

# ARTES Applications Workshop Keynote:

## **When Technology meets Customers' needs**

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# Customer Value of GEO Services

The right Information, in the right Place,  
at the right Time, to the right People  
to Make the right decisions.





# Customers and Needs

- Government
  - Safety/Security
  - Environment
  - Land Use
  - Energy
  - Food/Water
  - Health
- Corporate
  - Safety/Security
  - Transport
  - Insurance
  - Energy
  - Food/Water
- Consumer
  - Market Access
  - Recreation
  - Transport
  - Education



**Food Security**  
(governments)

**VS.**

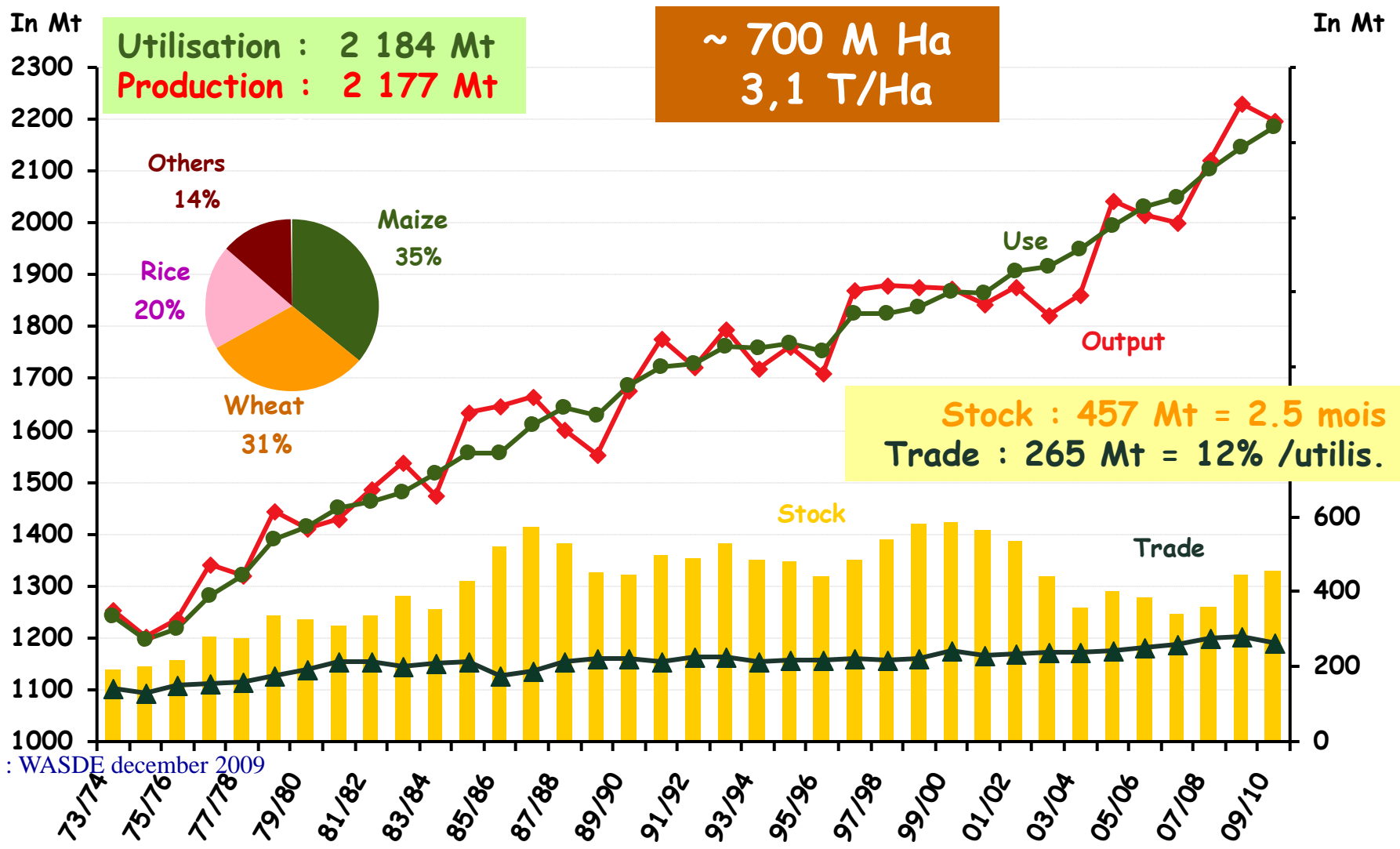
**Precision Farming**  
(producers)

