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Economic Cooperation

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Agenda Item: 9

Promote Technology Dissemination in APEC Grain Sector

Purpose: Consideration
Submitted by: ABAC China

APEC
RUSSIA 2012

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Promote Technology dissemination in APEC Grain Sector

By ABAC China

Feb 5, 2012

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Background

Approach → In 1999, APEC Leaders adopted the ABAC's proposal that an integrated "APEC Food System" be established.

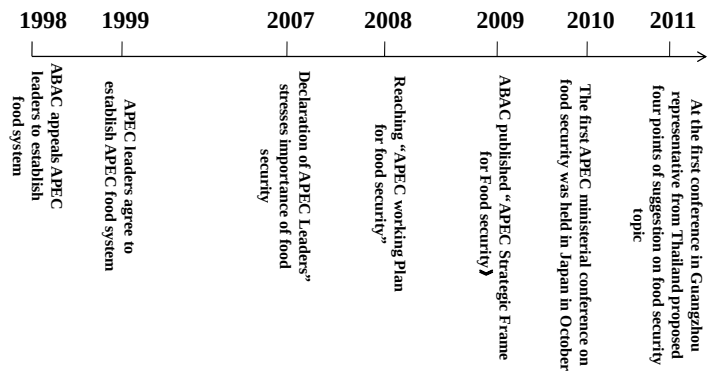
To make consumers accessible to the food they desire at affordable prices.
To enhance productivity of the food sector through region-wide availability of food-related technological advances and through efficient resource use.

Guideline → In 2009, ABAC released a "Strategic Framework for Food Security in APEC".

Objective I: Ensuring Availability and Reliable Access
Objective II: Strengthening Food Safety and Dietary Health
Objective III: Preserving Environmental Security

Background

Progress on food security



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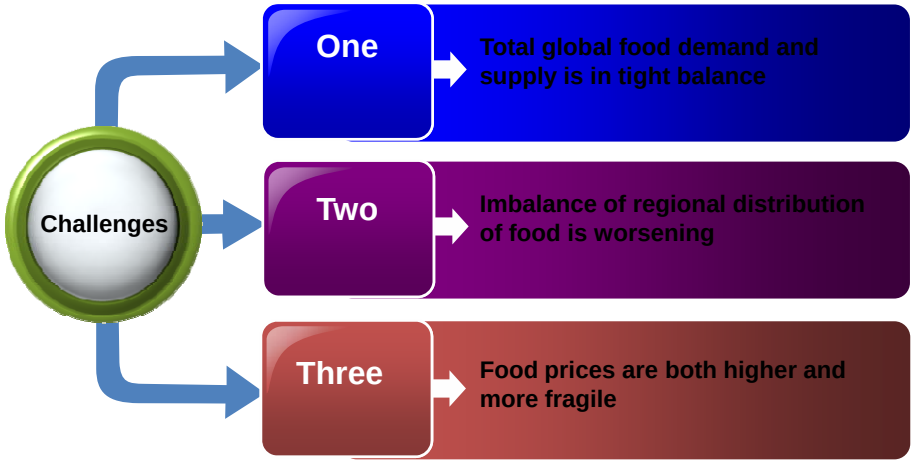
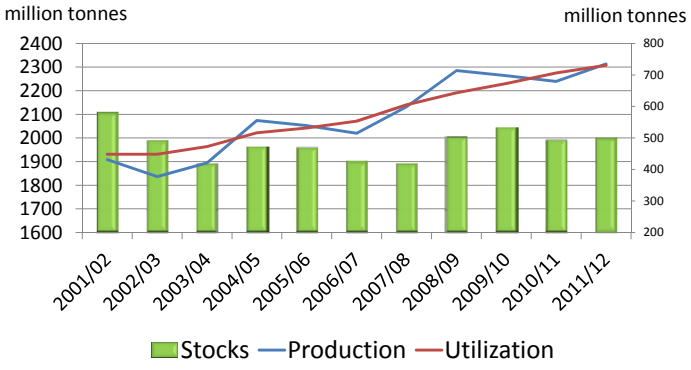
Challenges of food security



Challenge One

Total global food demand and supply is in tight balance.

