

MAIN TASKS OF THE AGRICULTURAL SCIENCE AND TECHNOLOGY INNOVATION PROGRAM

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OUTLINE

1 CAAS & ITS ROLE

2 AGRICULTURAL SCIENCE
AND TECHNOLOGY
INNOVATION PROGRAM

3 SUGGESTIONS FOR FUTURE
COOPERATION

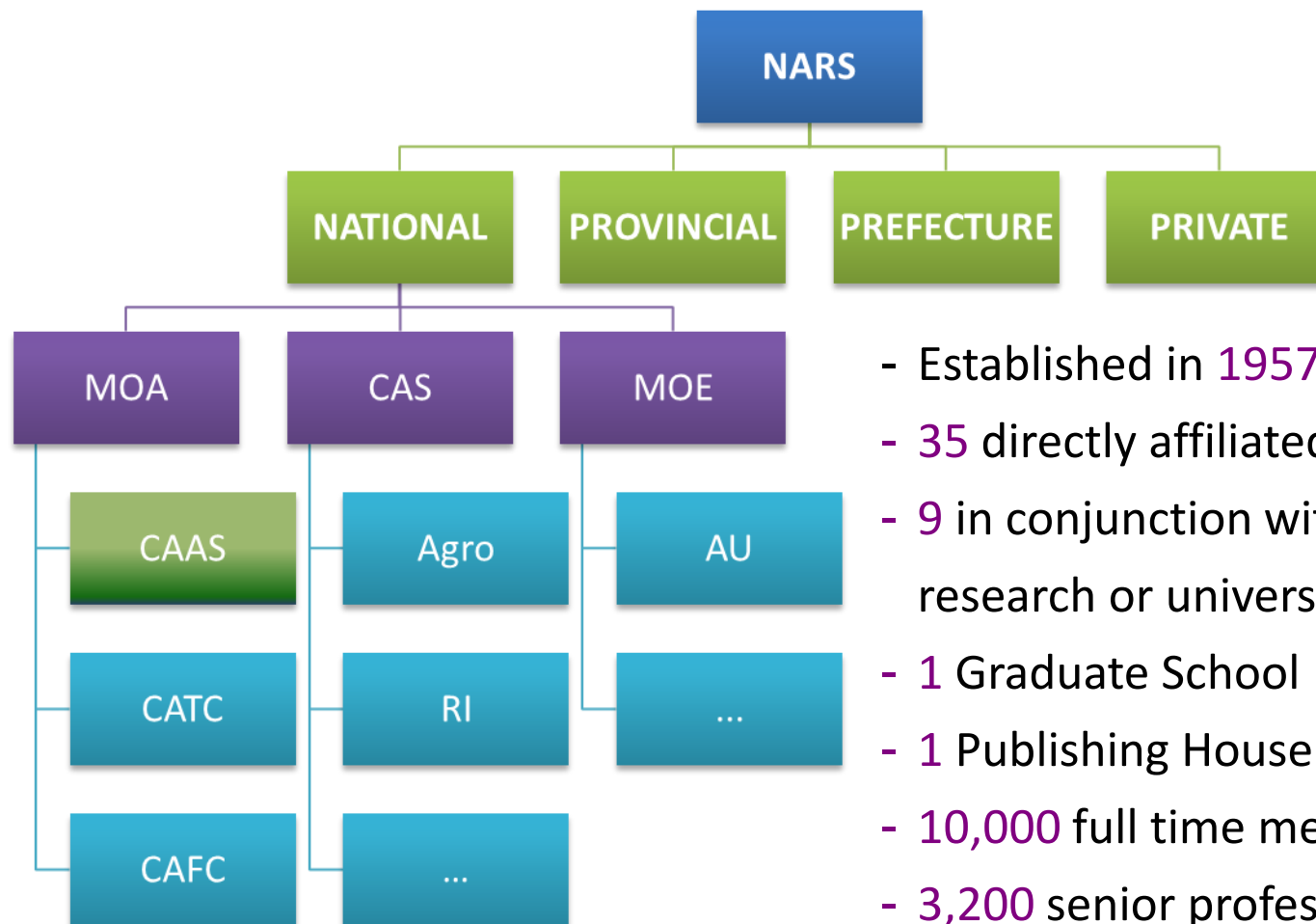




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1. CAAS & ITS ROLE IN CHINA AGRICULTURE

