



Alternative Investment Strategies

Investing in Farmland

Amsterdam, April 2015



Rabo Farm

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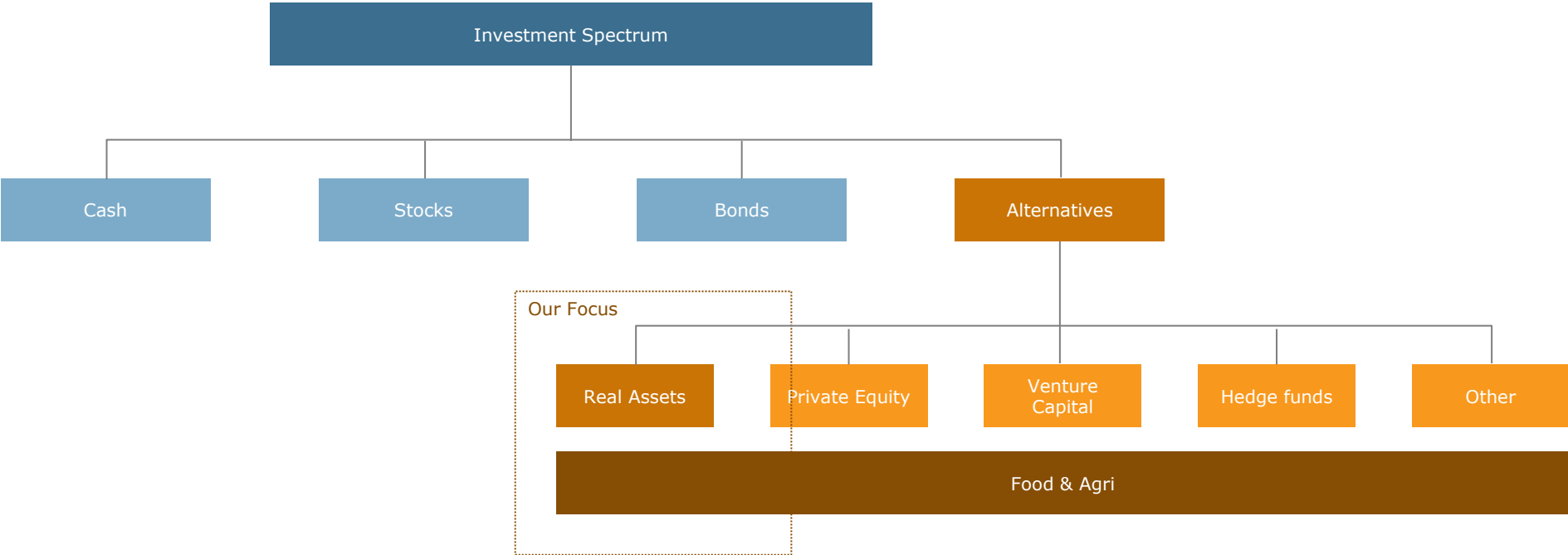


What are Alternative and Real Assets?



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The investment spectrum for Food & Agri



What are Real Assets?

“**Physical or tangible** assets that have **value**, due to their **substance** and **properties**.”

They are particularly well-suited for inflationary times, because of their tendency to outperform financial assets during such periods.”



Real Estate



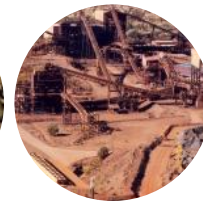
Oil



Clean Energy



Commodities



Metals &
Mining



Infra



Timber



Agriculture



Shipping

...

Similarities

Financial and real assets share a number of similarities. For instance, the valuations of financial and real assets are based on their potential to generate cash flows.

Both asset classes also exhibit significant degrees of uncertainties when establishing and predicting cash flow trends.

Differences

Most financial assets are **more liquid** than real assets, because they are easily convertible into cash. For example, whereas it would take just a matter of hours to sell stocks, the same cannot be said of real properties, which commonly take months to dispose of.

The valuations of buildings, for example, dip over time due to depreciation.

What do Real Assets bring to investors?



Blend of stable
income



Lower volatility



Equity like upside
potential



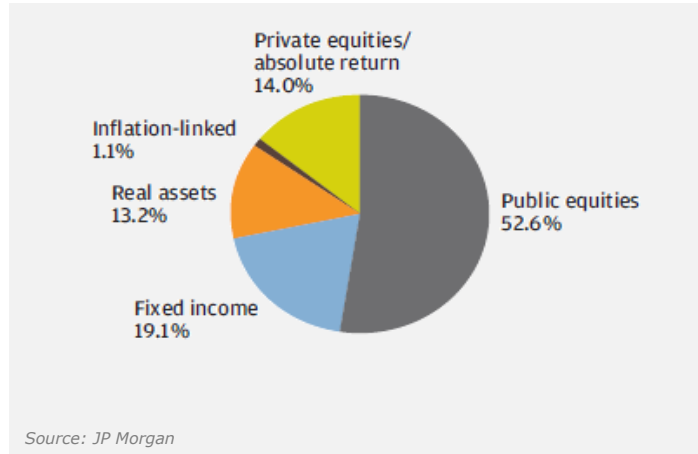
Inflation hedge



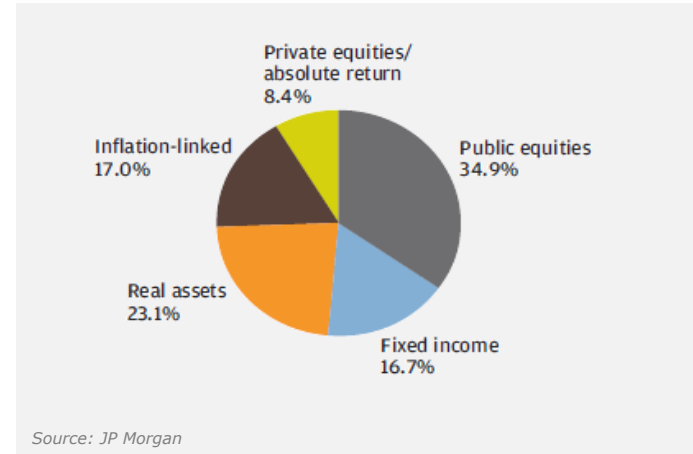
Lower correlation to
current traditional
investment products

