calculated by “transport distance” X “weight” of imported food, for assessing the environmental impact especially global warming, in terms of fuel consumption.

(Per capita food mileage)

	(Ton-km)
Japan 2010	6,770
2001	7,093
U.S. 2001	1,051
U.K. 2001	3,195
France 2001	1,738
Germany 2001	2,090

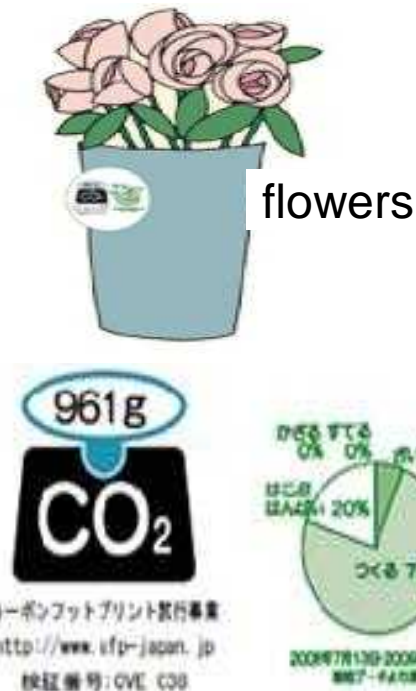
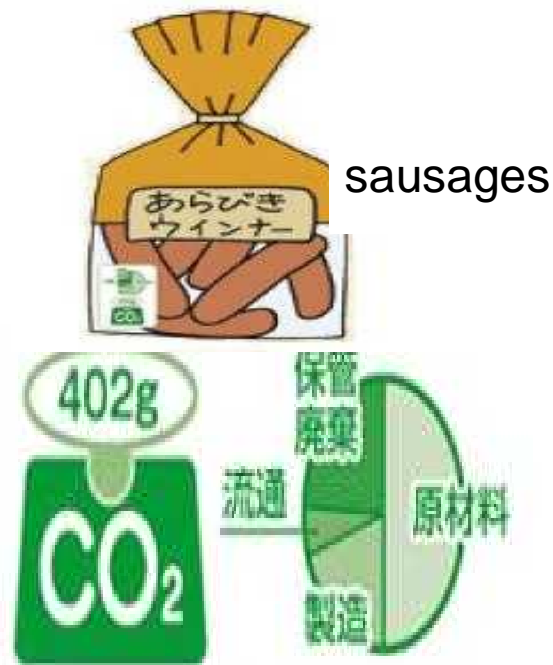
Source: Prepared by MAFF



A logo mark developed by NGOs in Japan to show commodity's food mileage reduction. A unit “POCO” means 100g saving of CO2 emission by choosing domestic products.

## - Carbon Footprints -

Carbon footprints indicate total greenhouse gas emissions in terms of CO<sub>2</sub> emissions caused by raw materials procurement, production, distribution, consumption/ maintenance, disposal and recycling of products. They are designed to enhance farmers' and consumers' consciousness of emission cuts.



### III Kazan Declaration & Establishing More Effective Information Network



# NIIGATA Declaration on Food Security

APEC Ministerial Meeting  
October 2010

## shared goals

### Sustainable development of the agricultural sector

- Expanding food supply capacity
- Enhancing disaster preparedness in agriculture
- Developing rural communities
- Confronting challenges in climate change & natural resource management

### facilitation of investment, trade and markets

- Promoting investment in agriculture
- Facilitating trade in food & agricultural products
- Strengthening confidence in agricultural markets
- Improving agribusiness environment
- Improving food safety practices

# Niigata Action Plan on Food Security (62 activities)

2010

2014

**Development of Information platform on food security (APIP)**

**Holding Workshops & Symposia, and Providing training course :**

Use & Management of Water, Agricultural Research, Green Tourism & Rural Culture, Climate Change, Food Security Mapping System, and Paddy Rice Cultivation System

**Sharing Information :**

Agricultural Assistance, Sustainable Use of Fisheries Resources, Disaster Prevention & Mitigation, Biomass Energy, Asia Forest Partnership, Cartagena Protocol on Biosafety, AFSIS, Quality Management, and Food Cultures

# KAZAN Declaration on Food Security

APEC Ministerial Meeting  
May 2012

## Increasing Agricultural Production and Productivity

- Increasing agricultural production on a sustainable basis is an essential factor of lasting food security
- The economies need to respond to appropriately to environmental risks such as climate change..., considering the diversity of environmental conditions world-wide and positive externalities of agriculture

