

# China Agricultural Science and Technology "Going Global"

Nie Fengying





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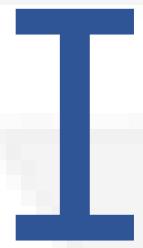
Progress in International

02 Agricultural Sciences and  
Technology Going Global

International Agricultural

03 Information Service

04 Leading Organization in  
National Level



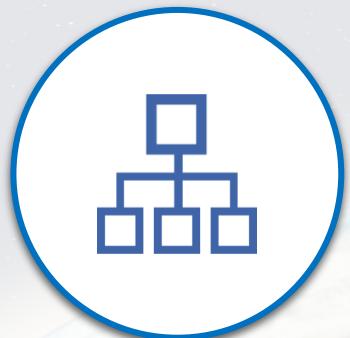
# Introduction of Center for International Agricultural Research (CIAR)

# Introduction of Center for International Agricultural Research

## 〔Background〕



One Belt and One Road Strategy



Structural adjustment of agricultural supply side



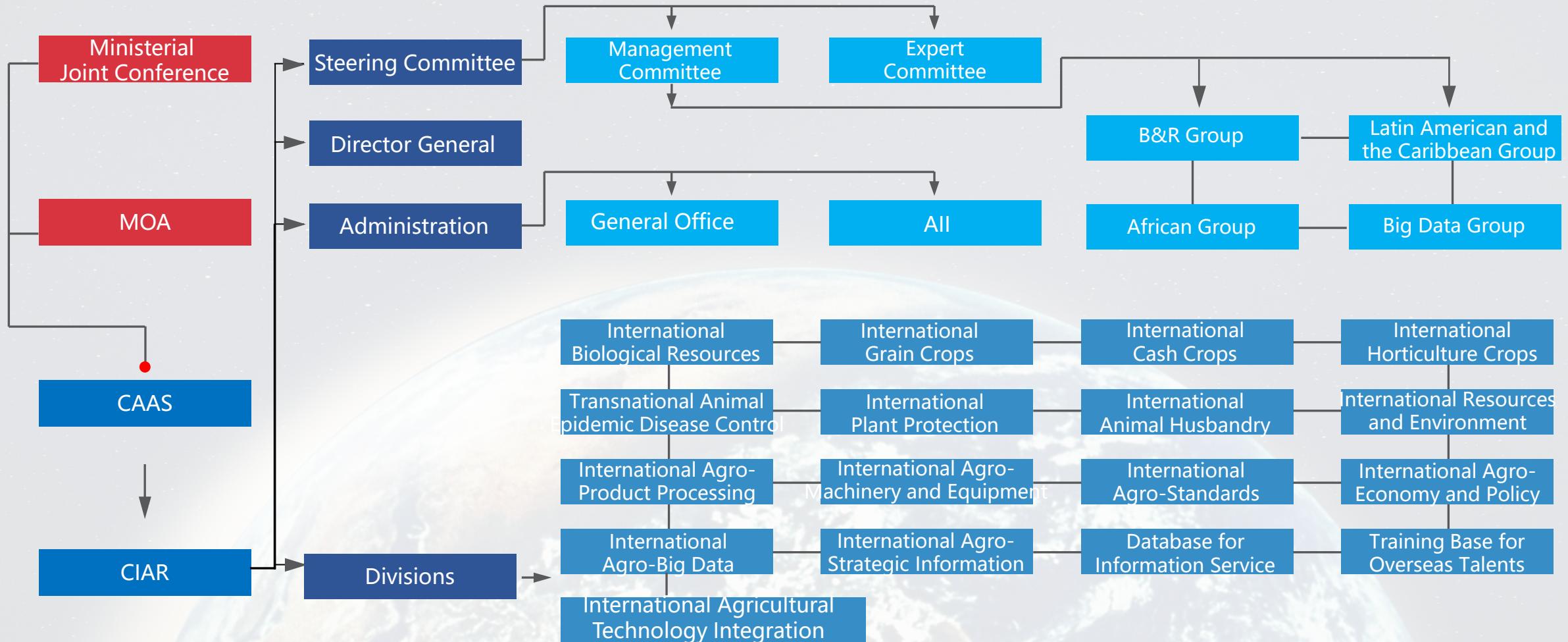
Voice on global food and agriculture management



