

Linking agriculture, food and consumers: the challenges and issues that we all must face

Keith Woodford
Independent Consultant and Professor of Agri-Food Systems (Hon)
Lincoln University
New Zealand

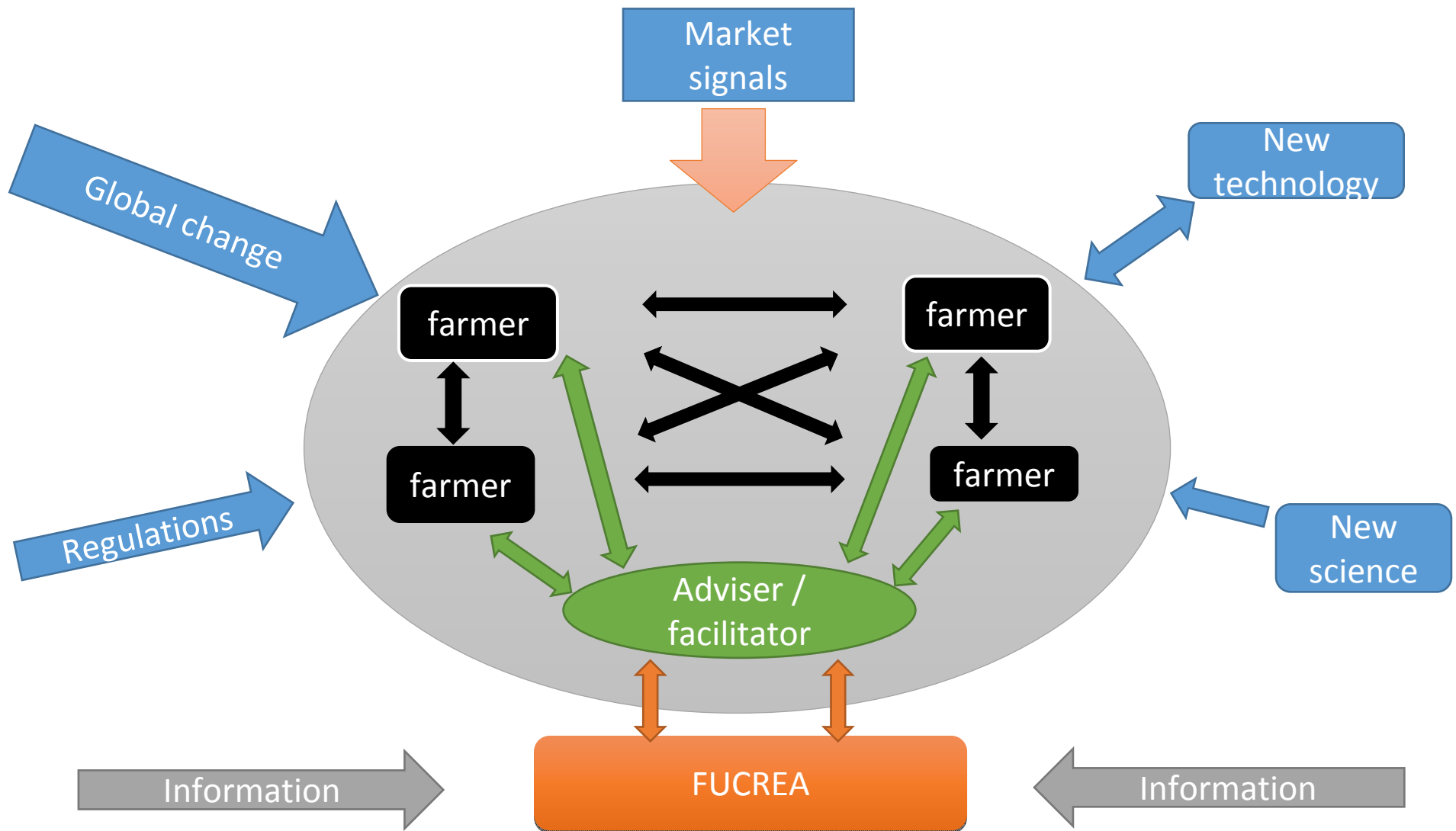
*A presentation to FUCREA, Uruguay
22 August 2016*