## Facilitation Trade and Developing Food Markets

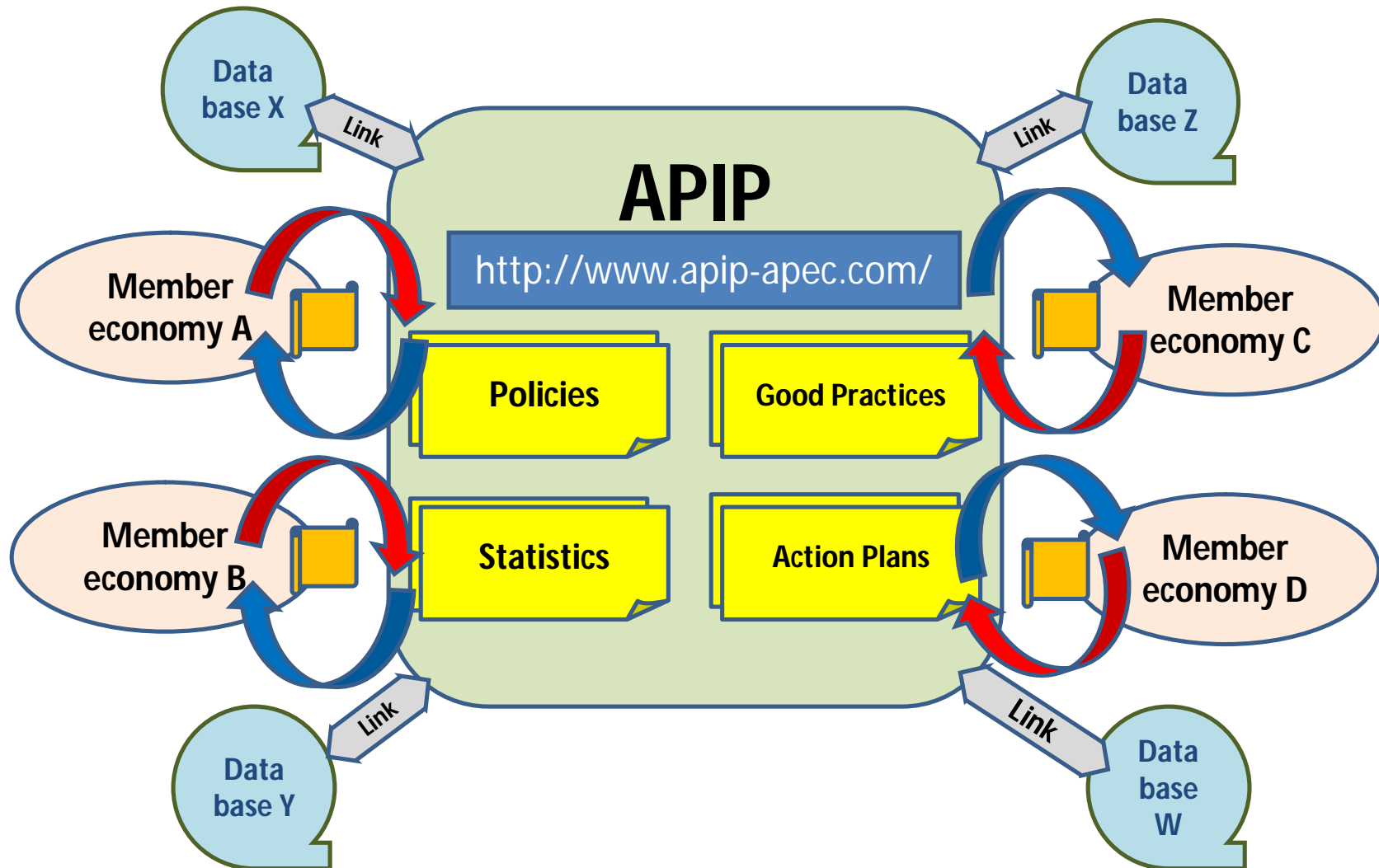
- Recognizing that bans and other restrictions on the export of food may cause price volatility, especially for economies that rely on imports of staple products, we reconfirmed the commitments on protectionism made by APEC Leaders

## Enhancing Food Safety and Quality

## Improving Access to Food for Socially Vulnerable Groups of Population

## Ensuring Sustainable Ecosystems based Management and Combating Illegal, Unreported and Unregulated(IUU) Fishing and Associated Trade