**VS.**

**Commodity Supply**  
(Major food companies)

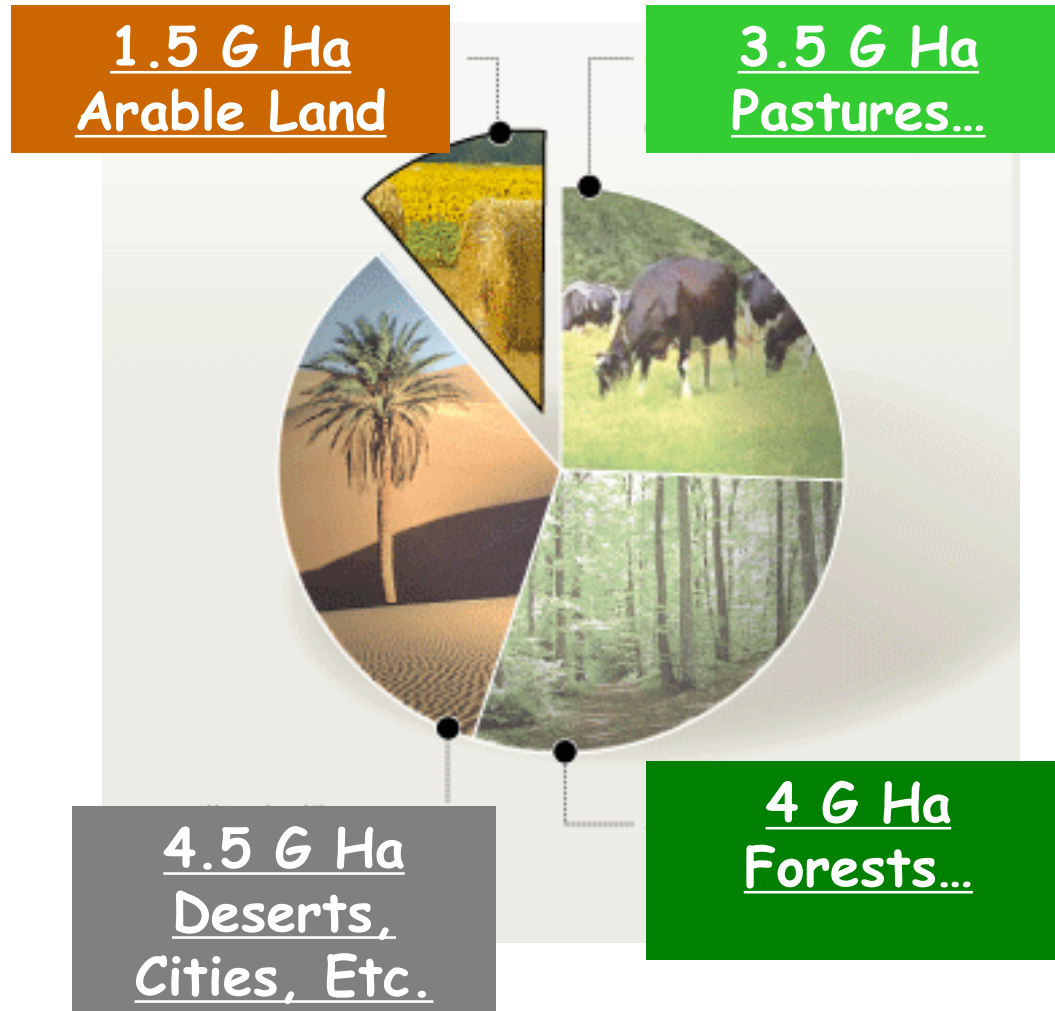


# Cereals: 70 % of Global Food Supply





# Global Land Use 2010



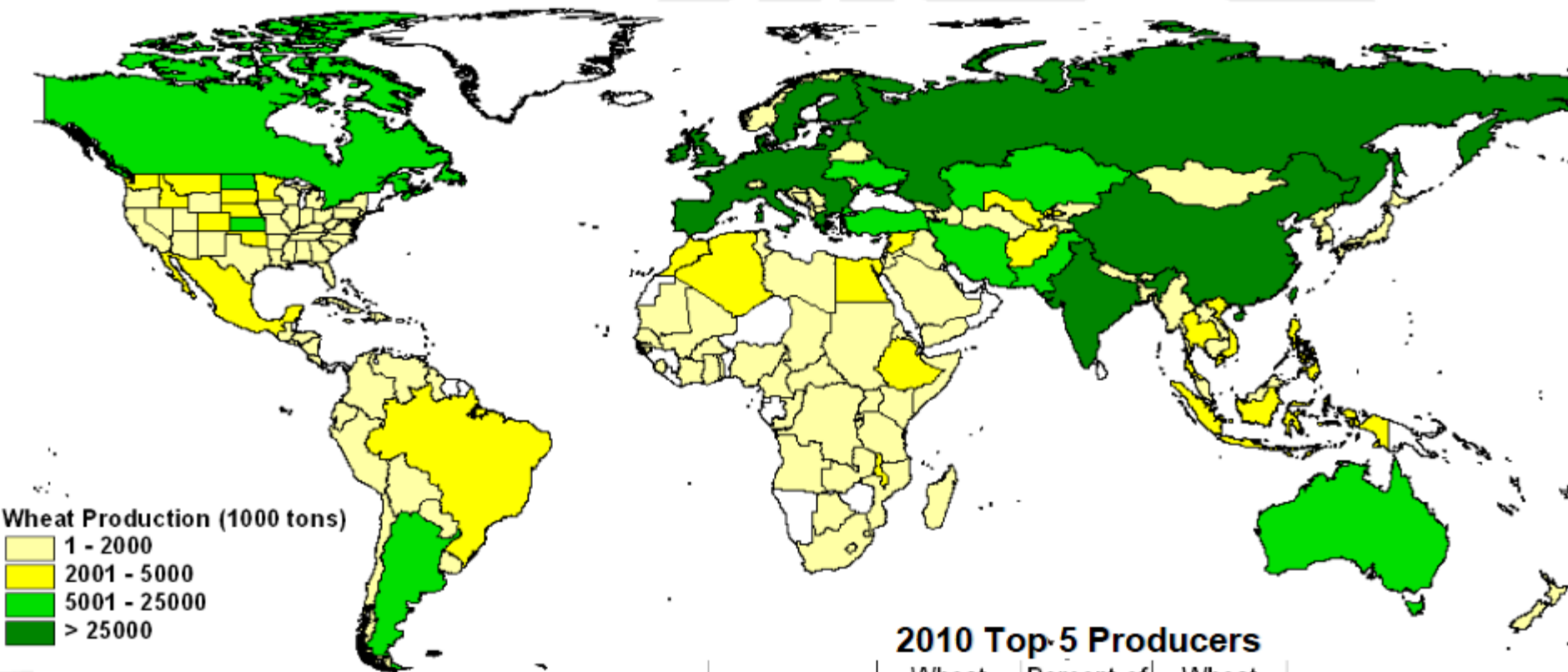


# Global Land Use 2030





# 2010 Global Wheat Production



**2010 Top-5 Producers**

	Wheat Production (1000 tons)	Percent of World (percent)	Wheat Export (1000 tons)
World	641444		
EU-27	135630	21	21000
China	114500	18	
India	80710	13	
United States	60514	9	34019
Russia	42500	7	3500

**Northern Hemisphere where temperatures are cooler.**

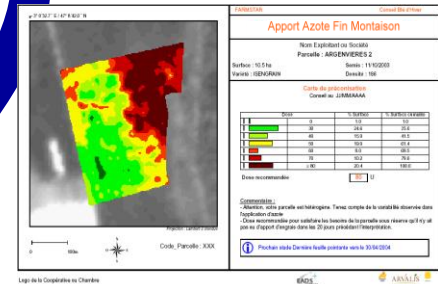
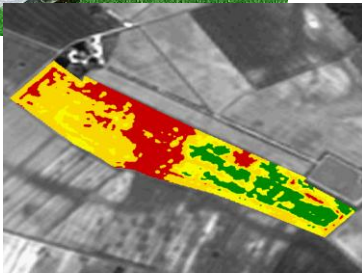
Source: PSD Online  
<http://www.fas.usda.gov/psdonline/>

October 13, 2010

USDA/FAS/OGA



## A circular inset image showing a satellite in orbit above Earth's cloud-covered surface. The satellite has a central body with various instruments and two large, rectangular solar panel arrays extending outwards. The Earth's surface is visible below, showing white clouds and dark landmasses. The background is the blackness of space with some distant stars.



