

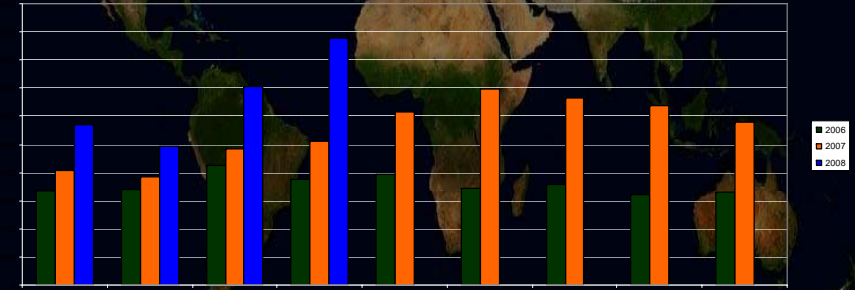


Workshop on "Developing a Global Agriculture Monitoring System of Systems"

Near Term Priorities for Global Agriculture Monitoring

GEO: Global Agriculture Monitoring, Beijing, China 2009

Visits to Crop Explorer

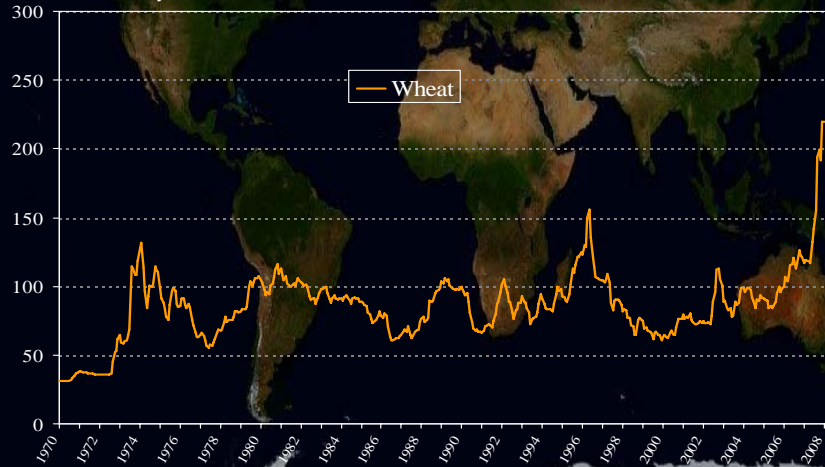


Source: WebTrends Monthly Report

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World-wide Recession/Tight Food Supplies

Index: January 1990 = 100



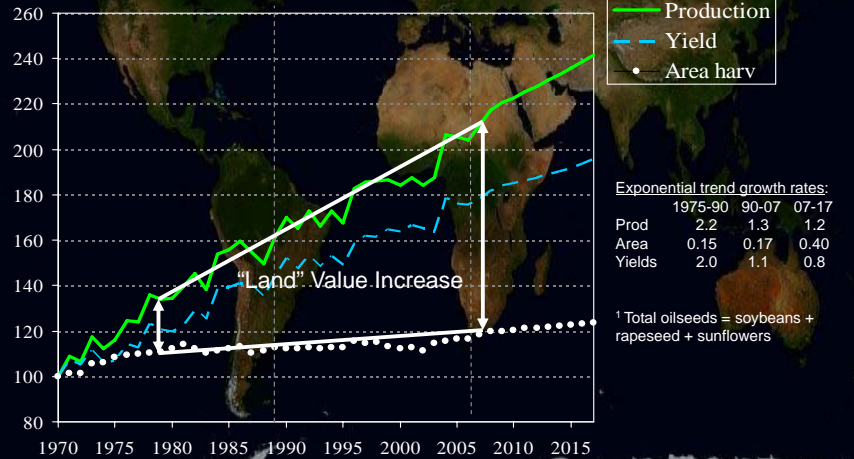
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Source: International Monetary Fund: International Financial Statistics

Total world grain & oilseeds¹

Production, yield, & area harvested

Index: 1970 = 100



Exponential trend growth rates:

	1975-90	90-07	07-17
Prod	2.2	1.3	1.2
Area	0.15	0.17	0.40
Yields	2.0	1.1	0.8

¹ Total oilseeds = soybeans + rapeseed + sunflowers

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Source: USDA Agricultural Projections to 2017

A State of Mind for Setting Priorities for the next 1-3 years:

- Urgent-Important-Practical
 - **Confidence with global food supply availability**
 - Provide access to EO and EO derived information
 - Exploit existing EO suppliers
 - Exploit existing successes
 - Provide Producer/Consumer - Market – Food Aid agency usable information
 - Define the customer(s)[early adoptor(s)] subset
 - Define “value” of EO
 - ...in non-EO speak
 - ...what is important to those who fund you
 - Provide requirements used for EO mission planning
 - Mission planning to include data policy, ground processing...
 - Use available EO's
 - MAKE IT SIMPLE!

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Global Agriculture Monitoring Priorities Review

- Strategic Enhancements of:
 - Satellite Observations
 - Meteorological Data
 - National Agriculture Monitoring Systems
 - Capacity Building
 - Global Cropland Mapping

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Satellite Observations

- Maintain Global Regional Observations
 - At risk
 - VIIRS-NPP compromised/delayed
 - New SPOT-VEG now planned
- Systematic Acquisition Strategy for Farm Observations
 - Halting, but steady progress
 - Systematic acquisition strategy in place for some areas of the world,
 - Systematic monitoring operations not sufficient,
 - LDCM delayed beyond near-term window
- Systematic Acquisition Strategy for Field Observations
 - Slow progress
 - Systems still designed and operated for mapping or one-off purposes rather than monitoring

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Meteorological Data

- Identify gaps in in-situ agro-meteorological observational network and advocate a significant increase in field observations (in-situ), especially in climate vulnerable regions.
 - No Action
 - New
 - Global gridded precipitation (temp..)
- Lobby for free exchange of field and satellite agro-meteorological data/products through the World Meteorological Organization (WMO) and satellite operators/agencies,
 - On-going
- Undertake capacity building activities in the integration of field and satellite observation, in support of localized agro-meteorological product generation and application.
 - Capacity Building Task
- Leverage improving national and global telecommunication to more widely and freely disseminate data and products to end-users.
 - No Action

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National Agriculture Monitoring Systems

- Immediate measures for bridging the communication gap between remote sensing and agriculture survey specialists,
 - No Action
- Reporting of successful integration of satellite observations and field techniques in National Operational Agriculture Survey and Monitoring, and
 - COP's Meetings and Report outs
- Technical support for Remote Sensing Applications in Agricultural Survey / Monitoring in countries with weak capacity.
 - Capacity Building Task

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Capacity Building

- Creating awareness of GEOSS space-programs and opportunities in support of Agriculture Monitoring (2007-2010),
 - GEO Web Site
- Enhancement of satellite derived rainfall estimates (RFE) by national meteorological services and,
 - No Action
- Development of national and regional Food Security Outlook (FSO) scenario's as part of climate-risk management.
 - Co-meeting with Agriculture Risk Management

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Global Cropland Mapping

- Form a steering committee from the Community of Practice,
 - COP meeting, Ispra (JRC) 2008
- Develop a user requirements document,
 - On-going
- Compile an inventory of existing in situ crop information at a parcel level and existing crop type and croplands maps and,
 - No Action
- Convene a technical meeting to design of a globally distributed experiment on crop and croplands mapping (early 2008)
 - COP Meeting, Ispra (JRC) 2008

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Google "Crop Explorer"