# Asia-Pacific Food Security Information Platform (APIP)



# Contents of APIP

## Niigata Action Plan

62 activities implemented by  
14 economies

## Policies

Social Factors Affecting Food Security

Food Security Policies

Climate Change Policies

Policies for Agribusiness Environment

## Good Practices

Expanding Food Supply Capacity

Enhancing Disaster Preparedness

Usage & Management of Water Resources

Improvement of Agribusiness Environment

Research & Studies

Enhancement of Food Chain & Improvement of Food Safety Practice

Development & Promotion of Rural Areas

Facilitation of Food & Agricultural Trade

## Statistics

Natural Phenomenon

Energy

Starvation and Poverty

Food Security Information

Food Prices

Food Supply & Demand

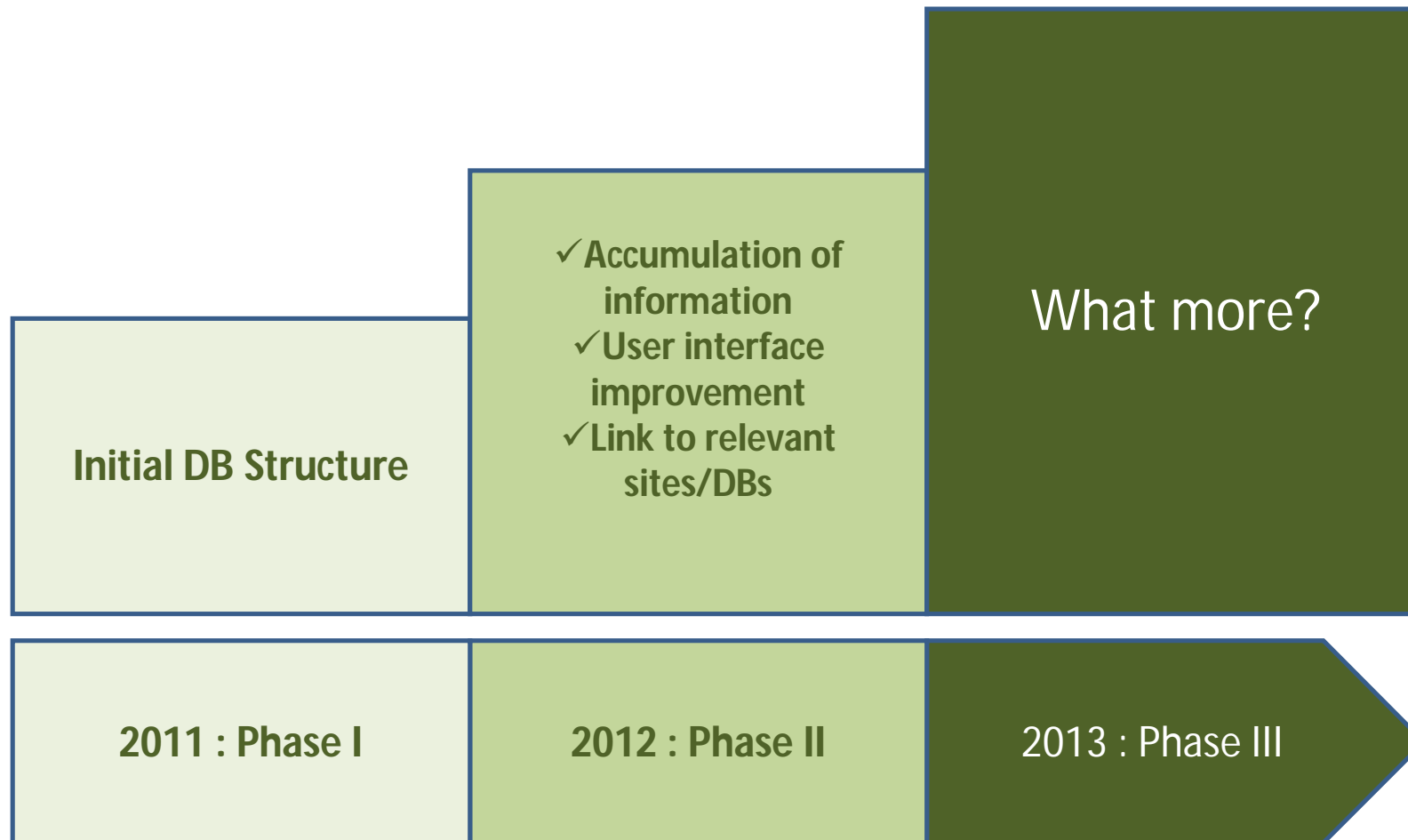
Agricultural Infrastructure

Agricultural Resources

Production & Trade



# Further Development of APIP



**We are here!**

# Examples of Niigata Action Plans results of which can be incorporated into APIP

Activity	Year	Economy
<b>Platform for Information Sharing</b>		
➤ Develop the APIP	2011-	Japan
➤ Develop concept of unified information and statistic agricultural portal (48)		Russia
<b>Research and Developments</b>		
➤ Reinforce international collaborative research on global warming and food security by sharing research outcomes via IP (8)	2011-	Japan
<b>Reduce Food Losses</b>		
➤ Organize workshop, training and a joint research project to share approaches and tools for post-harvest handling (13)	2012-2015	Chinese Taipei
<b>Disaster Preparedness in Agriculture</b>		
➤ Share best practices on disaster prevention and mitigation in agriculture and support measures for farming and rural areas in times of disaster, including international relief systems via IP (18)	2011-	Japan