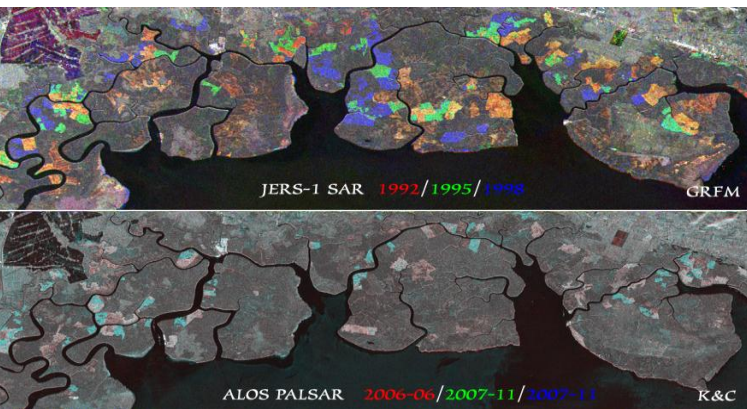


# Agriculture in Africa

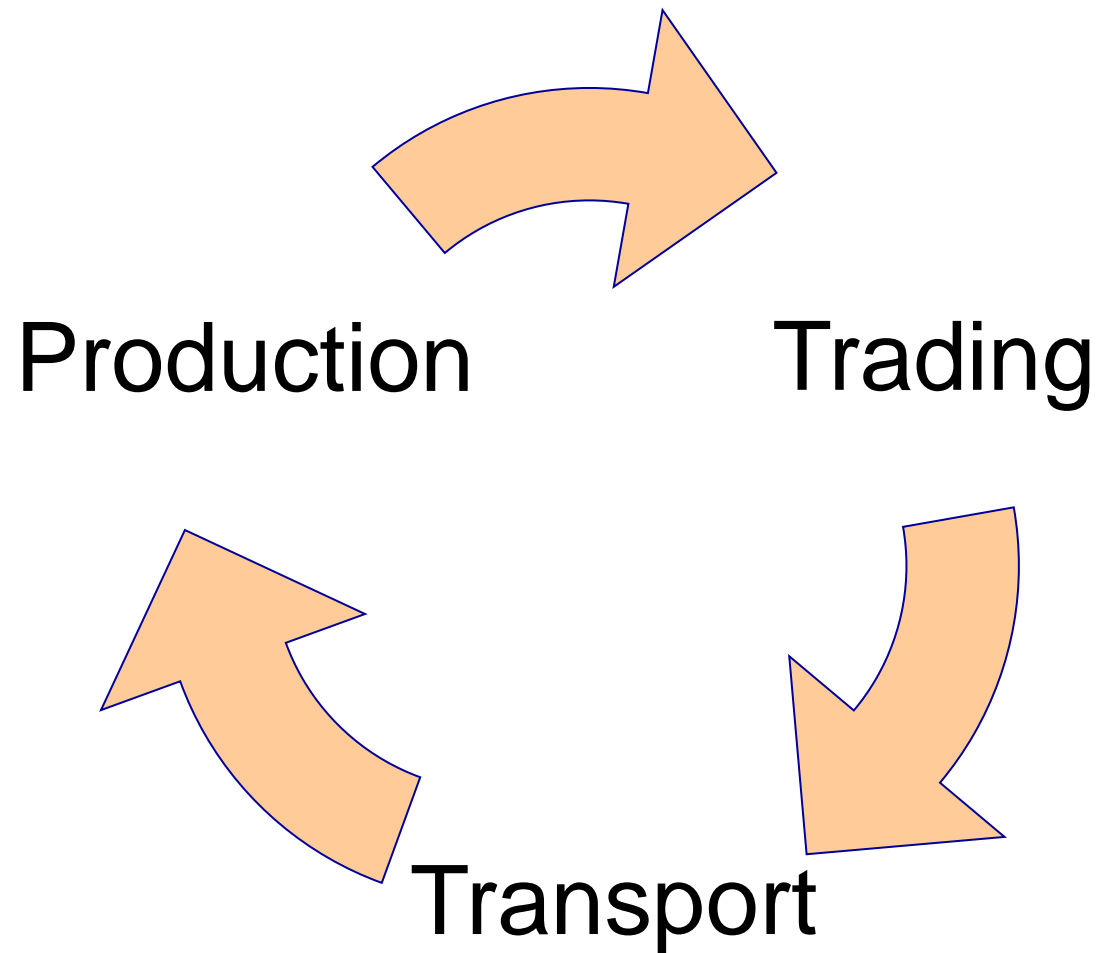
To develop a sustainable & social agriculture

