



中国科学院遥感应用研究所
INSTITUTE OF REMOTE SENSING APPLICATIONS
CHINESE ACADEMY OF SCIENCES



GROUP ON
EARTH OBSERVATIONS



Workshop on “Developing an Agricultural Monitoring System of Systems”

February 11th – 13th, 2009
Beijing, China

Venue: Room 2501, Building A, IRSA/CAS

Workshop Goals:

1. Scope an Agricultural Monitoring System of Systems, identifying the requirements, the necessary components of the system and the data policies and practices needed for the system to be effective
2. Outline a Agricultural Monitoring and Risk Management Best Practices Document
3. Refine the Work-plans for GEO Tasks Ag 0702 and Ag 0703.
4. Give increased visibility to Chinese Agricultural Monitoring

Day 1. February 11 8.30 AM

Registration 8.30 – 9.00

1. Introductory Session – Chair: Wu Bingfang, IRSA 9.00 – 10.40

- Welcome and Introduction - Chinese Host CAS, Cao Jinghua, Deputy G. Director Bureau of International Co-operation Chinese Academy of Sciences (20mins)
- Projections and Economics of Global Food Supply and Demand – Maurice House, Deputy Administrator, USDA Foreign Agricultural Service (20mins)
- The GEOSS Program – Jinlong Fan, GEO Sec. (20mins)
- Towards a Global Earth Observing System of Systems for Agriculture – Chris Justice, UMD (Ag 0703 Task Leader) (20mins)
- China Earth Observation Satellite Program: current status – Guo Jianning, CRESDA (20mins)

Coffee Break 10.40 – 11.00

2. Overview State of the Science – Chair: Guo Huadong, CEODE 11.00 – 12.20

- State of the Science Ag 0703 Focus 1. Agricultural Production Monitoring – J. S. Parihar, ISRO (20mins)
- State of the Science 2. Ag 0703 Focus 2. Famine Early Warning – J. Verdin USGS FEWS (20mins)
- State of the Science 3. Ag 0703 Focus 3. Monitoring of Agricultural Land Cover Change – P. Defourny UCL (20mins)
- State of the Science 4. Ag 0702. Seasonal to Annual Agricultural Forecasting and Risk Reduction – R. Stefanski, WMO (20mins)

Lunch 12.20 – 2.00 pm



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3. Chinese Agricultural Monitoring – Chair: Zhou Chenghu, IGSNRR 2.00–3.20 pm

Agricultural Monitoring in China and CropWatch system: an Overview – Wu Bingfang, IRSA (20mins)

National agriculture monitoring system with remote sensing in the Ministry of Agriculture of China – Chen Zhongxin, CAAS (20mins)

Agro-meteorological Methods for Chinese agricultural monitoring – Wang Jianlin / Hou Yingyu, CMA (20mins)

Chinese arable land changes and food security – Liu Jiyuan, IGSNRR (20mins)

Charge to Breakout - Chris Justice, UMD

Coffee Break 3.20- 4.00 pm

4. Breakout Groups on the Adequacy of the Current Observing Systems for:

- Agricultural Production Monitoring – Chairs: J. S. Parihar and Heather McNairn (*Room 2501*)
- Famine Early Warning – Chairs: J. Verdin and Alkhalil Adoum (*Room 2503*)
- Agricultural Land Cover Change – Chairs: J. Townshend and Liu Jiyuan (*Room 2504*)
- Seasonal to Annual Forecasting and Risk Reduction – Chairs: R. Stefanski and Brad Garanganga (*Room 2314*)

End of Session 5.45 pm

6:30 pm - Banquet, Quanjude (Beijing Roast Duck) Yayuncun Restaurant, 2nd floor, hosted by IRSA

Day 2. February 12 8.30 AM

4. Breakout Report Back – Chair: Chris Justice, UMD 8.30–9.10

5. Observing Systems Overview Presentations – Chair: Zhao Zhongming, IRSA 9.10–10.30

Establishing the data policy necessary for a GEO Global Agricultural Monitoring System of Systems – J. Townshend, IGOL/UMD (20mins)

CEOS summary of planned spaceborne assets and data initiatives of relevance to agriculture – B. Reed, CEOS/USGS (20mins)

China Earth Observation Satellite Program: future systems for agricultural monitoring – Gu Xingfa / Yu Tao, IRSA (20mins)

WMO's planned observation enhancements and data initiatives of relevance to agricultural meteorology and forecasting – R. Stefanski, WMO (20mins)