UNIQUE AGRICULTURAL R&D INSTITUTION AT NATIONAL LEVEL IN CHINA

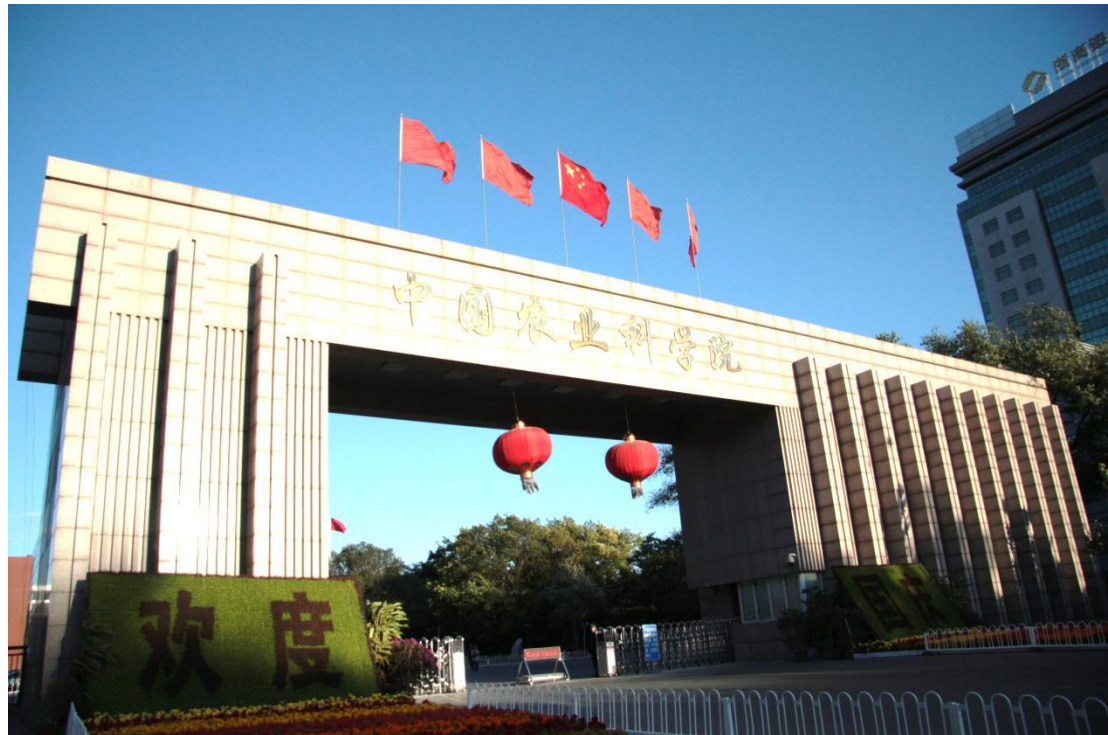


- Established in 1957
- 35 directly affiliated institutes
- 9 in conjunction with provincial research or university
- 1 Graduate School
- 1 Publishing House
- 10,000 full time members
- 3,200 senior professors

