



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

MACS-G20 Working Group on Agricultural Technology Sharing (ATS)

Prof.Kongming WU, Vice President

Chinese Academy of Agricultural Sciences (CAAS)

Prof.Fengying NIE, Deputy Director

Center for International Agricultural Research of CAAS

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Content



Introduction of Agricultural Technology Sharing (ATS)
Rational and Objectives



Progress of ATS Working Group
Procedure and Outputs



Plan for ATS Platform
Basis and Workplan



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Part I Introduction of Agricultural Technology Sharing (ATS)

Rationale



Rationale

- There are agriculture technology platforms but sparse and not well connected.
- To serve ordinary users of these technologies, such as smallholder farmers, entrepreneurs, private sectors, we need a user friendly, integrated technology information platform to:
 - **COLLABORATE**
 - **COOPERATE**
 - **EXCHANGE**
 - **SHARE**

For Rapid Agricultural Innovation

That is why we need....

Agricultural Technology Sharing Platform

5th G20 MACS Communiqué

14.We agree to set up a working group on Agricultural Technology Sharing (ATS) led by China to map and analyze strengths and weaknesses of existing knowledge and information sharing mechanisms as well as to develop a proposal.

Agricultural Technology Sharing Platform

China, as a responsible member of the global community, is willing to contribute to global poverty elimination, ensure food security, improve nutrition and promote sustainable agriculture.

Agricultural Technology Sharing Platform is dedicated to share agriculture technology supply and demand for collaboration, cooperation and innovation in agriculture across the world.

Objectives of ATS

Promote MACS cooperation mechanism :

- To encourage **practice and knowledge-sharing** among G20 members, interested countries and international organizations;
- To act as **public platform** to improve access on agricultural technologies, facilitate technology support, share experience in skills;
- To bring **efficiency for rapid search** of sparse resources for scientific endeavor and technology generation from global good;
- To construct sources of information ready for **cross-search and integration** of specific problems.

Objectives of ATS

Support South-South Cooperation:

- To share key experiences on what has worked and what has not worked;
- To promote technology transfer;
- To contribute to capacity building;
- To explore new modalities beyond traditional bilateral cooperation.

Features

- Enable differently constructed sources of information to be seamlessly integrated
- Act as a directory of shared information collated by partnering countries and representative organizations
- Encourage and emphasize the need to optimize policy making for enhancing agricultural technology innovation systems
- Bring in regulatory mechanisms pertaining to security, safety and protection of property rights for data and information as also technologies
- Consolidated standards for sharing and exchange of agricultural data, information and technology



