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# **Enhancing Agricultural Market Information: China's Experience**

Ву

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# **Enhancing Agricultural Market Information: China's Experience**

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#### **Outline**

- I. Overview of China's Agricultural Market Information System
- II. Practices in Recent Years
- III. Future Work



# I. Overview of China's Agricultural Market Information System

- Remarkable achievements in Ag and speed up marketing process
  - Main Ag commodities production ranked fist in the world, the average annual growth rate of grain was 3.4%, meat was 6.2% and aquatic product was 8.4% during the last three decades
  - Commercial rate of agricultural products is more than 60% China Main Ag Production, Unit: million ton

Commodity	1980	2012	Growth Rate (%)	Average Annual Growth Rate(%)
Grain	204,77	589,57	187.9	3.4
Meat products	12,05	83,84	595.8	6.2
Eggs	2,57	28,61	1013.2	7.8
Aquatic products	4,50	59,06	1212.4	8.4



#### Transformation of operating mode stimulated the demands of market informations

- □ The new type of producers of large-scale cultivation or breeding increased gradually and need more market information
- Transparency and real time market information are required under the decentralized Ag markets
- Price frequency fluctuant of Ag commodities and increased market risk, the government's scientific decision relies on more information

Enhancing Ag information monitoring and early warning system become one of governments' main work, and are also important research topics.



## The Status of China's Agricultural Market Information System

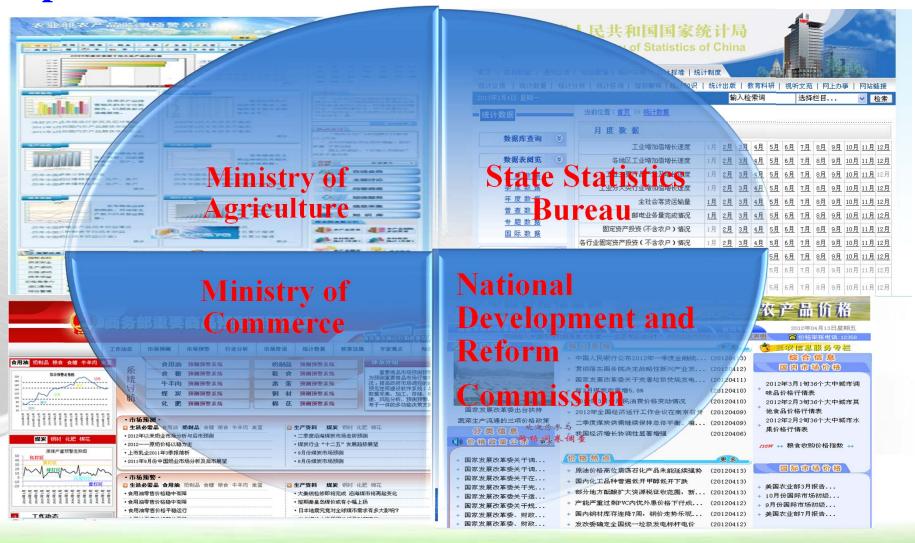
- Overall: multiple departments are involved, while each has its advantages
- Departments: such as State Statistics Bureau, MOA,
   MOC, NDRC, State Administration of Grain
- Content: Information related Ag markets, such as production, area, production cost and benefit, consumption, trade and price, etc.

#### Focal Point of Each Department

- □ State Statistics Bureau: the overall information of production, consumption, trade, price
- Ministry of Agriculture: agricultural production,
   whole sale Ag market information
- National Development and Reform Commission:
   cost-benefit, retail market price
- Ministry of Commerce: wholesale and supermarket
- □ General Administration of Customs: trade
- State Administration of Grain: grain stock and processing



■ A group of Influential agricultural information platform have been established.



#### Advantage and Disadvantage of Current System

- ☐ The strength and advantages of the various departments are played, but more scattered agricultural data management
- □ Conducive to the integration of agricultural market information with other departments, while data standard is not consistent
- The data can be mutual monitoring and double check, but much work on data co-ordination, and data is difficult to be released promptly

#### **II Practices in Recent Years**

- Strengthen the agricultural information monitoring team building
  - MOA has established Committee of Experts of Ag
     Market Early Warning
  - MOA has built a team of agricultural commodity specialists to monitor Ag markets, include grain, vegetable, fruit, livestock and fish (18 commodities in total).
  - Each provinces also established specialized agencies of agricultural information management to carry out regional analysis



- Strengthening Ag markets Information technical support capabilities
  - Conducted a number of research projects
  - Achieved systematic technological results

Improve the ability of Ag market information acquisition, monitoring, and analysis