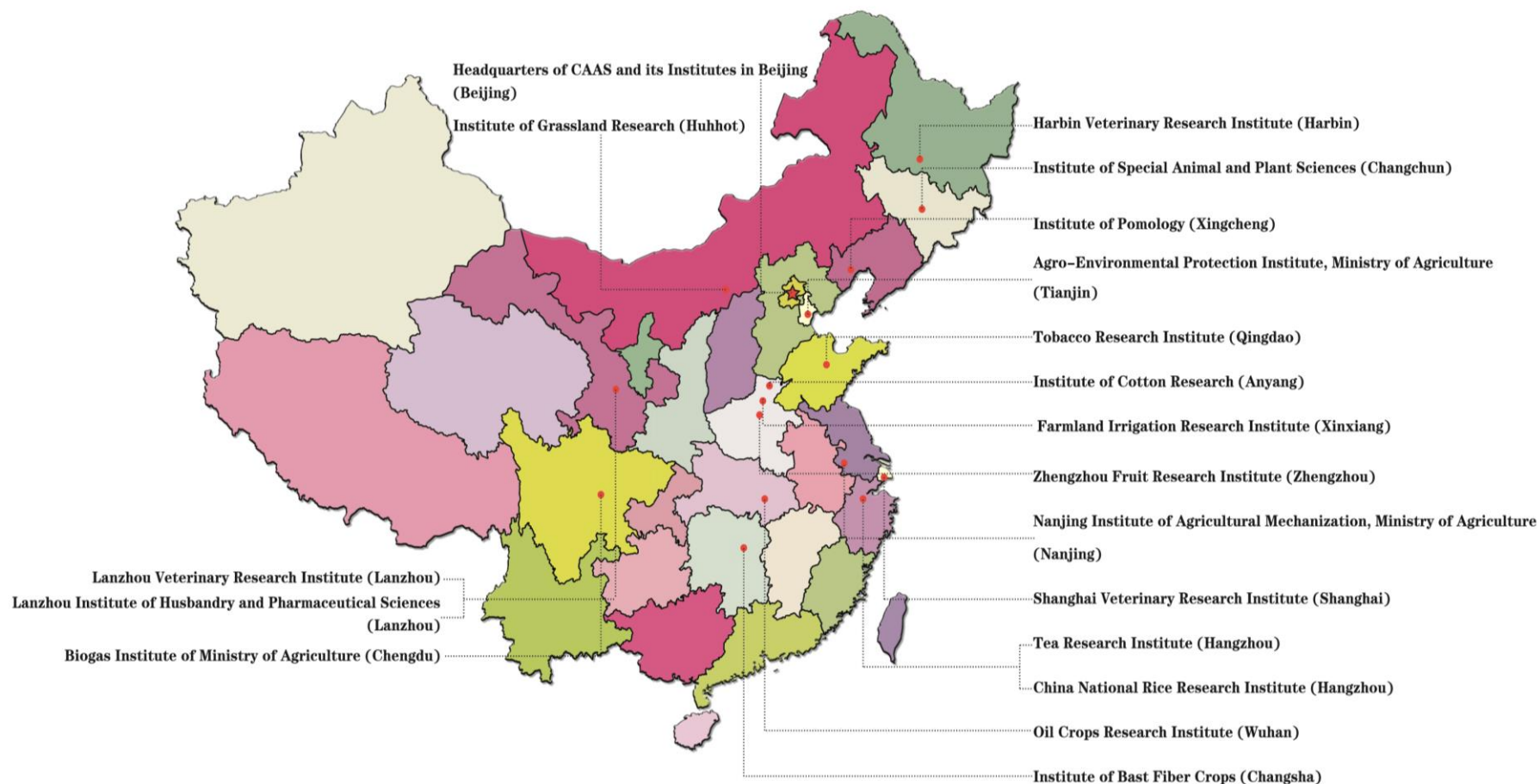


MANDATE AND MISSION

Contribution to China's food security, food safety and poverty reduction through research, partnership, capacity building and policy support.