<b>Promote the Consumption of Local Agricultural Products</b>		
➤ Hold workshop on the potency of local food resources, and establish a network among agriculture research centers on food diversification (25)	2011-2014	Indonesia
<b>Disseminate Promising Farming Practices to Cope with Climate Change</b>		
➤ Hold workshop disseminate feasible adaptation and mitigation measures identified by the food security mapping system incorporating climate change factorable data (33)	2011-2013	Japan
➤ Conduct study and share information on sustainable paddy rice cultivation system adaptable to climate change via IP (35)	2011-	Japan

# Establishing more effective Information Network

Kazan Declaration para. 15

We agreed to consider opportunities for cooperation between AMIS and APIP, starting with: the establishment of links between the two systems; participation of APEC economies that are beyond G20 and AMIS in the two information systems; and opportunities for further development of a common information system in terms of better functionality, availability, and coverage of more various agricultural commodities markets.



- **APEC 2012 Leaders' Declaration (Vladivostok)**

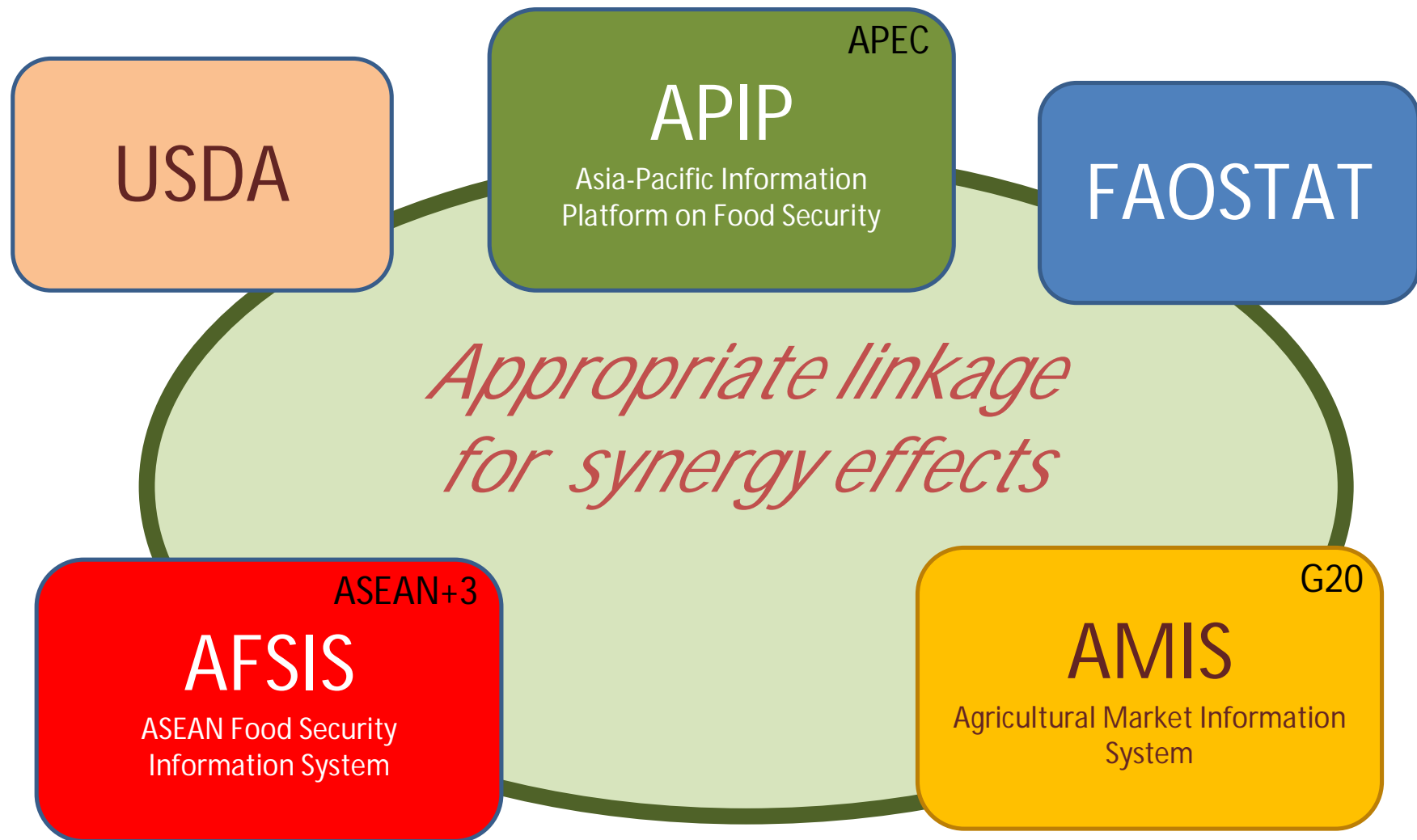
Noting the important contribution of greater transparency and effective food market monitoring to reducing food price volatility, we welcome the progress made in implementing the Asia-Pacific Food Security Information Platform (APIP) and therefore support cooperation between APIP, the Agricultural Market Information System (AMIS) and the Rapid Response Forum, launched by the G20.

