



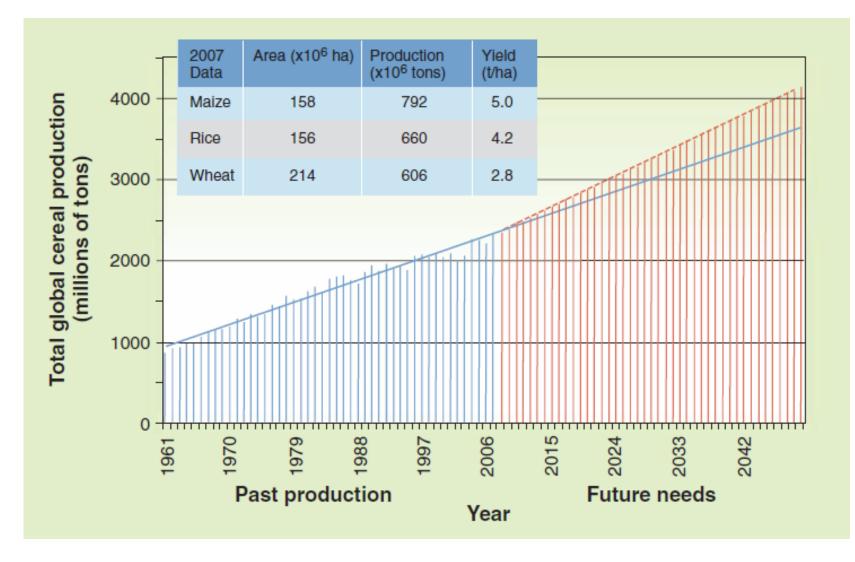
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Points of Discussions

- How GEOSS can/should contribute to SDGs
- To consider what we can do particularly under WG5/Agriculture & Food Security
 - To understand current and future perspectives of food production and consumption
 - To map current activities onto action items for SDGs
 - To prioritize current activities for SDGs
 - To discuss how agriculture related observations and data are important for SDGs
 - o Etc.



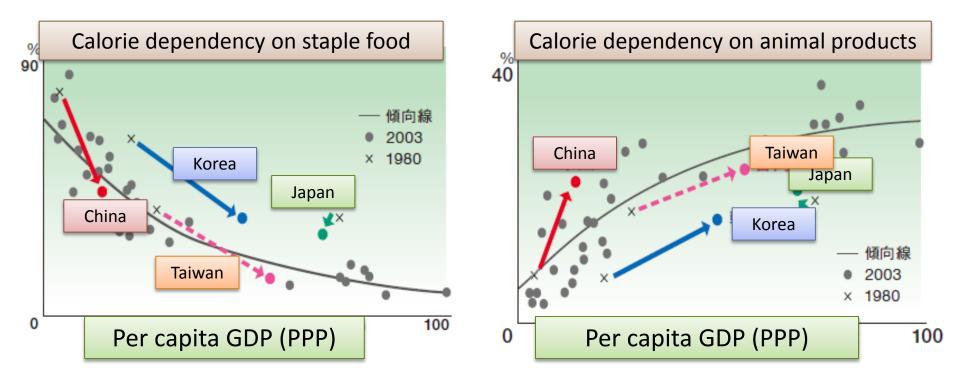
Food demand increases



Science 327, 2010 •4

Diet transition happens with economic growth

Production efficiency of animal product is much lower than staple food



Very inefficient meet production

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	Milk	Egg	Chicken	Pork	Beef	Fish
Grain needed to produce 1kg of product (kg)	1.1	2.8	4.5	7.3	20.0	1.4
Nitrogen uptake (%)	30	30	20	10	5	40

Source: Smil (2001) Enriching the earth. The MIT Press.

Water consumption for food production

• Water needed to produce 1 kg of agricultural product

Products	Water (t)	Products	Water (t)
Rice	3.6	Beef	20.6
Barley	2.6	Pork	5.9
Wheat	2.0	Chicken	4.5
Corn	1.9	Egg	3.2
Soybean	2.5		

Toward sustainable and sufficient rich food production