## Natural Resources Management

Preservation of environmental assets









# Renewable Energy Management

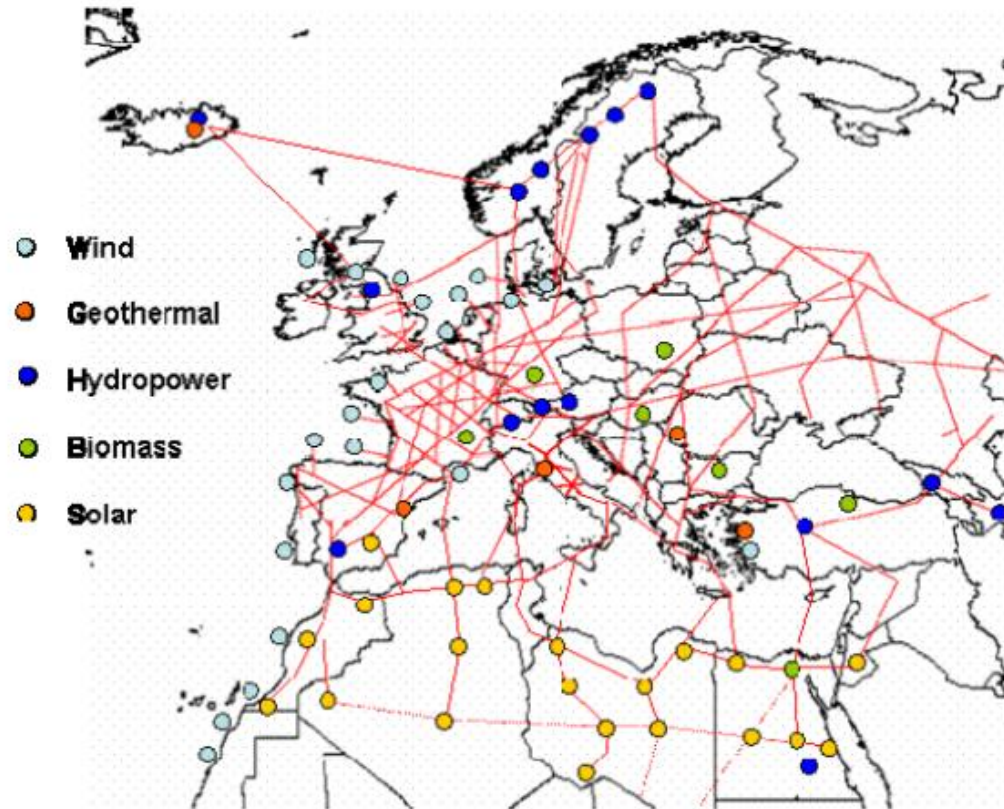


Figure 4-4: Vision of a Trans-European HVDC grid acting as “electricity highways” to increase the redundancy of power supply and to activate the best sites for renewable electricity generation. Based on /Asplund 2004/ with modifications according to the results of TRANS-CSP.