AFFILIATED RESEARCH INSTITUTES



RESEARCH AREAS AND CAPACITY



Crop Sciences



Veterinary Sciences



Horticulture Sciences



Agriculture Resources & Environment



Agro-product



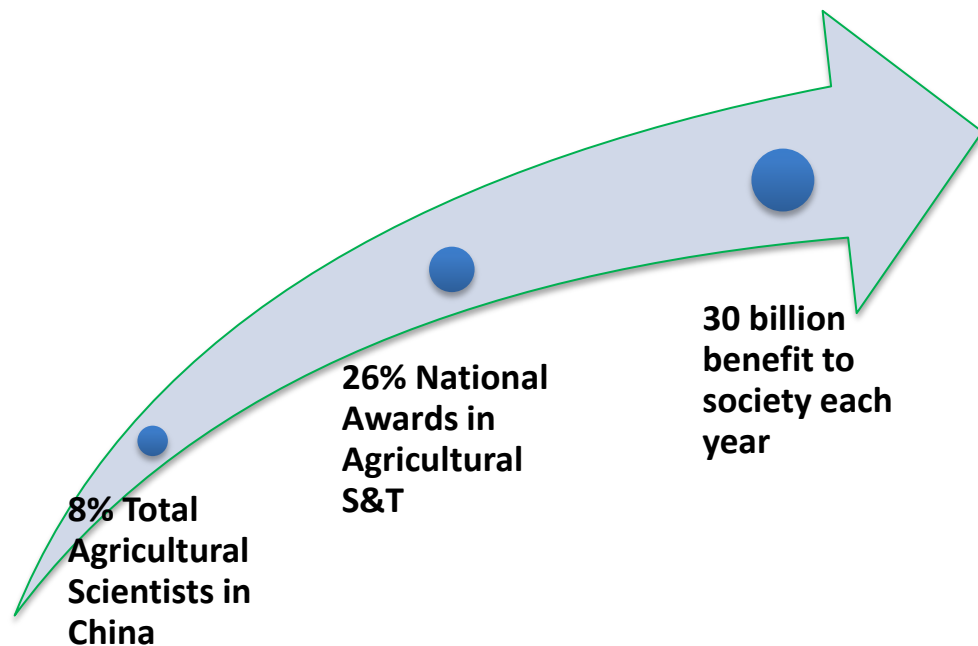
Safety and Processing



Agricultural Mechanization and Engineering



Agro Information and Economics



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POSITION AND ROLE

- National team of innovation, with the goal to establish a world's top-notch modern academy of scientific research
- Pace-setting of reform, and pivotal position on international cooperation on behalf of the country
- Addressing major issues of S&T related to agriculture, rural areas and farmers
- Think tank for decision-making: Agricultural policy and S&T strategy