中国农业科学院  
海外农业研究中心  
Center for International Agricultural Research, CAAS

- trans-sectoral cooperation and interdisciplinary research on major scientific innovation missions
- Build excellent overseas agricultural research and development team
- Promote the Chinese Agricultural S&T Going Global

# Introduction of Center for International Agricultural Research [Organizational Structure]



# Introduction of Center for International Agricultural Research

## Major Tasks

- Organized in a cross-sector and interdisciplinary pattern in the designing of major research topics
- Positioned to jointly make technological breakthrough
- Solve major problems in agriculture.

International Agricultural  
Research

- Create the International Agricultural Data Investigation and Analysis System
- Provide consultancy service for agribusiness in their overseas operations.

International Agricultural  
Information Service

- Foreign collaboration of the national academy of agricultural sciences
- China association for the promotion of international agricultural cooperation
- Global alliance for agricultural data and information services

Coordinate and organize  
National work



Agricultural Science and Technology  
"Going Global"

- Integrate resources for international collaboration and available technology
- Promote the cross-border flows of innovation elements
- Boost the export of technological products, machinery and equipment, and service

Human Resources  
Development

- Optimizes disciplinary programs and structures
- Build a pool of agricultural talents
- Set up a collaboration platform for agricultural professionals

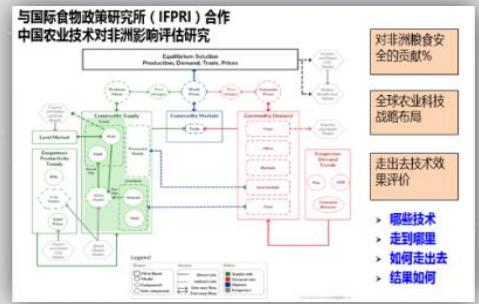


Progress in International  
Agricultural Sciences and  
Technology Going Global

# Progress in International Agricultural Sciences and Technology Going Global

## [International Information Research]

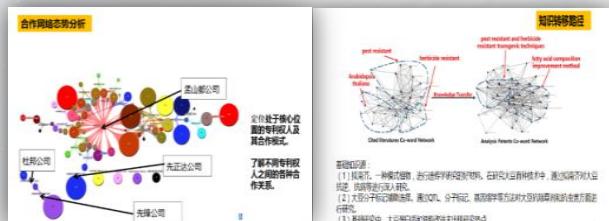
# International cooperation research



With IFPRI:

# China-Africa Agri-Technology Transfer: A Study on Macro-Impact and Micro- Mechanism

## Intellectual property rights and patent research



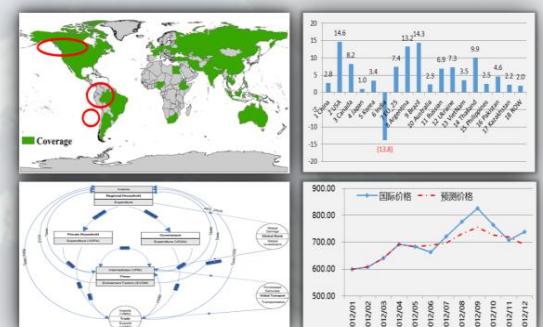
## Overseas agricultural patent technology analysis diagram