Technology transfer model



Farmer-centric Innovation System



The role of FUCREA in the next 50 years

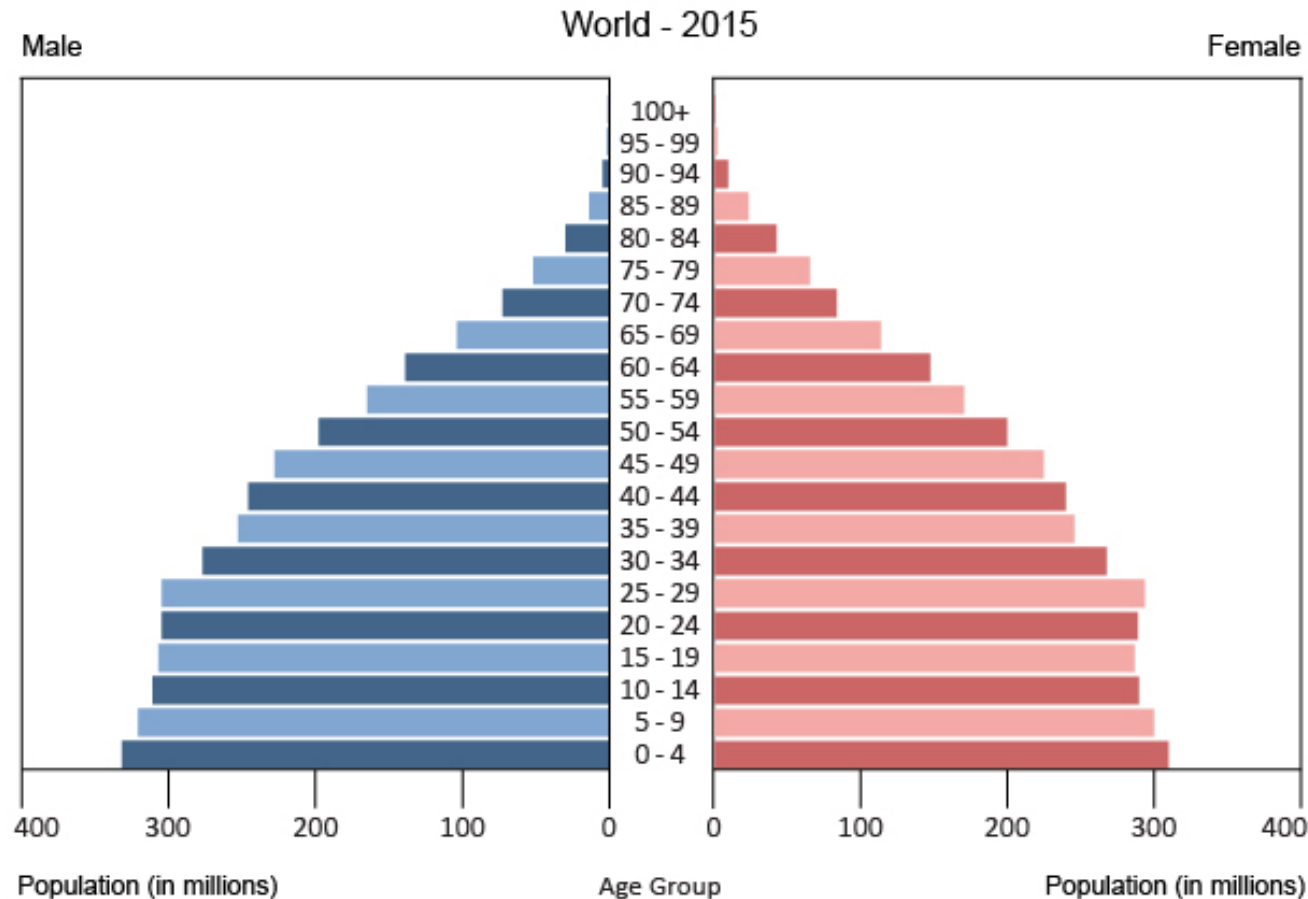
Includes helping farmers to see the future

Most of the big strategic decisions are a consequence of events external to the farm

This requires a strong central organisation providing good quality unbiased information as to where the world is heading