Coffee Break 10.30 – 10.50

6. Breakout Groups - Identifying Best Practices for:

- Agricultural Production Monitoring – Chairs: B. Doorn and Wu Bingfang (*Room 2501*)
- Famine Early Warning – Chairs: Henri Josserand and Xie Hongyi (*Room 2503*)



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- Agricultural Land Cover Change – Chairs: Matthew Hansen and Lieven Bydekerke (*Room 2504*)
- Seasonal to Annual Forecasting – Chairs: R. Stefanski and Samsul Huda (*Room 2314*)

Lunch 12.30 – 2.00 pm

7. Visions and Goals for a GEOSS for Agricultural Monitoring – Chair: Maurice House, USDA 2.00 –3.00 pm

Near term priorities for Global Agricultural Monitoring – B. Doorn, USDA FAS (15mins)

An International Perspective on Agriculture Monitoring – Terry Newby, Agricultural Research Council, South Africa (15mins)

Current Challenges and Opportunities for Famine Early Warning - Henri Josserand, FAO (15mins)

Future Directions for Agricultural Monitoring - Wu Bingfang / Meng Jihua, IRSA (15mins)

Coffee Break 3.00- 3.30 pm

8. Breakout Report Back and Discussion from the AM Session – Chair: J. S. Parihar, ISRO 3.30- 4.00 pm

9. Breakout Groups – The priority observation enhancements and activities for the GEO Agricultural Tasks

- Satellite component - Chairs: Pierre Defourny and Guo Jianning (*Room 2503*)
- In Situ component - Chairs: Tinomutenda Tamuka and Emmanuel Cloppet (*Room 2501*)
- Updating the Ag 0702 Workplan – Chair: R. Stefanski, WMO (Task Lead) (*Room 2314*)
- Updating the Ag 0703 Workplan – Chairs: Chris Justice, UMD (Task Lead) and Kenneth Korporal (*Room 2504*)
- Updating the Ag 0607 Workplan – Chairs: J. Owaro, Office of the Prime Minister, Govt. Uganda (Task Lead) and Gideon Galu, RCMRD, Kenya (*Room 2501*)

End of Session 5.45 pm

Day 3. February 13 8.30 AM

10. Report Back on the Priority Observation Enhancements and Updating the Workplans for the GEOSS Agricultural Tasks – Chair: Jinlong Fan, GEO 8.30- 11.30 (Coffee Break 10.30- 11.00)

Plenary Discussion

11. Developing the Workshop Recommendations – Chair: John Townshend, IGOL/UMD 11.30- 12.30

- a) to the GEO Secretariat and the GEO Working Groups,
- b) to the GEO Partners (CEOS, WMO, FAO, UNEP, etc)
- c) to the Community of Practice

Lunch 12.30 – 2.00 pm



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12. Developing an Agricultural Monitoring System of Systems: A Summary Session for Policy Makers with a Focus on China (Simultaneous translation is available for this session)

Chair: John Townshend, IGOL/UMD 2.00 – 3.00 pm

Welcome – Ding Zhongli, Vice President, CAS (10mins)

Welcome – Zheng Guoguang, GEO Co-chair, Administrator of CMA (10mins)

Global Agricultural Monitoring System of Systems – Chris Justice, UMD (20mins)

Chinese Agricultural Monitoring Systems – Wu Bingfang, IRSA (10mins)

Opportunities for China in a GEOSS for Agriculture – John Townshend, IGOL/UMD (10mins)

Coffee Break 3.00 – 3.30 pm

Chair: Feng Renguo, Deputy G. Director of Bureau of Science and Technology for Resources and Environment, CAS 3.30 – 5.30pm

Speech from Chinese ministries on status, user requirement, key challenge and data sharing policy (10mins for each speaker)

- State Administration of Grain: Zeng Liying, Vice Administrator
- National Bureau of Statistics: Zhao Jianhua, Deputy G. Director
- Secretariat of Asia Pacific Space Cooperation Organization: Zhang Wei, Director
- China Meteorological Administration: Lu Naimeng, Deputy G. Director
- Center for Earth Observation and Digital Earth, CAS: Guo Huadong, Director

Speech from senior scientists (10mins for each speaker)

- Sun Jiulin, Member of CAE
- Tong Qingxi, Academician of CAS
- Yang Bangjie, Standing Member of Congress, Ministry of Agriculture

General Discussion

13. Close of Workshop 5.30 – 5.45pm

- Chris Justice, UMD
- Wu Bingfang, IRSA

6:30 pm - Dinner, Best Western Olympic Hotel, hosted by CAS

February 14 Optional Tours

- 1) Agricultural Tour - Agricultural Experiment Station, Xiao Tang Shan, Beijing
- 2) Beijing City Tour - The Great Wall and Ming Tombs