## National and regional research



## Agricultural cooperative research report of Belt and Road Countries

## Monitoring and simulation studies overseas

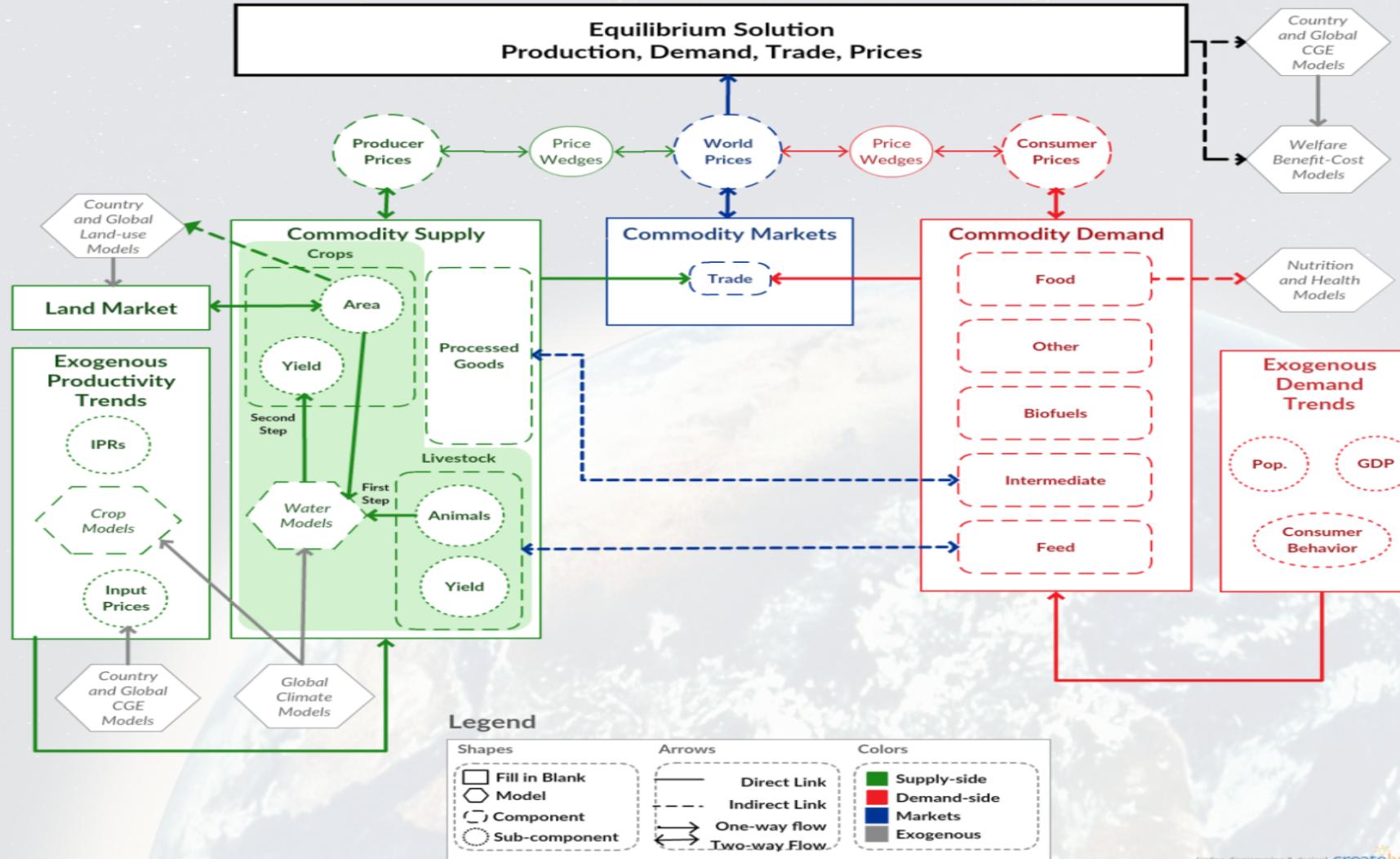


# Agriculture major shocks and policy simulation model

# Progress in International Agricultural Sciences and Technology Going Global

[International Cooperation Research with IFPRI]

## China-Africa Agri-Technology Transfer: A Study on Macro-Impact and Micro-Mechanism



The contribution of food security in Africa

Global agricultural S&T strategy layout

Go out and technical effect evaluation

- Which technologies?
- Where to go?
- How to go out?
- What's the outcome?