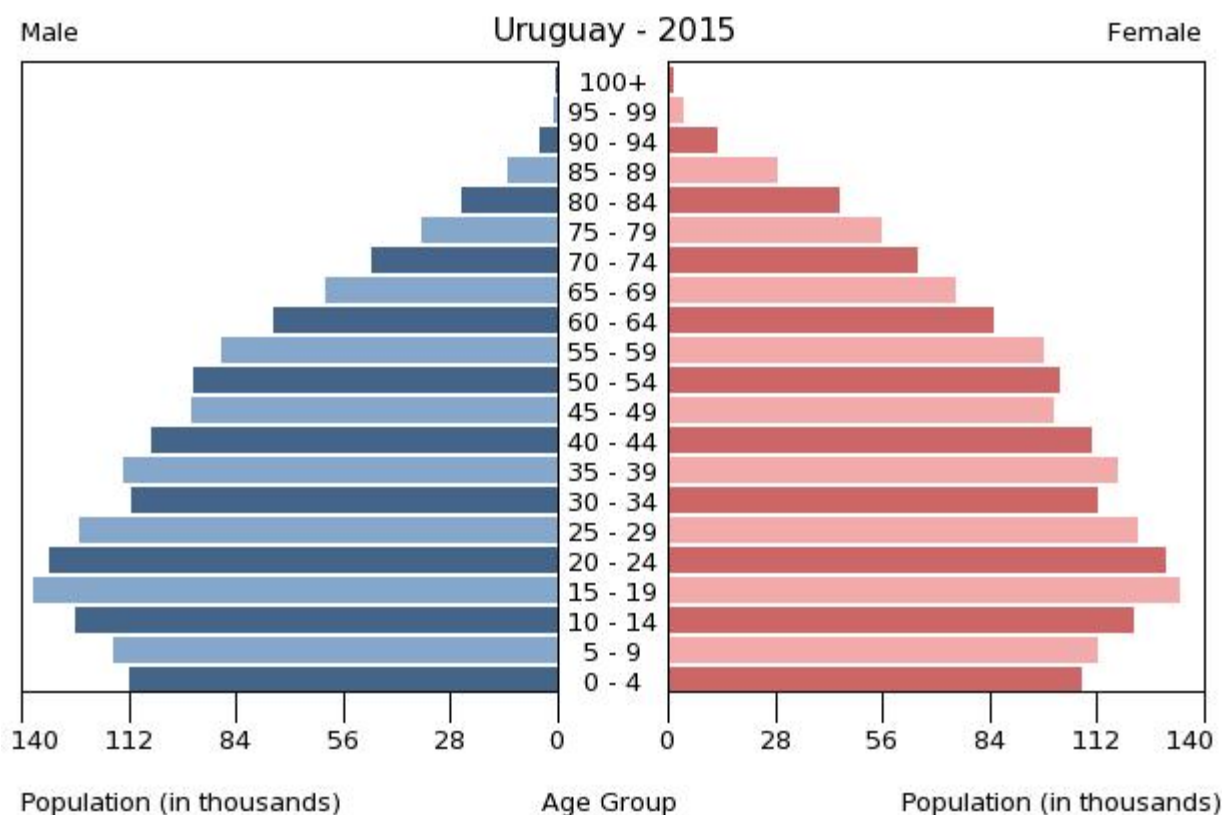
The World

population growth of 1.08% per annum;
9000 more people each hour



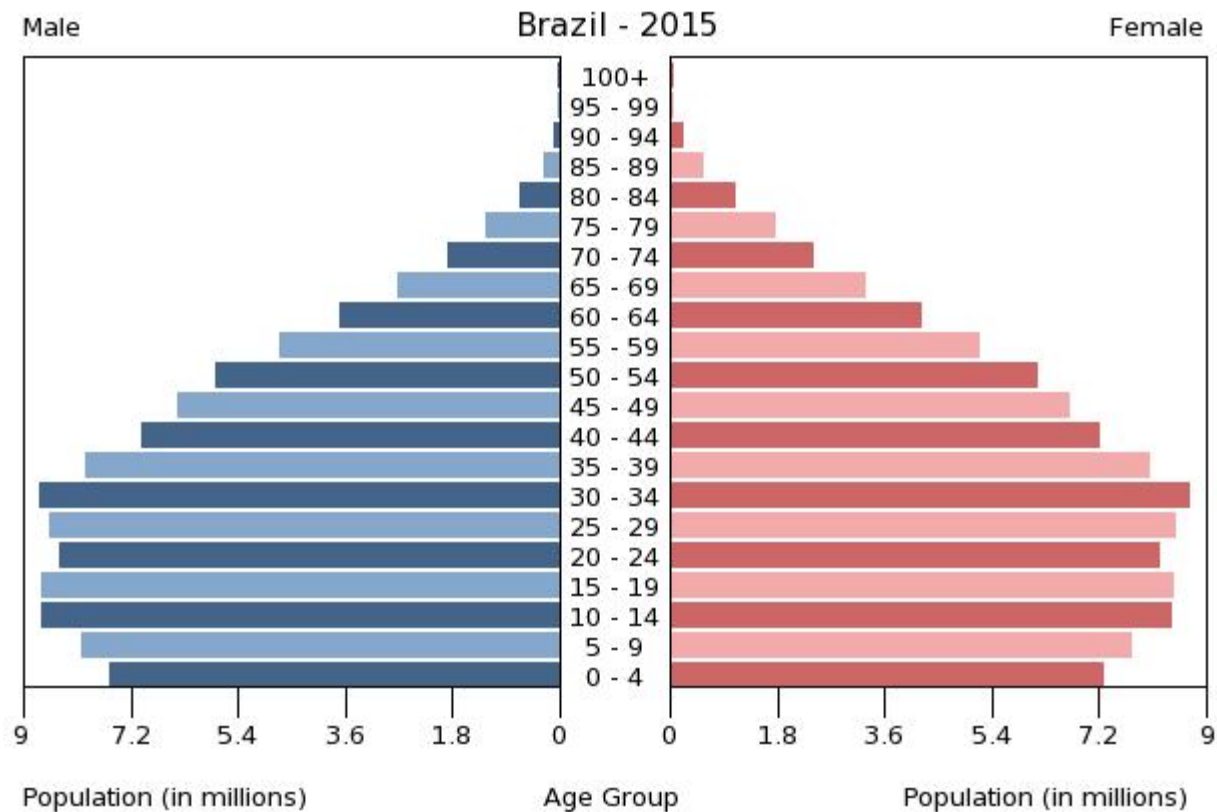
Uruguay

Growth 0.27% per annum;
1.82 children per woman



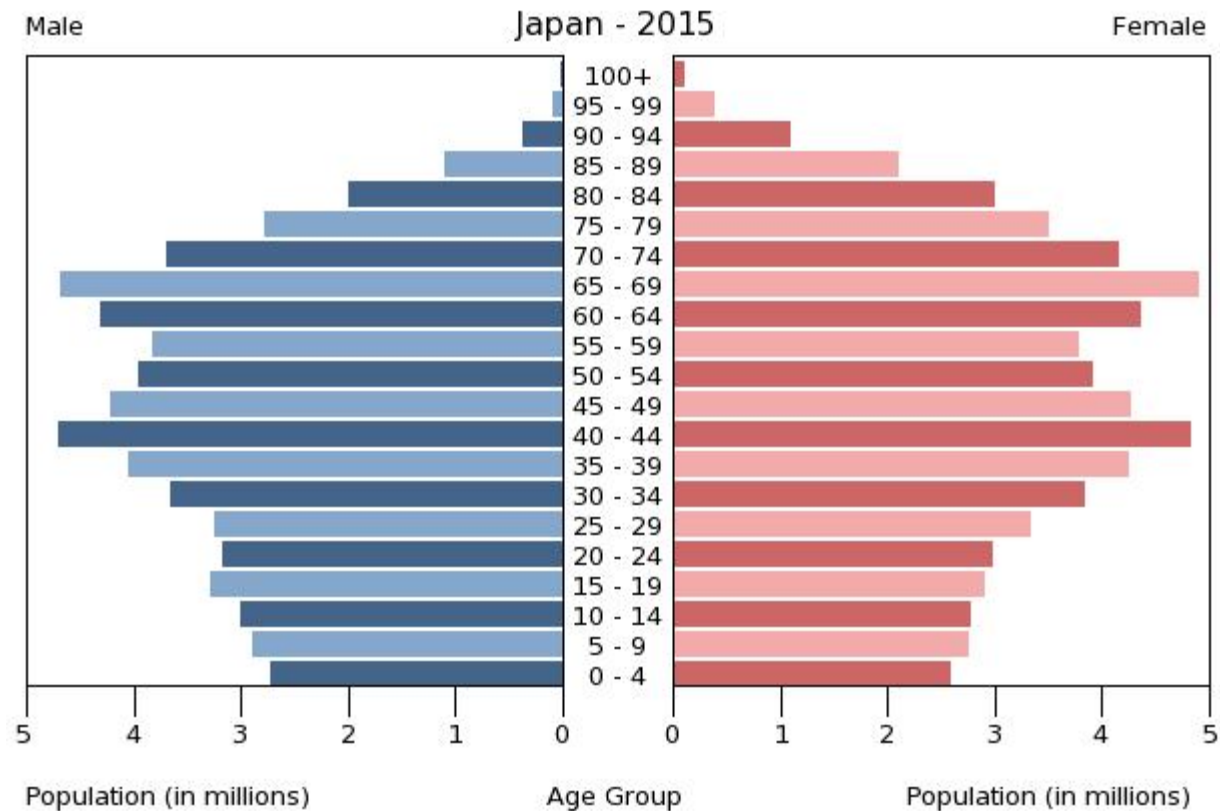
Brazil

0.77% growth rate; 1.77 children per woman



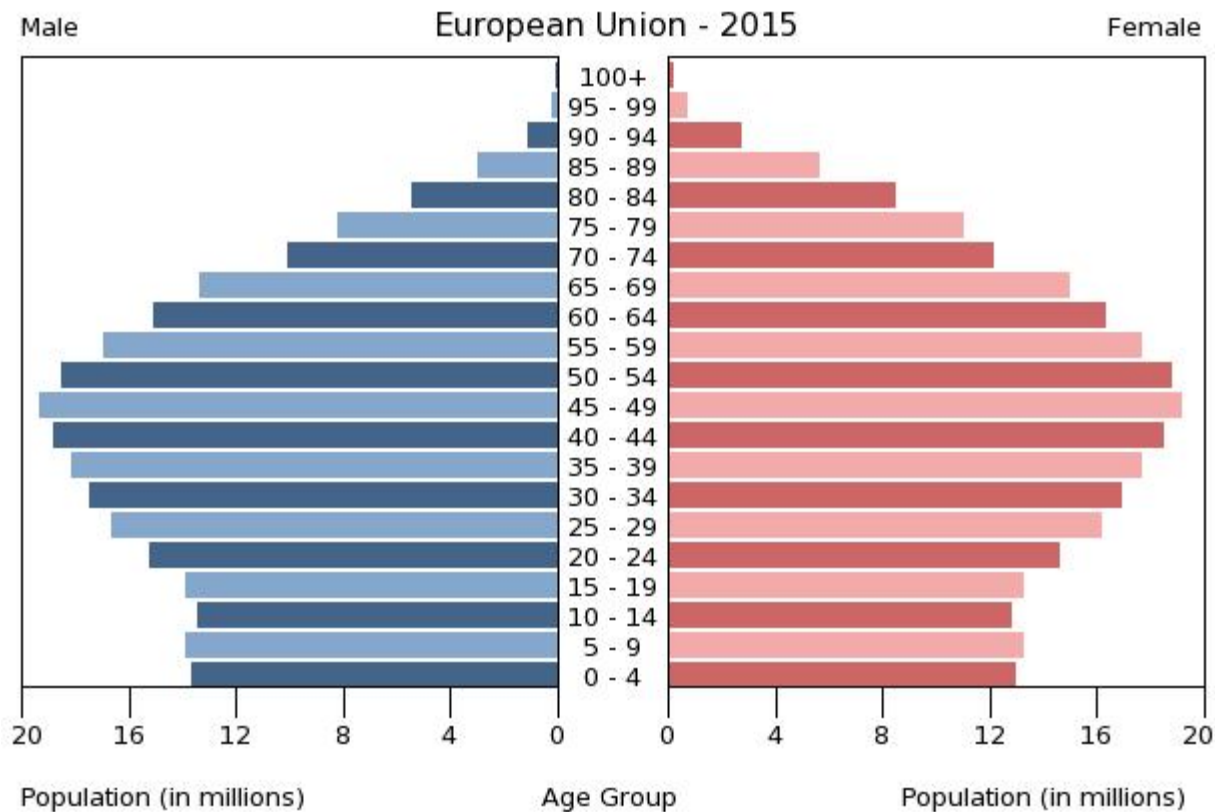
Japan

negative 0.16% growth; 1.4 children per woman
65-69 year olds the largest cohort

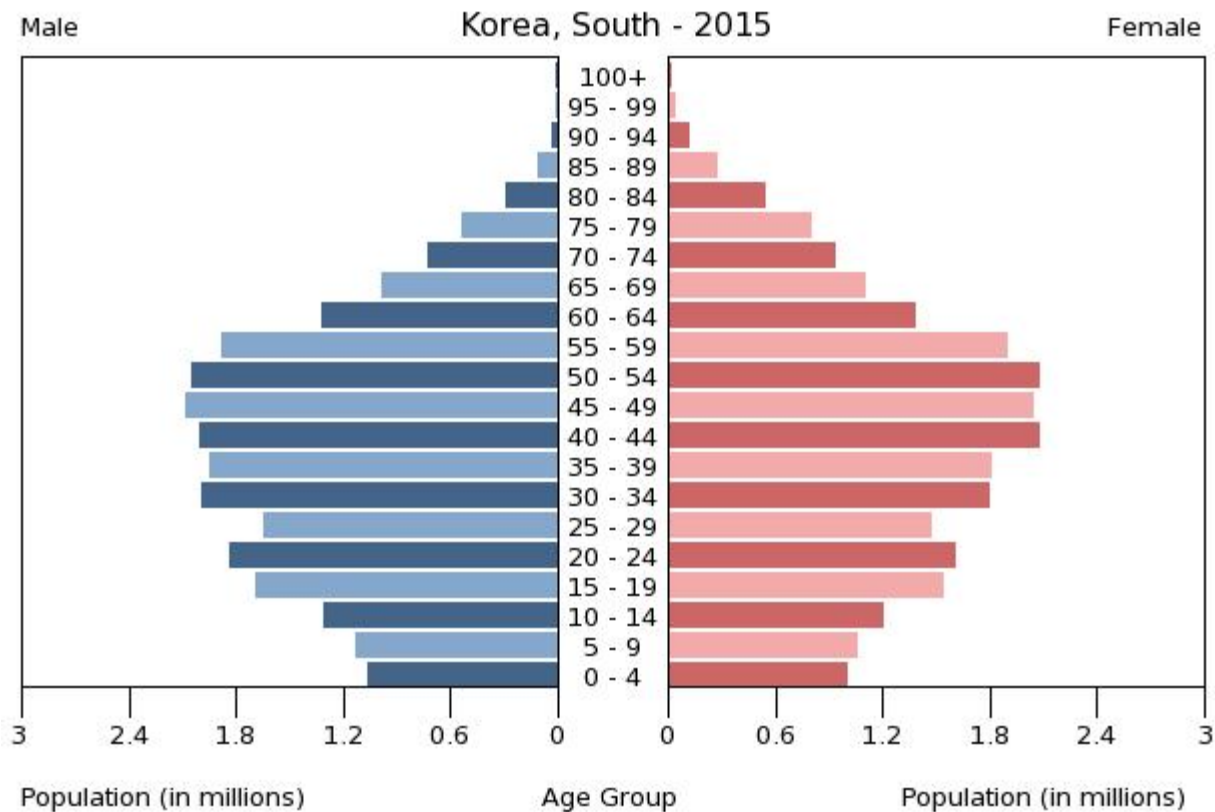


European Union