Cereal production, utilization and stocks



Source: FAO

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Challenge Two

Imbalance of regional distribution of food is worsening

Region	Proportion of population in 2010	Proportion of cultivated land in 2008	
Africa	15.0%	16.1%	Low production, net import area
Asia	**60.3%**	**34.1%**	**With big gap**
Europe	10.6%	20.1%	Generally balanced with small gap
North America	5.1%	15.6%	Major surplus area
South America	5.7%	8.2%	
Central America & Caribbean Area	2.8%	2.6%	
Oceanic	0.5%	3.3%	With some surplus but limited generally
global	100%	100%	

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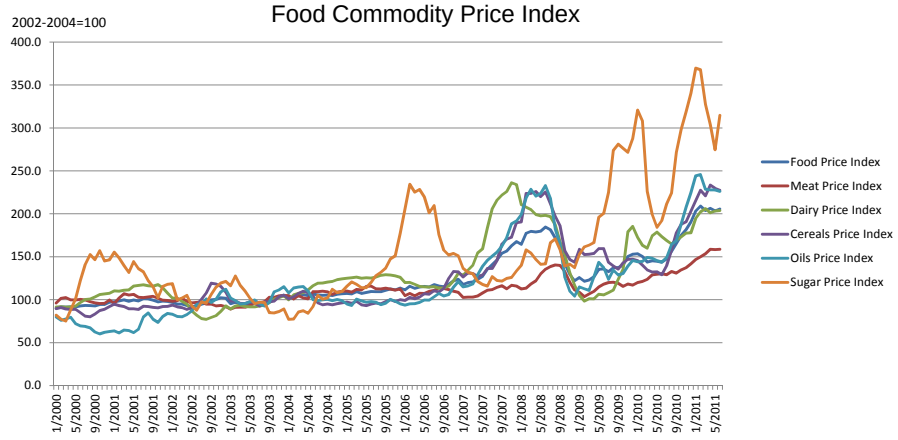
Challenge Three

Food prices are both higher and more fragile.



Source: FAO

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Fundamental to food security

Fundamental to the world food security issue is the imbalanced grain production, consumption and distribution.

In essence, the imbalanced geographical location of world grain production and trade patterns are resulted on one hand by nature-born differences and on the other hand by the fact that advanced technologies possessed by the developed economies for grain production, warehousing logistics and processing have not been effectively disseminated, thus leading to the imbalanced distribution of technology in the world grain sector.

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Fundamental to food security

Technology plays an unquestionable role in increasing grain output and ensuring stable grain supply (the contribution made by the technological advancement to the unit grain output in the developing economies is 50%, far below that of 70% in the developed economies).

As the matter stands, the key to addressing the food security issues is to speed up the technology expansion in the grain sector through technology transfer and cooperation to allow the developing economies to master more advanced technologies, improve its comprehensive grain production and processing capacity so as to increase its self-supporting capacity, effectively respond to the unstable grain supply and fluctuated grain price and contribute to the overall food security in the world.

Technology plays equally assignable role in improving effective use of grain resources, increasing product added value and reducing waste of grain resources (the post harvest grain loss rate in India is 40% due to a lack of the appropriate technology and equipment for warehousing logistics and processing, whereas the rate in the developing economies is 22%).

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Fundamental to food security

As early as in 1998, the AFS proposed by ABAC specified 4 cooperation areas that include the extension of agricultural production and processing technology.

The APEC Food Security Action Plan of 2010 and the project proposal included in it on the transfer of new and existing agricultural technologies proposed:

- develop a website for sharing information on agricultural technology;
- organize workshops as a platform for agricultural technology transfer to facilitate technology cooperation and provide an enabling environment for the development and transformation of agricultural technologies;
- organize capacity building workshop and implement a monitoring and management system to support investment on agricultural technology.

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Fundamental to food security

At present, the technology transfer in APEC grain sector is still under discussion. Since the implementation is mainly carried out by academies of agricultural sciences or other research institutes with a little involvement from business circle or agricultural and grain enterprises, it is sometimes hard to realize the cooperation proposals.

Based on industrial experience and practical understanding, this proposal has compared the technological gap between the developing economies and the developed economies in terms of grain cultivation, warehousing logistics and processing, analyzed the impacts of such technological gaps on world food security and put forward solutions.

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General recommendation

Establish a public-private cooperative mechanism (based on PPFS, committed by APEC member economies, supported by World Bank or other financial organizations and implemented by private institutions) to accelerate the transfer of grain cultivation, warehousing logistics and processing technologies from the developed economies to the developing economies.

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Specific recommendations

1. Developing a long term plan for disseminating key grain production technologies from the developed economies, including technology to breed high-yielding, quality and disease resistant varieties; planting technologies; technology of land resources protection and efficient use; technologies of water-saving
.
2. centive policies for disseminating low-temperature grain storage technology, logistics and transportation technology from the developed economies and help the developing economies set up comprehensive grain handling system (e.g. paddy handling centre) combining drying, storage, processing and transportation to reduce grain loss to the greatest extent
3. ollaboration on optimum grain processing technology between the developed economies and the developing economies and help the developing economies to improve comprehensive grain utilization, reduce grain loss, increase added value of grain products
4. Collaboration on setting a standard quality inspection system to ensure the quality both in domestic grain production, storage and transportation, processing and trade as well as in world trade.

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Thank You !