# Agricultural Science and Technology Going Global

## 「General situation」

### Central and West Asia:

Release of new products of cotton, wheat, maize, technology transformation of animal and plant protection

### Africa:

Evaluation and innovation, import of the germplasm resources like rice, maize, minor grain crops

### Latin America:

Crop science, livestock science, biotechnology, Agriculture Products Processing

### Central and Eastern Europe:

Good crops and livestock and poultry import and identification of germplasm resources, animal and plant protection, Agriculture Products Deep Processing

### Northeast Asia:

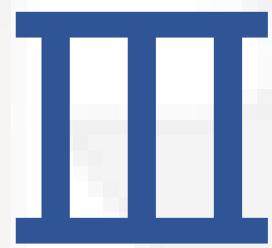
Animal and plant protection, Agriculture Products Deep Processing, agri irrigation machinery

### Southeast and South Asia:

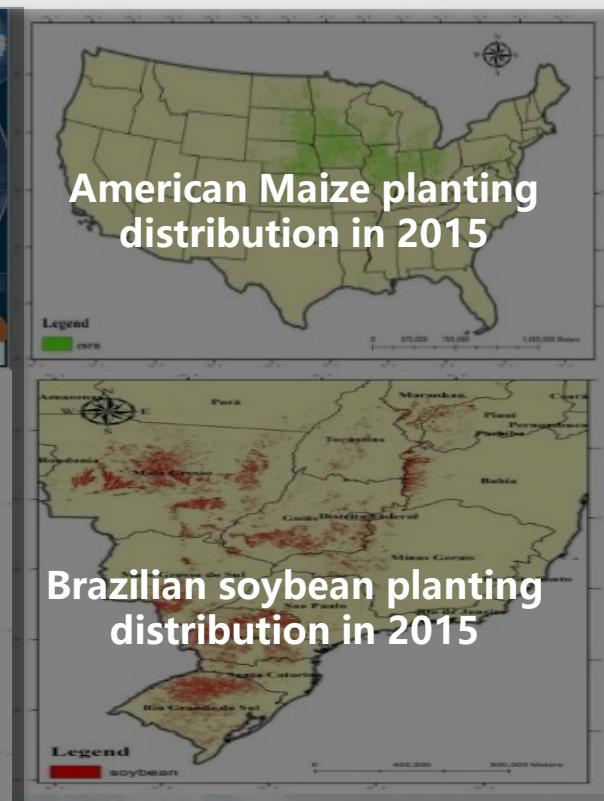
Import of the germplasm resources like rice, maize, vegetable, animal and plant protection, Agriculture Products Deep Processing, minor agri irrigation machinery

150 countries

61  
Technologies  
and products  
Going Global



International Agricultural  
Information Service



# International Agricultural Information Service

## 「Information Service Platform」

Public information service platform  
of agricultural co-operation with  
foreign countries

2016.01

Website of CIAR



2016.06

WeChat Official Accounts



2016.09

2017

Multi-dimensional analysis and  
decision support platform of  
Overseas Big Data



## 「 Overseas agriculture think-tank products 」



### Monthly Report

- Overseas Agriculture Observation
- Agricultural Scienc\_Tech Frontiers, Policy and Consultation

- Influence of Brexit for Chinese Agriculture
- Analysis and Suggestions of the fall of farmland prices in the United States

### Bulletin



### Annual Report



- Agricultural cooperation Plan between China and Latin-America
- Southeast Asian food cooperation development planning

### Consulting Report



- China Development Bank, COFCO:** National agricultural cooperation strategy research, with Indonesia, Cambodia, Laos, Thailand, Cuba, Uruguay, Surinam
- Taiwan Kangyou Co.:** Veterinary technical support
- Jiangsu lianfa.cn.& Jingyan Seed Co.:** Boost cotton technology going global
- Liayungang, Jiangsu:** OBOR International cooperation in agricultural industry alliance, and reach the cooperation intention **with 13 alliance enterprises**



# International Agricultural Information Service

「 Provide services for enterprise going global 」

Sign with CAAS for Global alliance for agricultural data and information services