growth rate 0.25%; 1.61 children per woman
45-49 year olds the biggest cohort

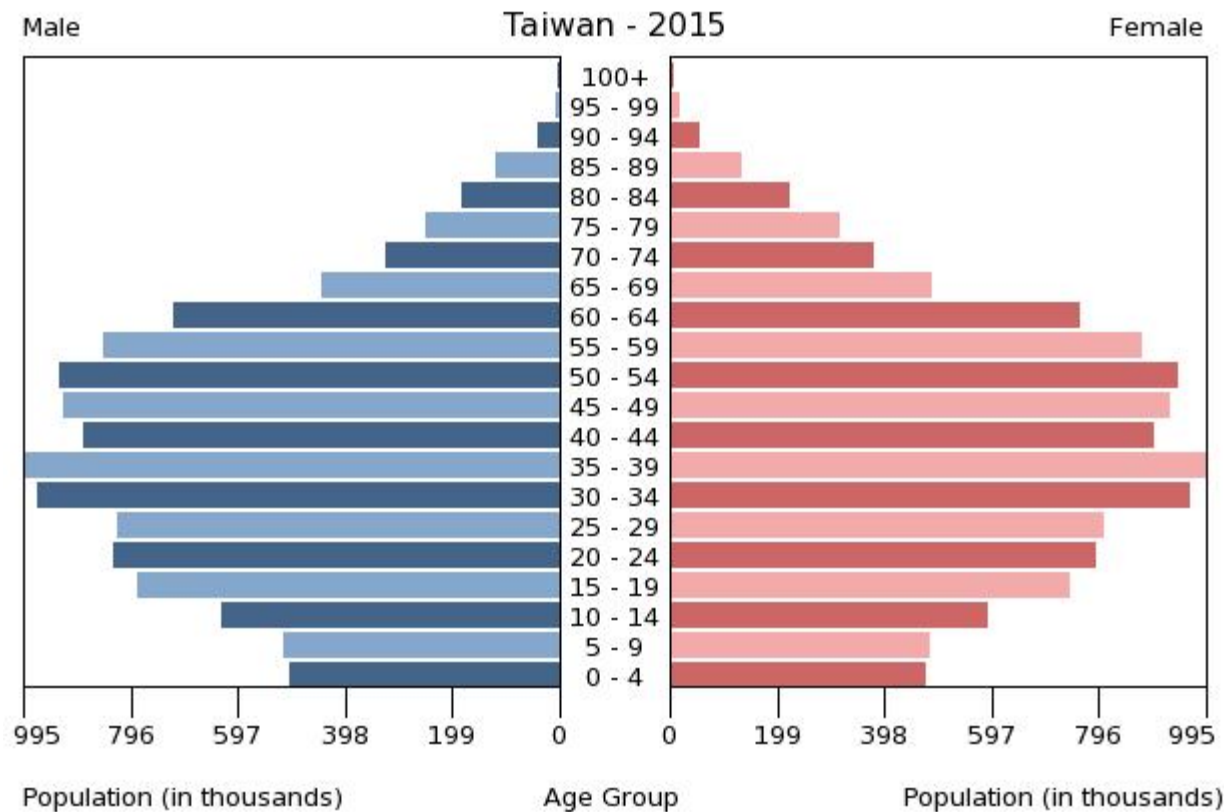


South Korea
0.14% annual growth;
1.25 children per woman



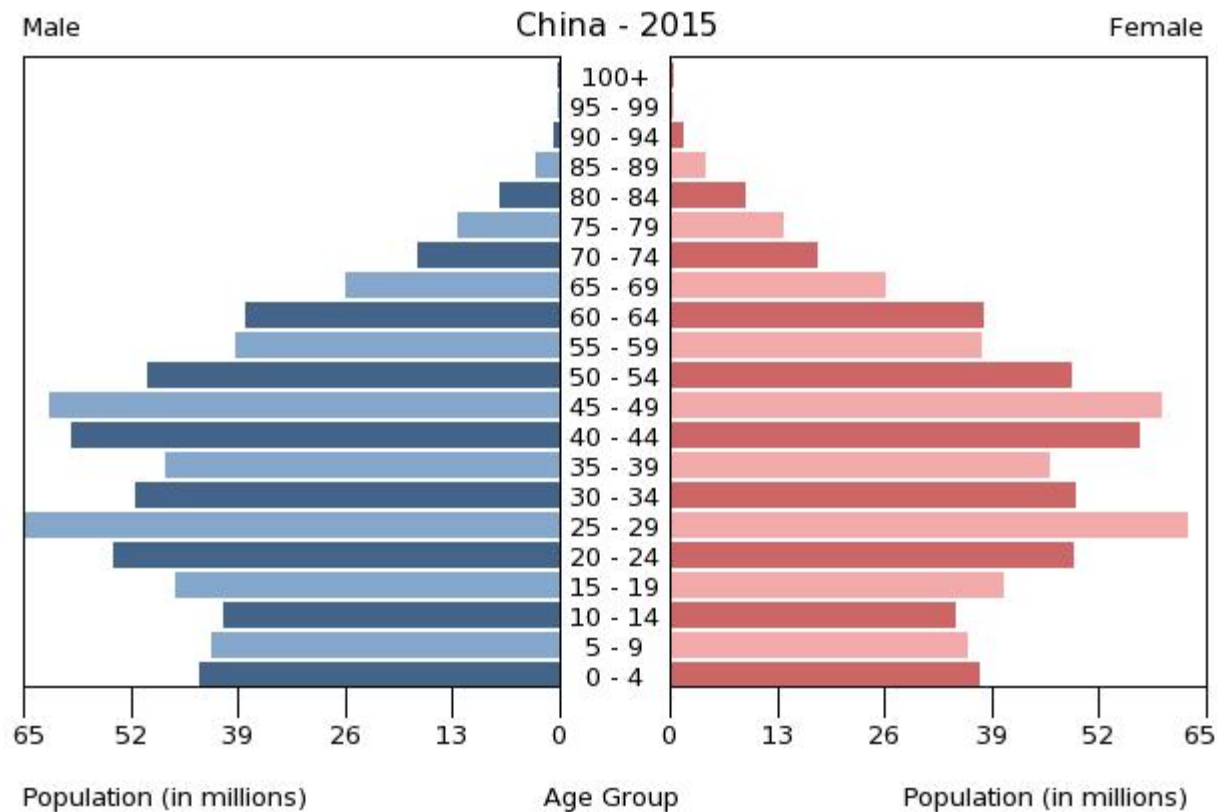
Taiwan

0.12% annual growth, 1.12 children per woman



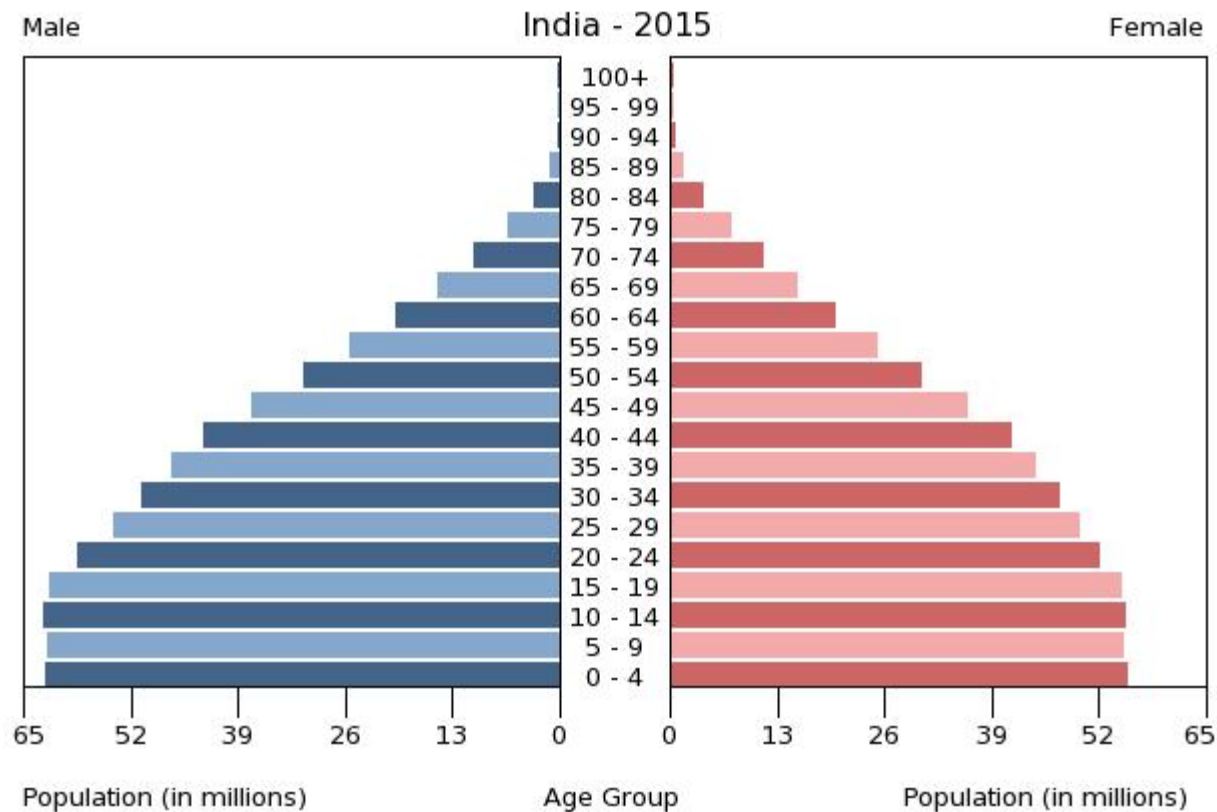
China

0.45% annual growth; 1.6 children per woman; imbalance of males



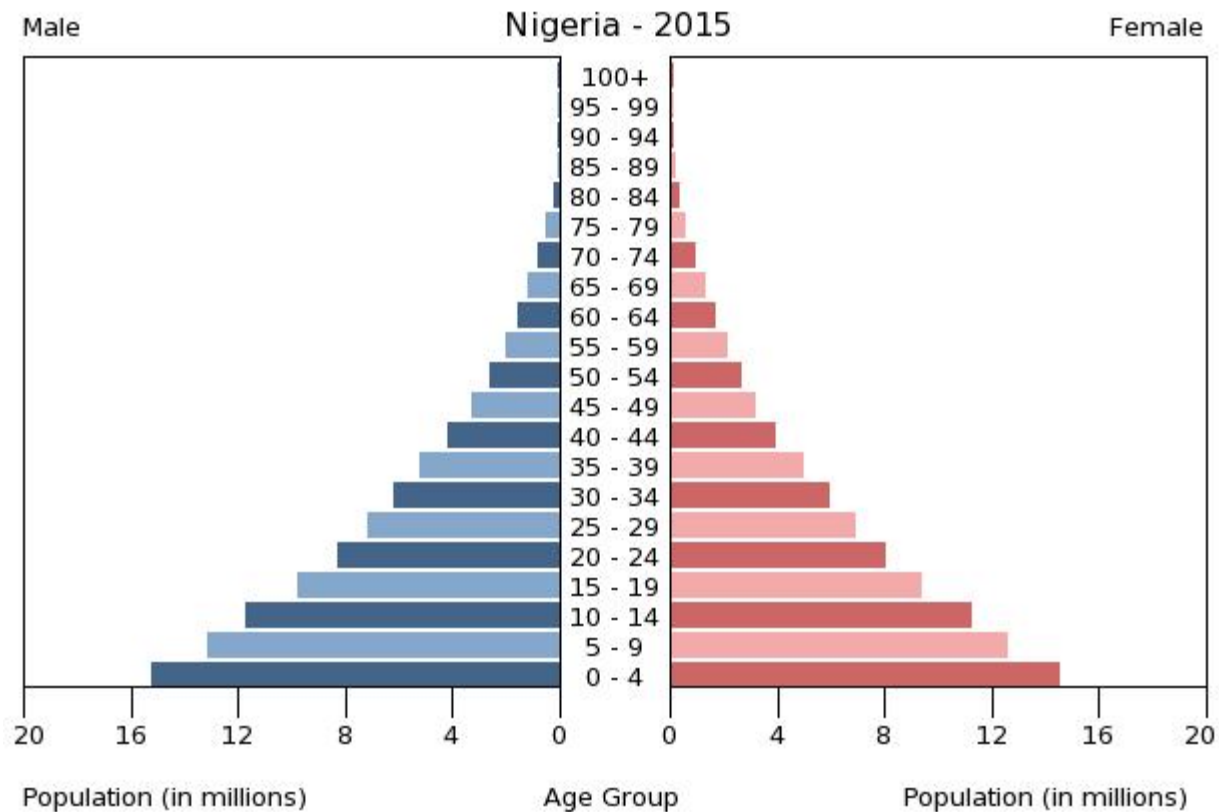
India

1.22% growth; 2.48 children per woman; imbalance of males



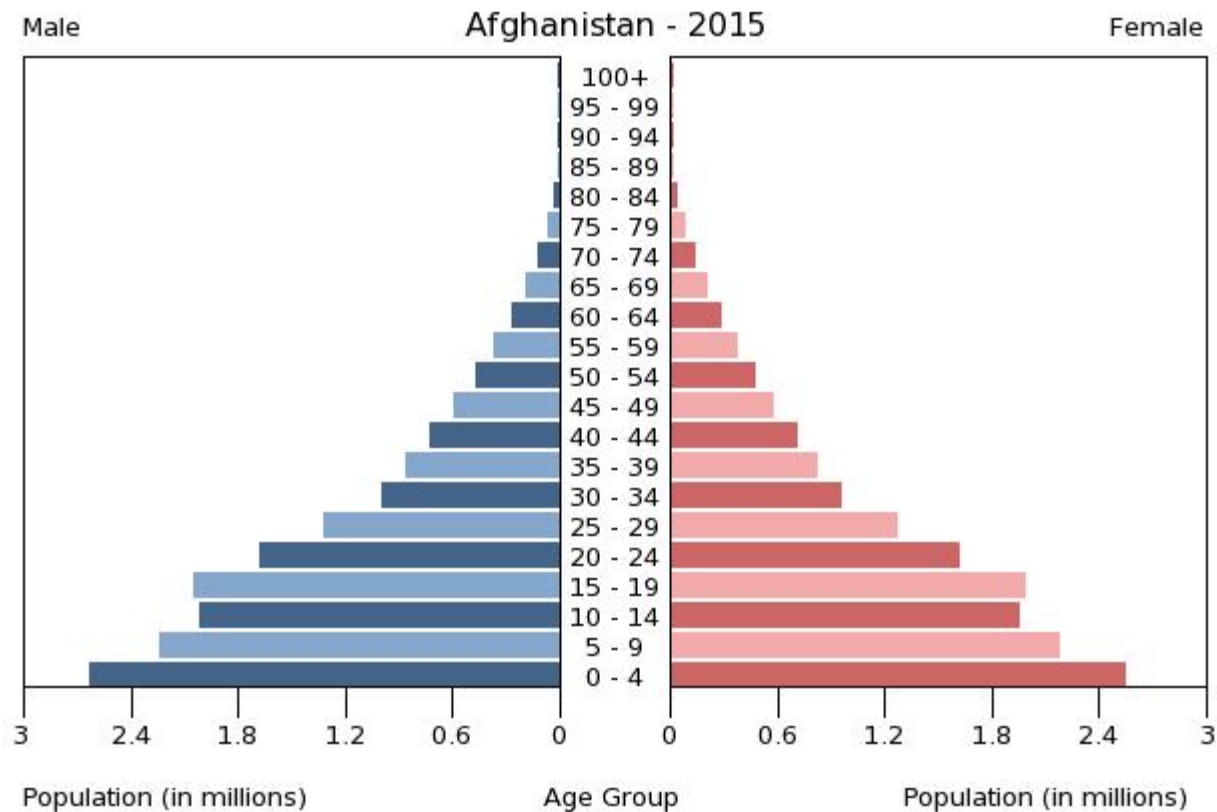