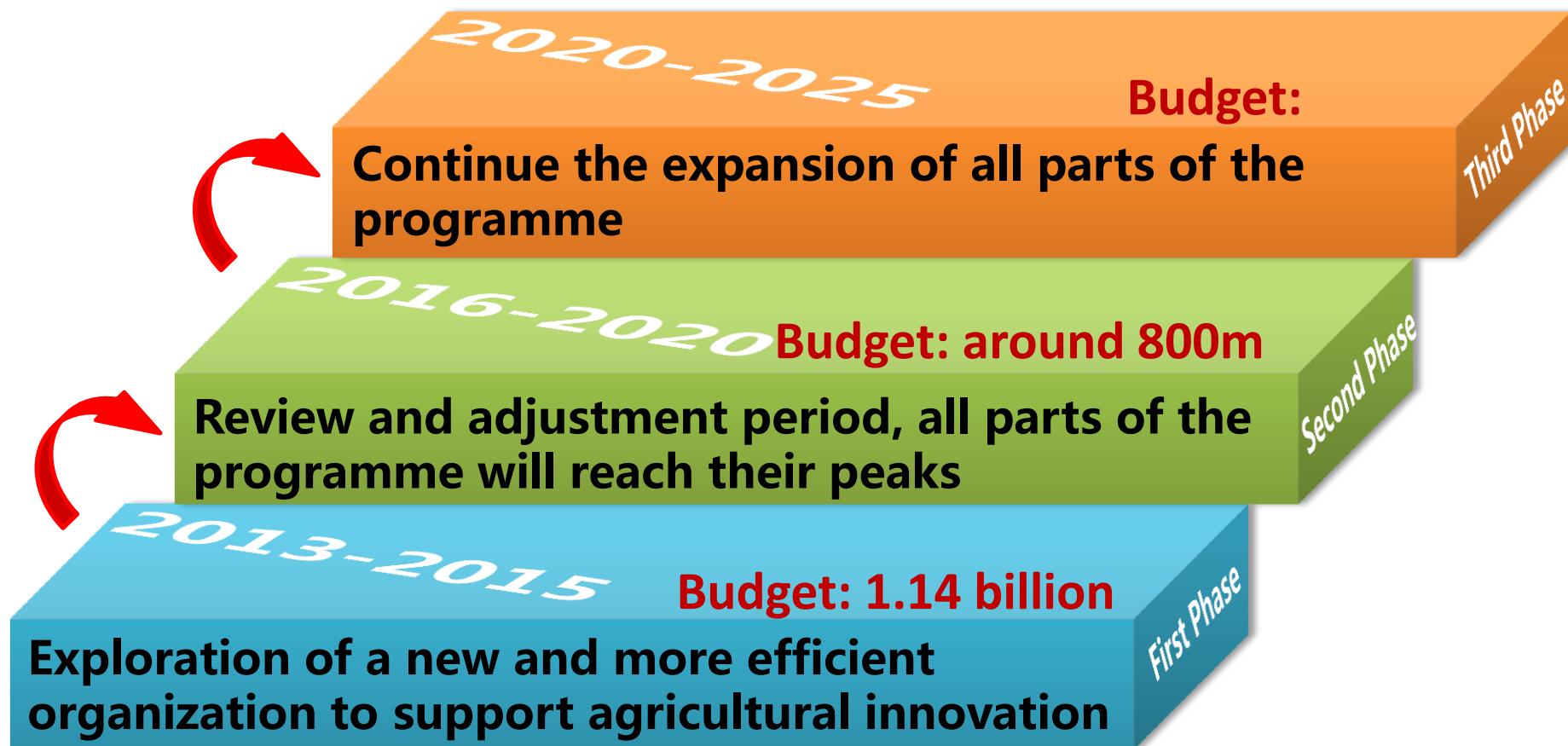


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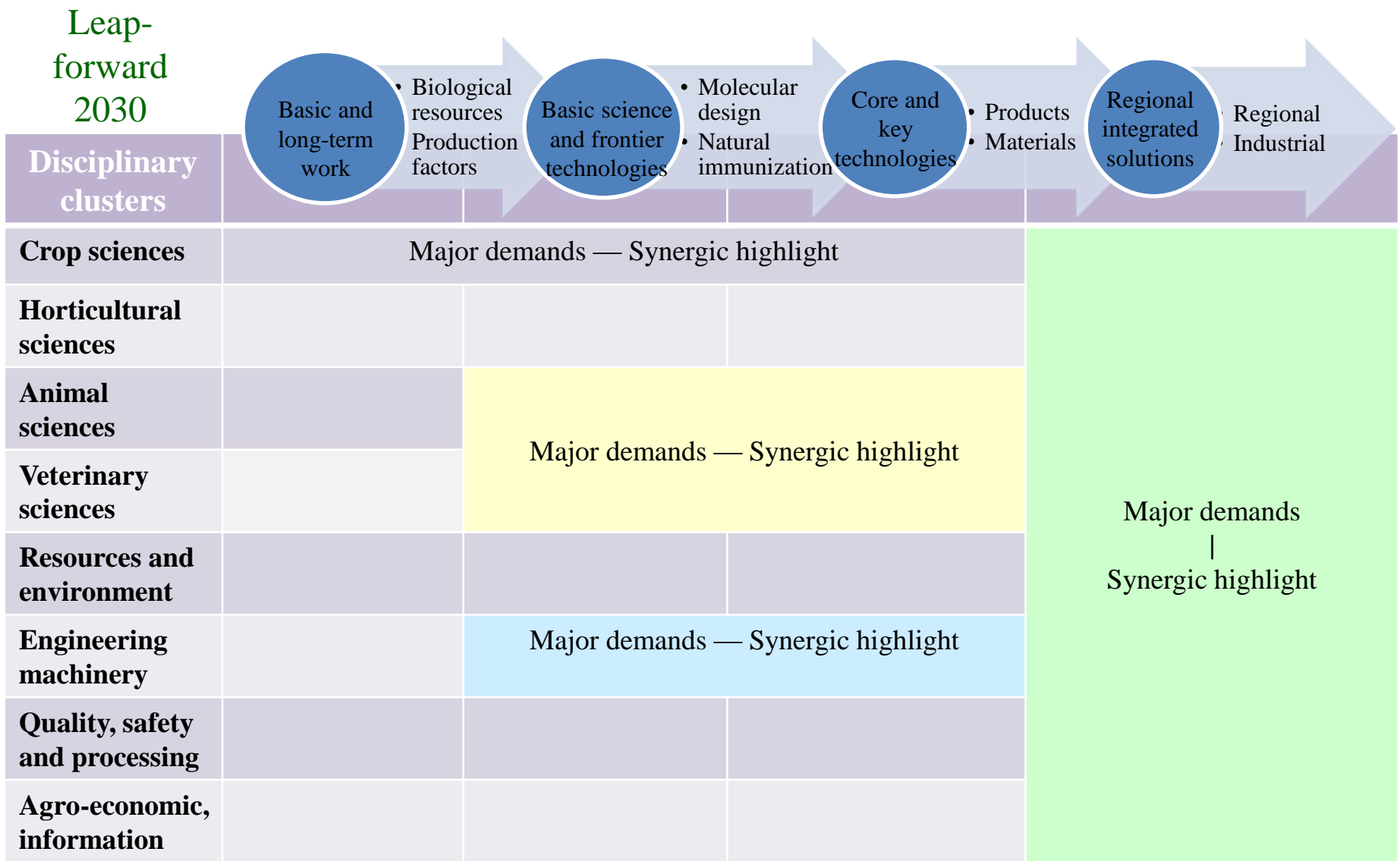
2. AGRICULTURAL SCIENCE AND TECHNOLOGY INNOVATION PROGRAM