Cooperation with CIAR



云南农垦云橡投资有限公司  
Yunnan Rubber Investment Co.,Ltd

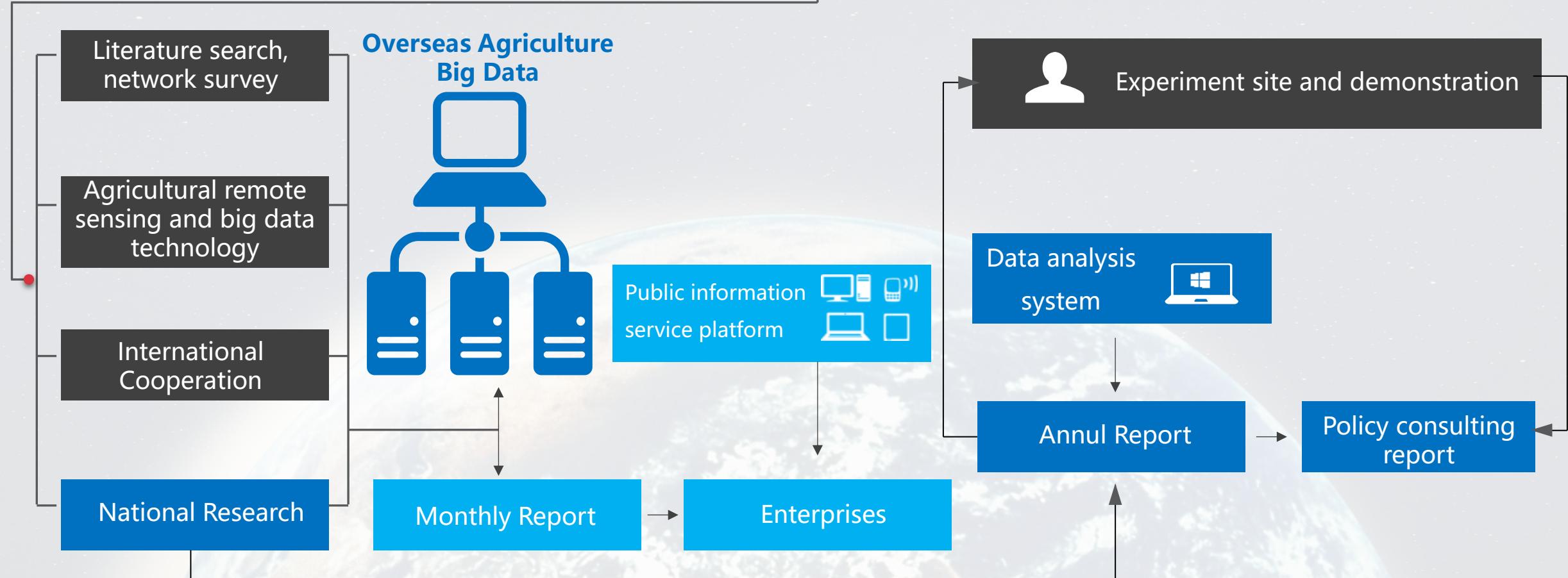


黄泛区实业集团  
WWW.HFQSYJT.COM



	Enterprise	content
<b>签署协议的12家企业</b>		
1	湛江华大贸易有限公司	甘蔗种植和糖料加工
2	聚龙集团	棕榈油种植加工
3	新希望六合股份有限公司欧非中心	饲料
4	四川蜀兴种业有限责任公司	水稻种子
5	四川安吉瑞科技发展有限公司	农机
6	安徽农垦农业投资开发有限公司	水稻、玉米、烟草种植
7	河南省黄泛区实业集团有限公司	种植、养殖、种子繁育、农机
8	云南农垦云橡投资有限公司	橡胶种植加工
9	希森马铃薯产业集团有限公司	马铃薯
10	獐子岛集团股份有限公司	水产品加工
11	湖南果秀食品有限公司	果蔬加工
12	雷沃重工股份有限公司	农机
<b>达成合作意向的企业</b>		
13	江西林恩茶叶有限公司	茶业
14	正邦集团	饲料
15	双胞胎集团	饲料
16	江西仙客来生物科技有限公司	食用菌生产
17	宏康农业香港公司	农产品贸易
18	江西赣粮实业有限公司	农产品物流加工、种业
19	江西省华美食品工业有限公司	粮食加工