Part II

Progress of ATS Working Group

ATS Working Group

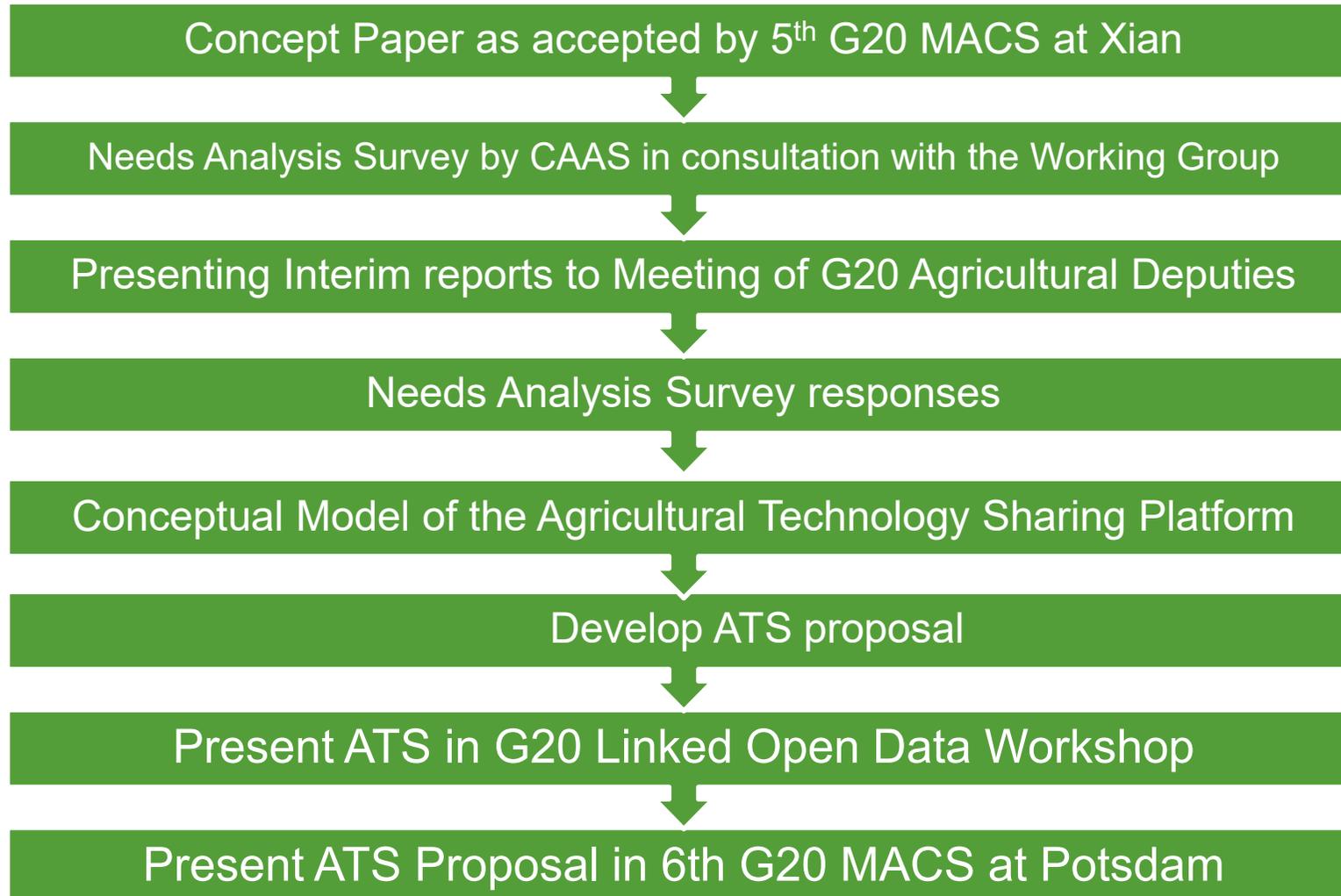
10 G20 economies

China, Australia, Germany, India, Indonesia, Italy, Japan, Spain, Russian Federation, Republic of Korea

6 International Organizations

OECD, FAO, IFPRI, CABI, GFAR, GODAN

Developing ATS Procedure



Need Analysis Survey-Objectives

Know What

Related projects and activities that indicate the knowledge domains

Know Who

Organizations/Institutions/experts, projects are engaged in the technology

Know Where

Contact details of Institutions or Organizations and experts

Know How

Technology available

Know Why

Why the area problem is being solved

Need Analysis-Know What

Key agricultural technologies areas to focus on

S.No.	Agricultural technologies areas	Ranking by HODs	Ranking by others	Ranking by all
1	Climate Change	1	1	1
3	Sustainable Improvement of Crops and Incomes	2	2	2
5	Transboundary Diseases and Pests	2	3	3
2	Water Conservation and Use	4	3	4
4	Combatting Desertification	5	3	5
6	Biodiversity	6	4	6

Needs Analysis Survey open to delegations in 5th MCAS
22 Respondents, 15 Heads of Delegation

Need Analysis-Know What

The other key areas suggested by respondents were technologies:

- that help manage and improve value addition chains, reduce and use waste and biomass from food and non-food products
- that improve nutrition and food safety especially of the poor
- for sustainable Intensification
- plant (and animal) breeding technologies
- that facilitate global trade in agricultural commodities and products
- that enable resource poor especially women to participate in agribusiness
- Innovations in technology mapping and dissemination
- technologies that improve labor use efficiency

Need Analysis-Know Who and where

What kind of technology information needed

- Brief description of technologies and innovations developed in the key area, 19 out of 22 respondents
- Institutions/Organizations involved in the Key area, 19/22
- Brief Project Outputs and Technology developed, 17/22
- Contact details of the Organizations, 16/22
- Expert group/Experts involved in the key area, 16/22
- Contact details of Expert group, 13/22
- Respective funding projects undertaken in the Key area, 12/22
- Bibliography on the project, 8/ 22

Need Analysis-Know Why

Gap Analysis of Current Models

S.No.	Information	TECA	Agropedia	AGRIS	CIARD. RING	Agriprofiles
1	Brief Descriptions of Technology and Innovations	Yes	Yes	No	(Keyword Tag)	Yes/?
2	Institutions Involved in Key Area	?	?	No	Yes	Yes
3	Brief Project Outputs			Yes	Yes	Yes
4	Contact Details of Organization	?	?	Yes	Yes/?	Yes
5	Experts Involved in Project/Key Area	?	Yes	Yes	Yes/?	Yes
6	Contact Details of Experts	?	?	Yes	Yes/?	Yes
7	Respective Funding Projects	?	?	No	No/?	Yes/?
8	Bibliography	?	Yes/?	Yes	Yes	Yes