- **APEC 2012 Ministerial Statement (Vladivostok)**

*Asia-Pacific Food Security Information Platform*

We welcome the launch of the Asia-Pacific Food Security Information Platform (APIP) in March 2012 in Japan, which was designed as a web-based resource to share regional information on food security. We encourage APIP to go forward with the steps directed to establish links with the Agricultural Market Information System (AMIS) created in the framework of the G20 in June 2011 in Paris to strengthen cooperation between the two systems. We urge APEC economies to provide the APIP with the relevant data and information in order to increase information sharing and effectiveness of this important tool.

# Establishing more effective Information Network



APEC

## APIP

Asia-Pacific Information  
Platform on Food Security

Comprehensive Information Platform  
(Information networking with database among  
economies, Improving convenience for data access)

G20

## AMIS

Agricultural Market Information  
System

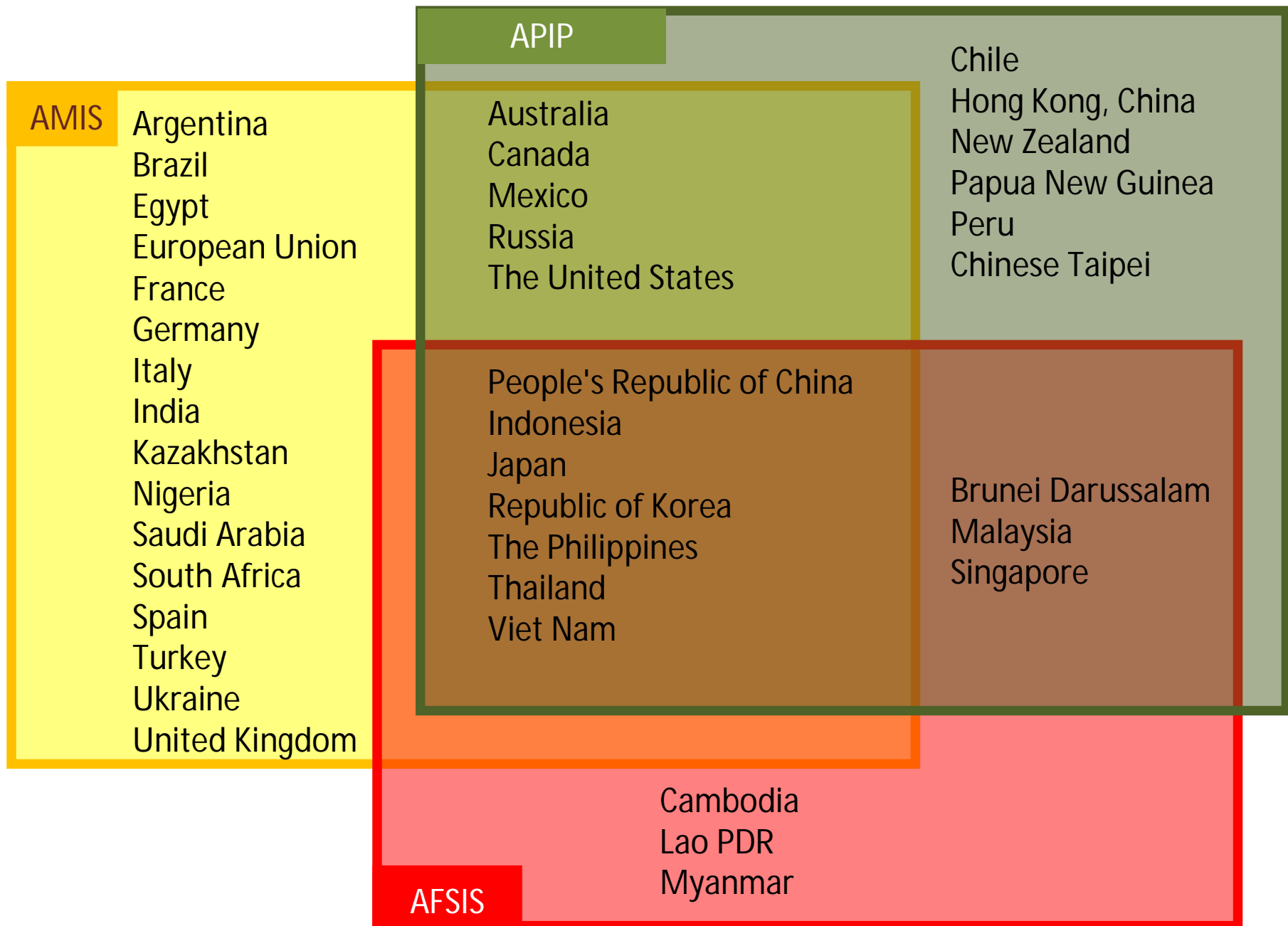
Statistical Database including market information  
(Stabilizing the market through improving  
transparency)

ASEAN+3

## AFSIS

ASEAN Food Security  
Information System

Statistical Database , Early Warning  
Information and Commodity Outlook  
(Improving data accuracy and capacity building)



	<b>APIP</b>	<b>AFSIS</b>	<b>AMIS</b>
Contents	✓Database for Information sharing	<ul style="list-style-type: none"> <li>✓Database for information on food security situation</li> <li>✓Early Warning Information and Commodity Outlook</li> <li>✓Capacity Building</li> </ul>	✓Database for supply and demand