## Global agricultural monitoring data acquisition: focus on overseas, key varieties, and production



Voice, decision, management and innovation on data



基础数据输入

均衡分布

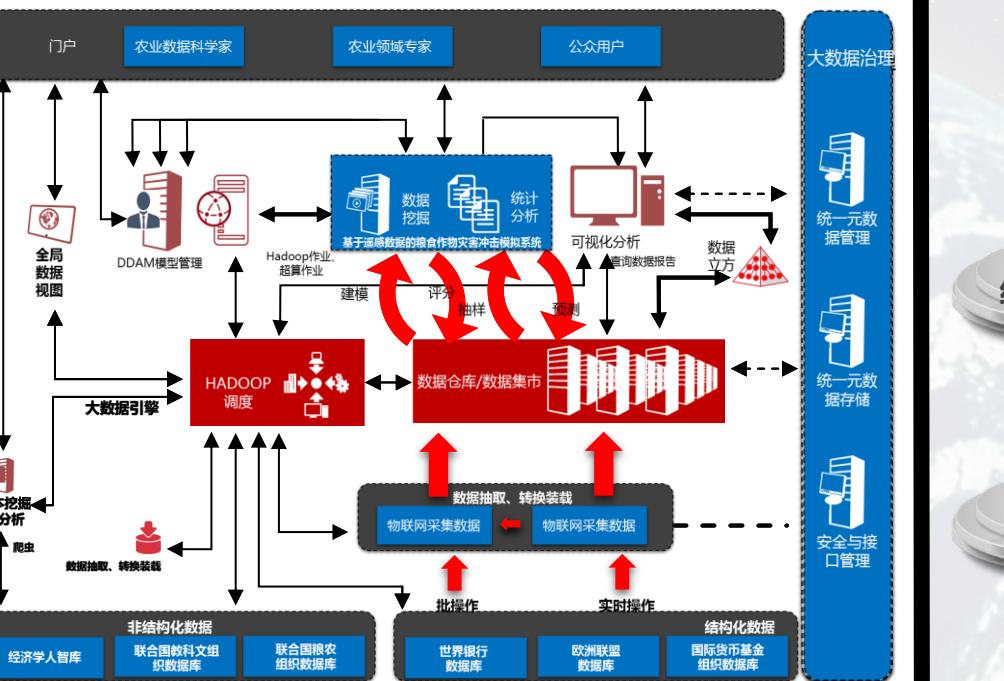
国家  
部门  
参数设置

开始



海外大数据多维分析与决策支撑平台

Report Type	Period	Value
Export Quantity (Tons)	Jan	120,000
Export Quantity (Tons)	Feb	115,000
Export Quantity (Tons)	Mar	130,000
Export Quantity (Tons)	Apr	125,000
Export Quantity (Tons)	May	135,000
Export Quantity (Tons)	Jun	140,000
Export Quantity (Tons)	Jul	145,000
Export Quantity (Tons)	Aug	150,000
Export Quantity (Tons)	Sep	155,000
Export Quantity (Tons)	Oct	160,000
Export Quantity (Tons)	Nov	165,000
Export Quantity (Tons)	Dec	170,000
Export Quantity (Tons)	Total	1,800,000
Import Quantity (Tons)	Jan	100,000
Import Quantity (Tons)	Feb	105,000
Import Quantity (Tons)	Mar	110,000
Import Quantity (Tons)	Apr	115,000
Import Quantity (Tons)	May	120,000
Import Quantity (Tons)	Jun	125,000
Import Quantity (Tons)	Jul	130,000
Import Quantity (Tons)	Aug	135,000
Import Quantity (Tons)	Sep	140,000
Import Quantity (Tons)	Oct	145,000
Import Quantity (Tons)	Nov	150,000
Import Quantity (Tons)	Dec	155,000
Import Quantity (Tons)	Total	1,700,000
Production (Tons)	Jan	150,000
Production (Tons)	Feb	155,000
Production (Tons)	Mar	160,000
Production (Tons)	Apr	165,000
Production (Tons)	May	170,000
Production (Tons)	Jun	175,000
Production (Tons)	Jul	180,000
Production (Tons)	Aug	185,000
Production (Tons)	Sep	190,000
Production (Tons)	Oct	195,000
Production (Tons)	Nov	200,000
Production (Tons)	Dec	205,000
Production (Tons)	Total	2,200,000
Consumption (Tons)	Jan	180,000
Consumption (Tons)	Feb	185,000
Consumption (Tons)	Mar	190,000
Consumption (Tons)	Apr	195,000
Consumption (Tons)	May	200,000
Consumption (Tons)	Jun	205,000
Consumption (Tons)	Jul	210,000
Consumption (Tons)	Aug	215,000
Consumption (Tons)	Sep	220,000
Consumption (Tons)	Oct	225,000
Consumption (Tons)	Nov	230,000
Consumption (Tons)	Dec	235,000
Consumption (Tons)	Total	2,400,000
Net Export (Tons)	Jan	30,000
Net Export (Tons)	Feb	35,000
Net Export (Tons)	Mar	40,000
Net Export (Tons)	Apr	45,000
Net Export (Tons)	May	50,000
Net Export (Tons)	Jun	55,000
Net Export (Tons)	Jul	60,000
Net Export (Tons)	Aug	65,000
Net Export (Tons)	Sep	70,000
Net Export (Tons)	Oct	75,000
Net Export (Tons)	Nov	80,000
Net Export (Tons)	Dec	85,000
Net Export (Tons)	Total	900,000
Net Import (Tons)	Jan	150,000
Net Import (Tons)	Feb	155,000
Net Import (Tons)	Mar	160,000
Net Import (Tons)	Apr	165,000
Net Import (Tons)	May	170,000
Net Import (Tons)	Jun	175,000
Net Import (Tons)	Jul	180,000
Net Import (Tons)	Aug	185,000
Net Import (Tons)	Sep	190,000