Nigeria

2.45% growth;
5.19 children per woman



Afghanistan

2.3% per annum, 5.3 children per woman



The big messages about population

Asian and European growth is largely over, with India the exception

South American growth is modest

Africa is totally out of control

What about economic growth?

Largely in Asia – still led by China, but widespread

Some parts of Africa

Brazil is in difficulty

Some growth elsewhere in South America

So where are the opportunities?

Growing middle classes in Asia who are prepared to pay for quality brands of food; but only low growth for food commodities except to feed animals

Africa and Western Asia (including Middle East) have huge demands for commodities but will they be able to afford it?

The importance of culture



Rangeland degradation



Qinghai-Tibet



Qinghai-Tibet Plateau



Qinghai-Tibet Plateau



Other countries are changing: free-stall in China



Fonterra in China



Fonterra in China



Disruptive science



Disruptive technologies

ESL (extended shelf life) milk.

This is not UHT!

Sex selected semen

Digital marketing channels

The challenges of value-add

It requires farmers working together

It requires capital

It requires partnerships with processors and marketers

It all starts with understanding the changes in the world beyond Uruguay's borders

The concluding messages

The challenges for Uruguay and FUCREA will be different in the next 50 years than the past.

The big changes 'on-farm' will be in response to events that occur beyond Uruguay's borders.

Integrated supply chains are the only way to capture benefits of value-adding.

FUCREA has huge importance in facilitating the discussions that will be needed to guide the necessary on-farm and off-farm (processing and marketing) changes, and providing the information required for those discussions.

The fundamental philosophy of FUCREA has to remain farmer-centric with 'farmers in the centre'.

All of the strength comes from working together.

**Keith Woodford's writings are available at
<https://keithwoodford.wordpress.com>**