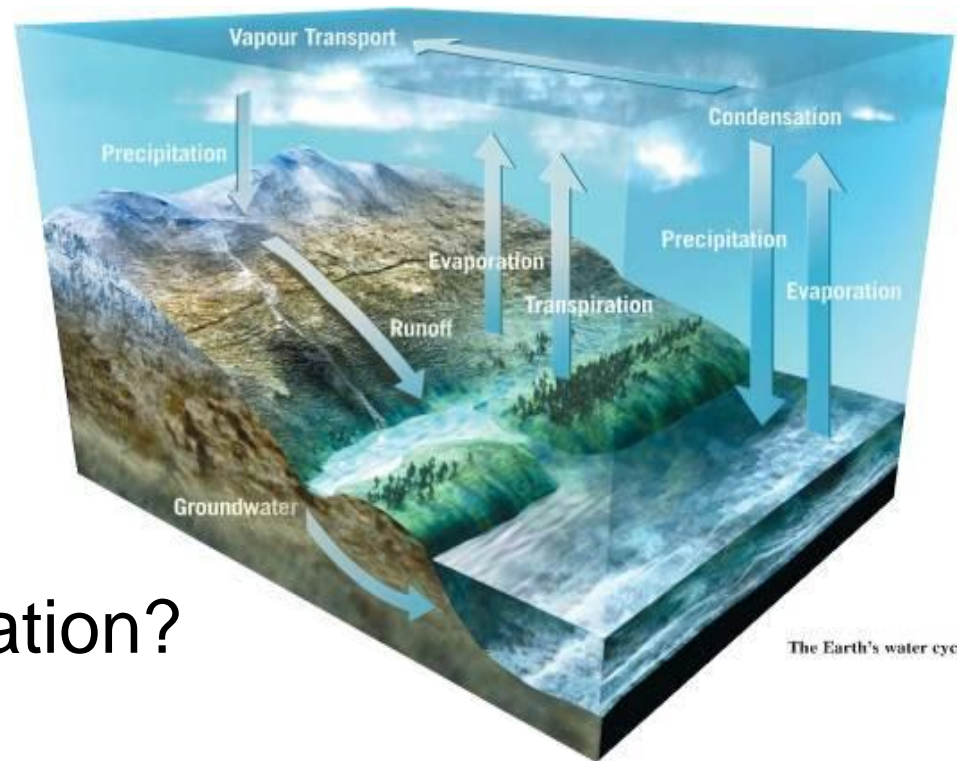
(from the German Aerospace Center study)





# Transporting Water ?

- Pipes, canals
- Shipping
- Virtual water
- Artificial Recharge
- Natural Cycle Stimulation?





# Recommendations

1. Focus on customer's needs



# Recommendations

1. Focus on customer's needs
2. Broaden the scope of Open Competition ITT







**excite**





























Google

excite

infoseek

Y!

WEB CRAWLER



LYCOS

msn Search

altavista



Google



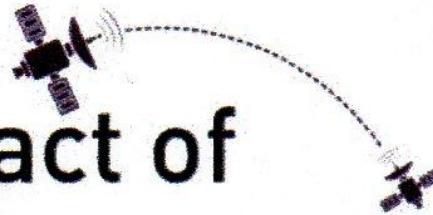


# Recommendations

1. Focus on customer's needs
2. Broaden the scope of Open Competition ITT
3. Support multiple parallel projects



What is the  
economic impact of



**Oxera**

**GEO SERVICES**

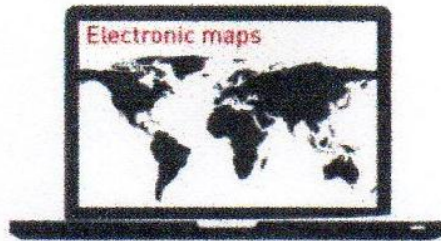


# GEO SERVICES

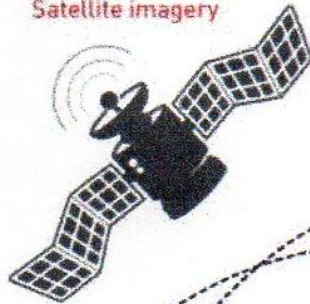
Geo services are:



Satellite receivers  
and manufacturing



Satellite imagery



Location-based search

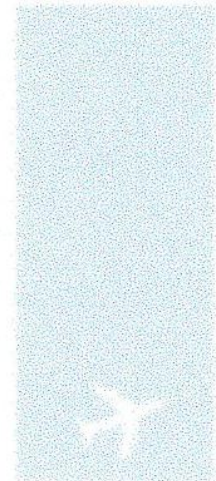
Geo services global  
revenues are  
\$150-\$270  
billion per  
year



Video games  
industry  
\$25 billion



Geo services  
\$150-\$270  
billion



Airline  
industry  
\$594 billion

Geo services global  
added value is around  
\$100 billion per  
year