Agricultural Science and Technology Innovation Program (ASTIP)

Goal: Produce sciences and technology based application that can be rapidly applied to solving real world problem

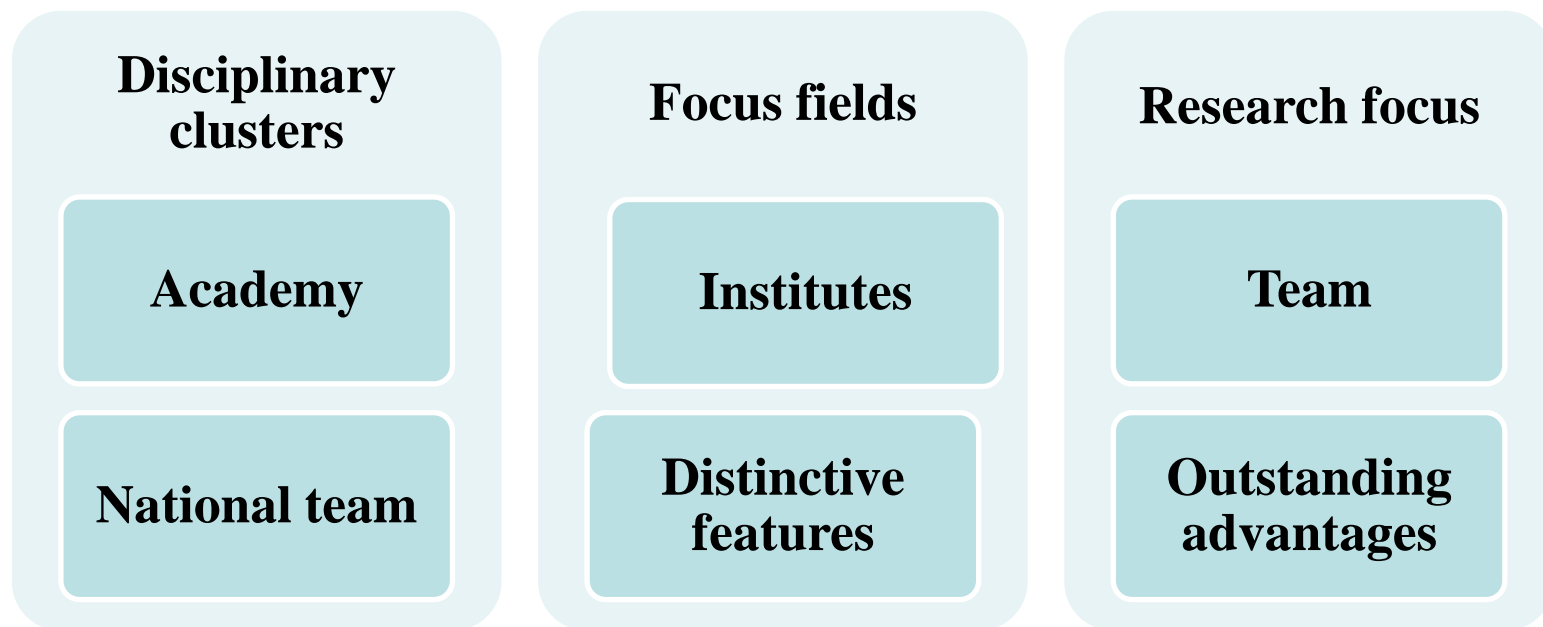


2.1 Supporting Long-Term and Interdisciplinary Research



Scientific research organization

Scientific research teams cataloged according to the three-tier disciplinary system