Net Import (Tons)	Oct	195,000
Net Import (Tons)	Nov	200,000
Net Import (Tons)	Dec	205,000
Net Import (Tons)	Total	2,100,000
Trade Balance (Tons)	Jan	120,000
Trade Balance (Tons)	Feb	125,000
Trade Balance (Tons)	Mar	130,000
Trade Balance (Tons)	Apr	135,000
Trade Balance (Tons)	May	140,000
Trade Balance (Tons)	Jun	145,000
Trade Balance (Tons)	Jul	150,000
Trade Balance (Tons)	Aug	155,000
Trade Balance (Tons)	Sep	160,000
Trade Balance (Tons)	Oct	165,000
Trade Balance (Tons)	Nov	170,000
Trade Balance (Tons)	Dec	175,000
Trade Balance (Tons)	Total	2,000,000
Yield Quality (%)	Jan	95.0
Yield Quality (%)	Feb	96.0
Yield Quality (%)	Mar	97.0
Yield Quality (%)	Apr	98.0
Yield Quality (%)	May	99.0
Yield Quality (%)	Jun	100.0
Yield Quality (%)	Jul	100.0
Yield Quality (%)	Aug	100.0
Yield Quality (%)	Sep	100.0
Yield Quality (%)	Oct	100.0
Yield Quality (%)	Nov	100.0
Yield Quality (%)	Dec	100.0
Yield Quality (%)	Total	100.0
Productivity (%)	Jan	98.0
Productivity (%)	Feb	99.0
Productivity (%)	Mar	100.0
Productivity (%)	Apr	101.0
Productivity (%)	May	102.0
Productivity (%)	Jun	103.0
Productivity (%)	Jul	104.0
Productivity (%)	Aug	105.0
Productivity (%)	Sep	106.0
Productivity (%)	Oct	107.0
Productivity (%)	Nov	108.0
Productivity (%)	Dec	109.0
Productivity (%)	Total	100.0
Cost (%)	Jan	90.0
Cost (%)	Feb	91.0
Cost (%)	Mar	92.0
Cost (%)	Apr	93.0
Cost (%)	May	94.0
Cost (%)	Jun	95.0
Cost (%)	Jul	96.0
Cost (%)	Aug	97.0
Cost (%)	Sep	98.0
Cost (%)	Oct	99.0
Cost (%)	Nov	100.0
Cost (%)	Dec	101.0
Cost (%)	Total	100.0
Profit (%)	Jan	85.0
Profit (%)	Feb	86.0
Profit (%)	Mar	87.0
Profit (%)	Apr	88.0
Profit (%)	May	89.0
Profit (%)	Jun	90.0
Profit (%)	Jul	91.0
Profit (%)	Aug	92.0
Profit (%)	Sep	93.0
Profit (%)	Oct	94.0
Profit (%)	Nov	95.0
Profit (%)	Dec	96.0
Profit (%)	Total	100.0
Yield (Tons)	Jan	100.0
Yield (Tons)	Feb	105.0
Yield (Tons)	Mar	110.0
Yield (Tons)	Apr	115.0
Yield (Tons)	May	120.0
Yield (Tons)	Jun	125.0
Yield (Tons)	Jul	130.0
Yield (Tons)	Aug	135.0
Yield (Tons)	Sep	140.0
Yield (Tons)	Oct	145.0
Yield (Tons)	Nov	150.0
Yield (Tons)	Dec	155.0
Yield (Tons)	Total	160.0
Cost (Tons)	Jan	90.0
Cost (Tons)	Feb	92.0
Cost (Tons)	Mar	94.0
Cost (Tons)	Apr	96.0
Cost (Tons)	May	98.0
Cost (Tons)	Jun	100.0
Cost (Tons)	Jul	102.0
Cost (Tons)	Aug	104.0
Cost (Tons)	Sep	106.0
Cost (Tons)	Oct	108.0
Cost (Tons)	Nov	110.0
Cost (Tons)	Dec	112.0
Cost (Tons)	Total	110.0
Profit (Tons)	Jan	10.0
Profit (Tons)	Feb	12.0
Profit (Tons)	Mar	14.0
Profit (Tons)	Apr	16.0
Profit (Tons)	May	18.0
Profit (Tons)	Jun	20.0
Profit (Tons)	Jul	22.0
Profit (Tons)	Aug	24.0
Profit (Tons)	Sep	26.0
Profit (Tons)	Oct	28.0
Profit (Tons)	Nov	30.0
Profit (Tons)	Dec	32.0
Profit (Tons)	Total	30.0