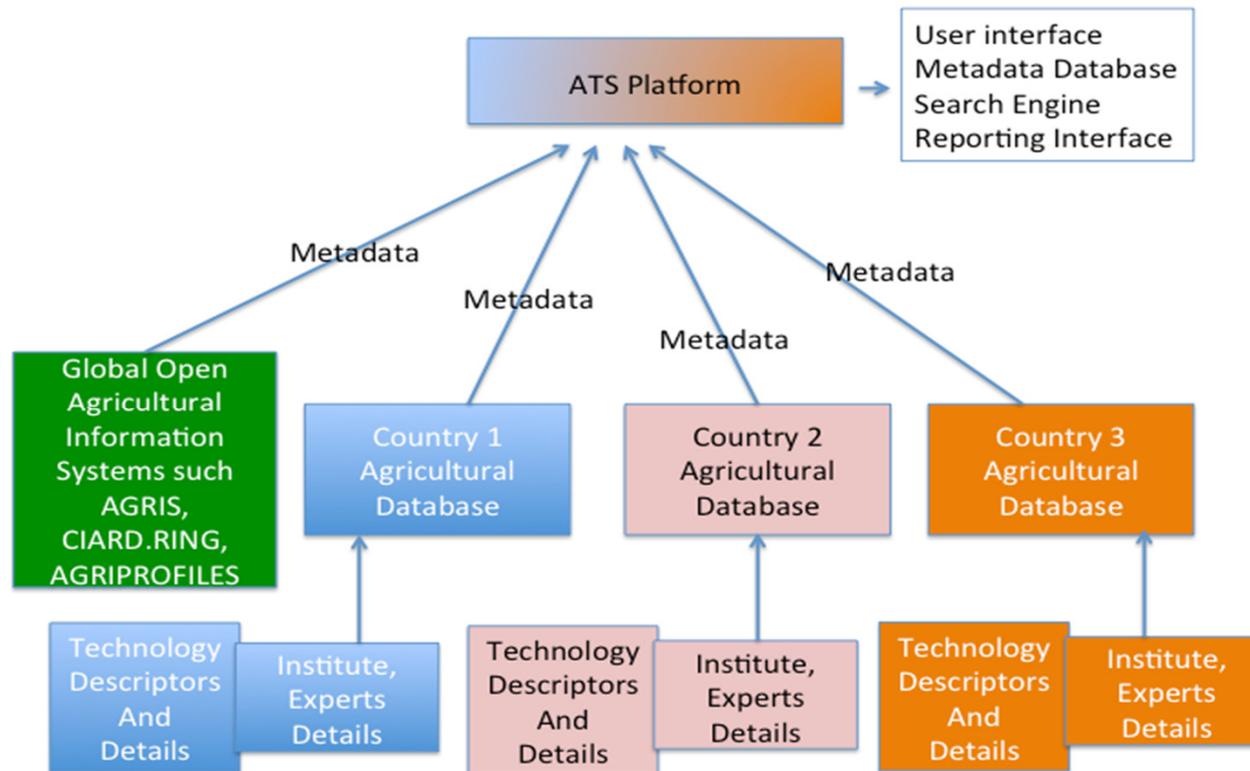
Gap Analysis

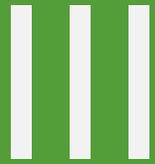
- Agriculture technology platforms are scattered and not connected
- Some information of the technology in platform is missing
- Researchers are the main users for most platforms, lack of service for smallholders, enterprises, policy makers
- Data is not equipped with metadata, not published in a machine readable format
- Lack of information and knowledge sharing standards and regulations

Need Analysis-Conclusion

- Strong demand for agriculture technology sharing to solve global issues
- No existing platform to narrow the gap between agriculture technology demand and supply
- Lack of standards and institutional arrangements to support agriculture technology sharing
- Necessity to develop ATS to
 - Enhance the equal access, adoption and extension of agriculture technology information
 - Support South-south Cooperation and agriculture technology sharing
 - Contribute towards SDGs

Schema of ATS Platform





Part III

Working Plan for ATS Platform

Work Plan

- ATS Working Group will further improve the proposal and workplan based on suggestions and comments from 2017 Potsdam MACS
- ATS Working Group in close collaboration with G20 members and GFAR, FAO, GODAN, IFPRI, etc.
- 2018 G20 MACS ATS Workshop to be organized with consensus of participants



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Thank you!