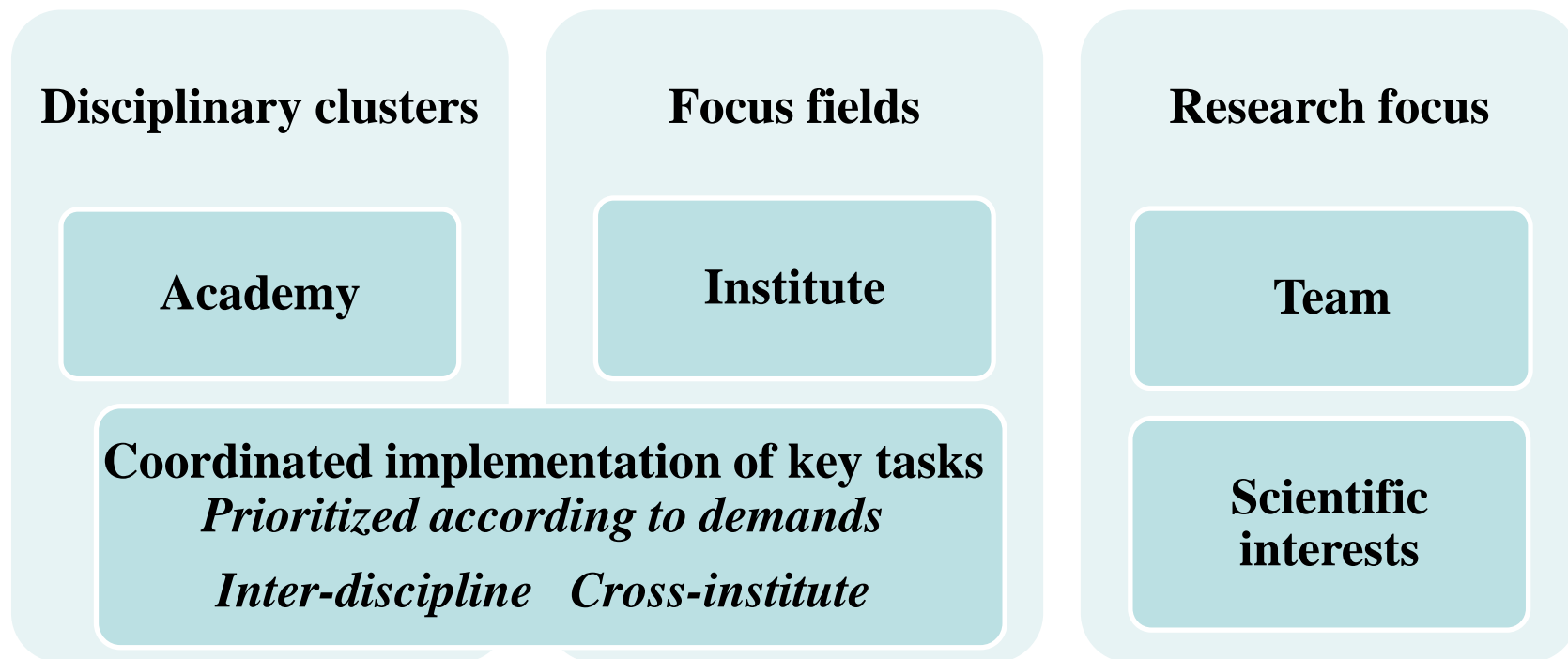


8 disciplinary cluster — **107** focus fields — **320** research focus
— **315** teams



Organization of innovation tasks

Innovation tasks oriented according to the three-tier disciplinary system



14 of the over 50 cross-institute and cross-team key coordinated tasks of innovation tasks has been launched



Key Science and Technology Initiatives

- ❑ Targeted Crop Breeding by Design
- ❑ Localization Breeding of New Animal Breeds
- ❑ Green and Precise Prevention and Control of Crop Pests and Weeds
- ❑ Rapid Diagnosis, Prevention and Control of Major Animal Diseases
- ❑ Efficient and Circular Utilization of Agricultural Resources
- ❑ Prevention and Control of Agricultural Environment Pollution in Typical Regions
- ❑ Monitoring, Early-Warning and Control Along the Whole Process of the Quality and Safety of Agricultural Products
- ❑ R&D of Intelligent Agricultural Facilities and Equipment
- ❑ Innovation and Application of Agricultural Biomics
- ❑ Function Upgrading and Tiered Processing of Agricultural Products
- ❑ Mining and Application of Agricultural Big Data
- ❑ Policy Study of the Development of Agriculture in Transition



2.2 Nurturing Outstanding Teams and Talents

✧ Nurture outstanding teams



✧ Bring up high-level talents

- The Elite Youth Program
- Strengthen four teams building (research and innovation, technical support, technical transfer, and administration)

✧ Improve the Graduate School

- Talent education program, master, PhD, Post-D, on-the-job education



2.3 Expanding Research Support Facilities and Infrastructure

✧ National (Key) laboratories

- SKL: **6+** crop molecular breeding, vegetables, edible crop biology

✧ Disciplinary cluster key laboratory (station)

- laboratory: **+5~10**; field station: **+15**

✧ Field test bases

- Regional comprehensive test bases, professional test and demonstration bases of major producing regions