Member	APEC	ASEAN+3	G20+ main exporting/importing countries  FAO, WB, OECD, IFRPI, IFAD and WTO
Secretariat	-	AFSIS Secretariat (Bangkok)	AMIS Secretariat (Rome, FAO)
Donor	Japan	Japan	Japan, France, WB, IFAD, Bill & Melinda Gates Foundation
Start	2011	2003	2011

	APIP	AFSIS	AMIS
<b>Coverage</b>			
Policies	農		
Good practice	農		
Statistics	農	農	農
Action plan	農		
<b>Statistics</b>			
Commodity	Cover Almost All Commodities, such as Rice, Maize, Soybeans, Sugarcane, Cassava, Wheat. (Link to Databases of FAO, USDA, IMF, IGC, AMIS, etc.)	Rice	
		Maize	
		Soybeans	
		Sugarcane Cassava	Wheat
Data items	Temperature, Desertification, Natural Disasters, Plant Pest and Disease, Energy, Food Prices, Food Supply and Demand, Infrastructure, Resources, Production, And Trade.	Production	Production
		Yield	<b>Opening Stocks</b>
		Planted area	Domestic utilization
		Harvested area	<b>Closing Stocks</b>
		Imports (quantity, value)	Imports(quantity)
		Exports (quantity, value)	Exports(quantity)
		<b>Price (farmgate, wholesale)</b>	
<b>Outputs</b>			
		<ul style="list-style-type: none"> <li>- Providing more accurate data</li> <li>- Commodity Outlook (short and medium term)</li> <li>- Early Warning Information</li> <li>- Improved capacity</li> </ul>	<ul style="list-style-type: none"> <li>- Providing updated supply &amp; demand data</li> <li>- Report on supply &amp; demand</li> <li>- Short-term market outlook</li> <li>- Improved capacity Providing more accurate data</li> </ul>

# Thank you for your attention !!

*More details, please contact following;*

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