#### Ag market information collection specifications have been drew up

Formulate a series of standardization and norms, including the requirements of collection, the acquisition process, indicators and methods, etc. specifications

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中华人民共和国国家标准

GB 18937--2003

ICS 65.020.01 B 02

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中华人民共和国农业行业标准

NY/T 2138-2012

ICS 65.020.0 B 02



中华人民共和国农业行业标准

NY/T 2137-2012

全国产品与服务统一代码编制规则

Unified coding rules for products and services identification

农产品全息市场信息采集规范

Standards of agri-product holographic-market-information collection

农产品市场信息分类与计算机编码

Classification and computer coding of agri-product market information



## Develop the equipment of Portable agricultural market information collection ("PAMIC")

- Integrated the functions of GPS satellite positioning, 3G information real-time transmission and stylized information collection
- Involving 11 collection index and 953 varieties, and significantly improve the efficiency of information collection





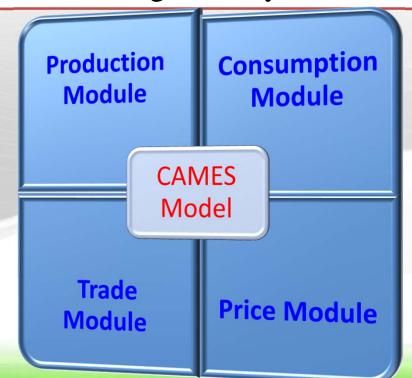






#### Construct China Agricultural Market Monitoring and Early-Warning Model

- Data analysis: big data, intelligent
- Commodities monitoring: Grain, vegetable, livestock, etc
- Modeling research: commodity model, models management system



#### **Characters:**

- □Space: regional
- □Time: real time
- □Commodities: most of kinds
- □Factor: meteorology, input,
- management and others

#### China Agricultural Market Monitoring and Early-Warning Systems

- Linked PAMIC and CAMES model, and realize real-time monitoring and early warning
- □ Three modules: data display and inquiry; analyze and early warning, work management





中国农产品市场监测预警系 数据展示与查询 分析与预置 工作管理 同一产品分析 常用分析 | 价格预测 7月4日 8点30分 富士苹果:18.00元/公斤 = 0.00% 美国提子: 12.50元/公斤 = 0.00% 西瓜: 2.00元/公斤 -0.00% 产品名称: 产品等级: 市场类型: 分析 交易量: 大于 ❤ 20000 1 生产类型: 重置 2011 🗸 年 保存条件 地区分类 北京猪肉价格分析 (2005年-2011年) 查询 数据区域 同比 任意比 同比 环比 环比 同比(%) ● 大区 ○ 省份 名称 地区 价格 成交量(万) 涨跌(同比) 涨跌幅(%)(同比) ● 全国 1 猪肉 北京 2011-01-01 10.12 1000.25 0.29 亩 □ 华北 15 北京 2011-01-02 10.22 1000.25 10 🖪 🗀 天津 3 猪肉 北京 2011-01-03 10.05 922.25 1 0.29 **1** 2.88 由 □ 河北 0.33 1 3.25 4 猪肉 北京 2011-01-04 10.34 1000.25 😠 🦲 山西 5 猪肉 北京 2011-01-05 10.56 1000.25 1 0.29 1 2.88 2006 2007 2008 2009 ■ □ 内蒙古 2005 □ 东北 6 猪肉 北京 2011-01-06 10.25 1022.25 **1**−3, 25 **♣**-0.33 □ 华东 7 猪肉 北京 2011-01-07 10.43 1034.45 **♣**−0.33 **♣**-3.25 -10 8 猪肉 北京 2011-01-07 10.43 1034.45 ♣-0.33 **3.25 3.25** 🖽 🦲 西北 9 猪肉 北京 2011-01-07 10.43 1034.45 -15 ♣-0.33 **♣**-3. 25 団 □ 港澳台 10 猪肉 北京 2011-01-07 10.43 1034.45 -0.33 ♣-3.25

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Analyze and forecast Ag information by commodities/regions/periods/dimensions.

#### III. Future Work

- Strengthen data integration management departments
  - ☐ Improve the coordination among departments and Strengthen data acquisition
  - Build unified data application platform to enhance the comparability of data
- Enhance the ability of original data acquisition capabilities
  - Develop standards and norms to improve the reliability of the original data.
  - Apply advanced information technology and equipment to improve the timeliness of data



# Strengthen data analysis and processing capacity

- Establish intelligent data analysis system to improve the ability of data processing
- Build-up of professionals information analysis team to improve the capabilities of information analytical processing
- Strengthen agricultural information applications and services
  - Carry out diversified information services to meet the needs of different regions and different populations
  - Perfect information release system, improve the validity of the information services