✧ Research-into-use centers

- National Transfer and Service Center for Agricultural Science and Technology Achievements
- National Trading Center for Property Right of Science and Technology Achievements in Seed Industry



2.4 Fostering International Cooperation

✧ Accelerate global layout

- Overseas joint laboratory, agricultural technology test and demonstration bases, One Belt One Road Initiatives

✧ Organize major S&T programs of int'l cooperation

- Gene Map, Epidemics Firewall, CSA&L

✧ Alignment with international S&T programs

- CGIAR, Bill Gates Foundation, Horizon 2020, Newton Fund, CSIRO flagship program

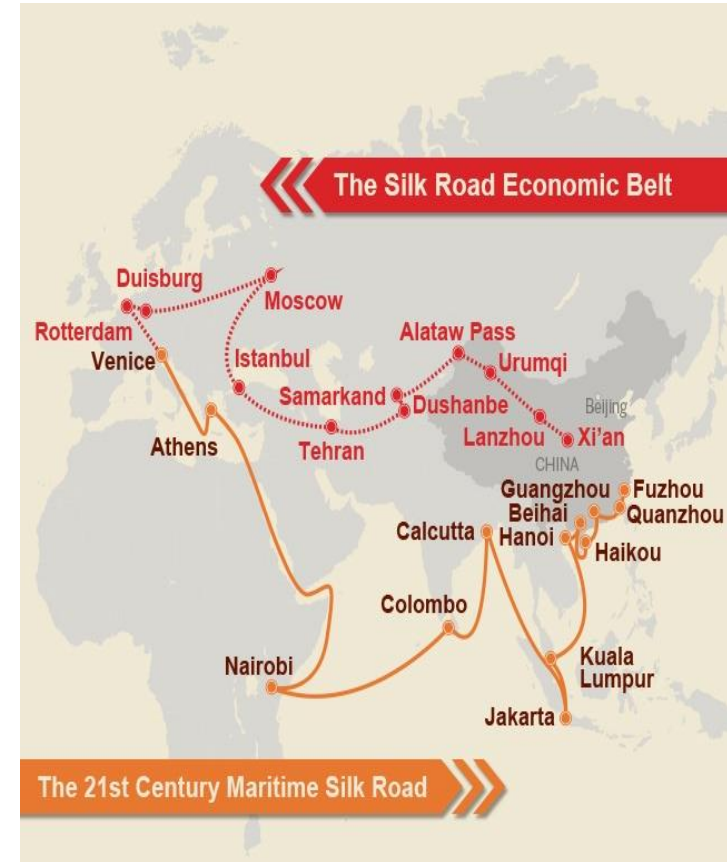
✧ High-level talents exchanges

- Young scientist training and expertise introduction



□ Integration and innovation of overseas agricultural technologies

- Germplasm exchange
- Trans-boundary plant and animal disease control and early warning
- Dry land agriculture
- Efficient energy-saving of horticulture
- Agriculture standard and inspection



2.5 Promote Research Findings Transfer

✧ Improve research findings transfer mechanism

- National Transfer and Service Center of Achievements of Agricultural Science and Technology, motivation and evaluation, title and benefits distribution, IPR protection

✧ Consolidate technical integration and transfer

- Research findings
- platform
- talent teams

✧ Scale up and strengthen industries of science and technology

- Nurture S&T businesses
- modern corporate system



□ Green and efficiency integration tasks

- Integration and Innovation of Green Technologies for Yield Increase and Efficiency Gains for Crop Production
- Integration and Innovation of Green Animal Farming Technologies
- Integration and Innovation of Western Dry Land Farming Technologies
- Integration and Innovation of Technologies of Urban and Modern Agriculture





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3. SUGGESTIONS FOR FUTURE COOPERATION

To set up joint laboratory (research center)

- Agro-products safety
- Agricultural sustainable development
- Rural development, climate change
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To upgrade agricultural R&I cooperation partnership

- Co-initiating the bilateral and multilateral cooperation projects and joint actions
- Advancing collaboration in frontier and basic research on large-scale level



The 5th Global Forum of Leaders for Agricultural Science and Technology (GLAST-2016)

- Initiated by CAAS and co-sponsored by FAO and CGIAR
- Theme “Eliminating Hunger and Poverty through S&T Innovation”
- Time: December 13-15 Place: Linshui County, Hainan Province



Thanks!



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