# International Agricultural Information Service

「 The alliance for global agricultural big data and information services 」

## National agricultural S&T innovation alliance

## The alliance for global agricultural big data and information services

- All-CAAS
- Directly affiliated institution under MoA
- Local agricultural scientific research institutions and universities
- Enterprises

S&T resources co-construction and sharing

Overseas agricultural research and data survey

The screenshot shows the homepage of the 'S&T resources co-construction and sharing platform'. At the top, there is a navigation bar with links for '整合资源' (Integrate Resources), '共建共享' (Co-build and Share), '交流合作' (Exchange and Cooperation), and '共同创新' (Common Innovation). Below the navigation bar, there are several sections: '文献传递' (Document Transfer), '资源共享' (Resource Sharing), '科技动态' (Technology Dynamics), '专题检索' (Special Topic Search), '交流培训' (Exchange and Training), and '特色服务' (Special Services). Each section contains brief descriptions and links to more details. At the bottom of the page, there is a footer with links to other platforms like '中国农业科技文献服务平台' and '国家农业科学数据共享中心'.

The screenshot shows the mobile service platform for the alliance. It features a QR code for the WeChat public account, icons for Android and iOS mobile apps, and a screenshot of the mobile app interface. A text box states: '同时推出了微信公众号服务以及安卓版和苹果版手机APP服务。' (We have also launched WeChat public account services and Android and iOS mobile app services.) Below the screenshots, there is a news feed section titled '最新动态' (Latest News) with various articles and their publication dates.

S&T resources co-construction and sharing platform

Wide resources

One-stop

Full coverage

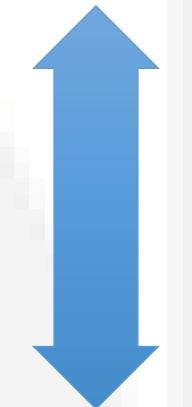
multi-terminal

# IV

Leading Organization in  
National Level



# Leading Organization in National Level



APEC  
Agrotechnique  
work group



China-EU  
Agrotechnique  
work group



MACS



# Thank you!