A Trend towards more Real Assets

US Pension plan (USD 152bn)



CAD Pension plan (CAD 105bn)

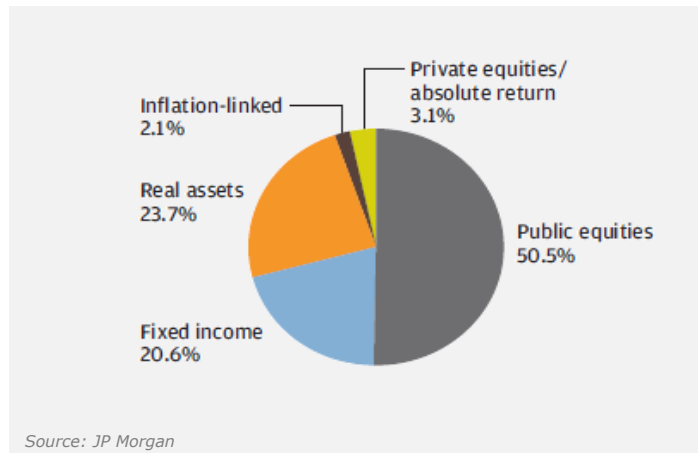


Examples;

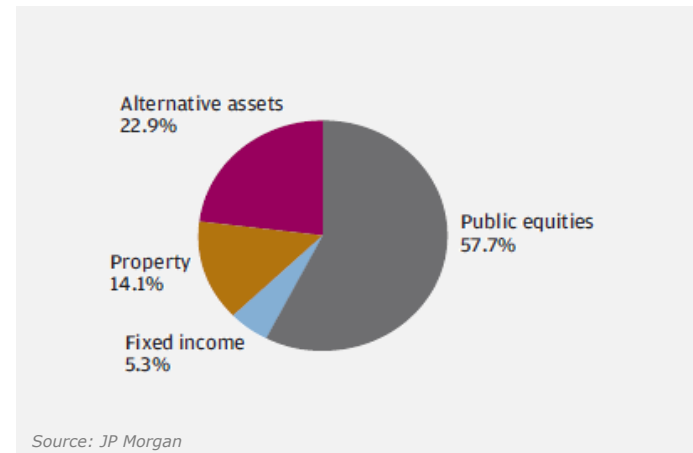


J.P.Morgan
Asset Management

Asian SW Fund (USD 200bn)



AUS Pension plan (AUD 17bn)



....

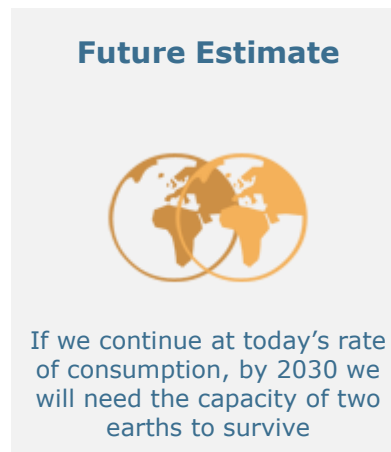
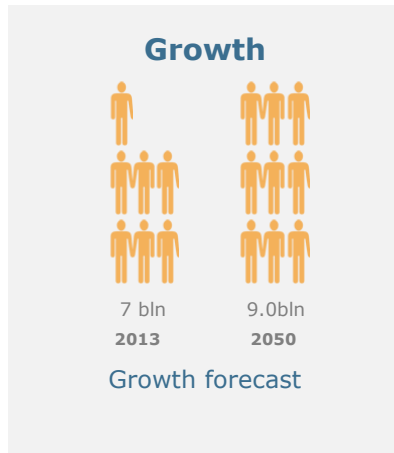
2

The Challenge: How to feed the world?



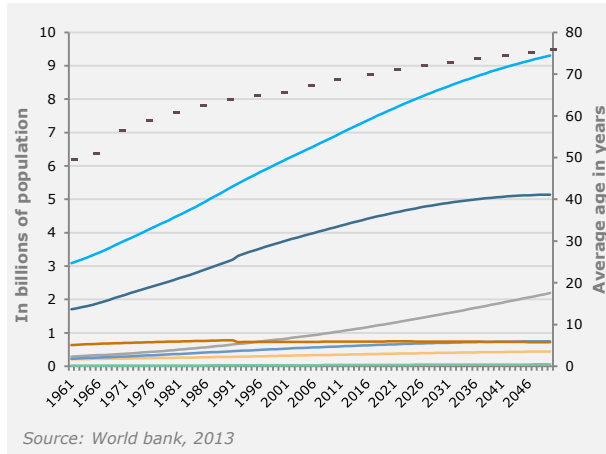
Rabo Farm

The global fundamental drivers; food security

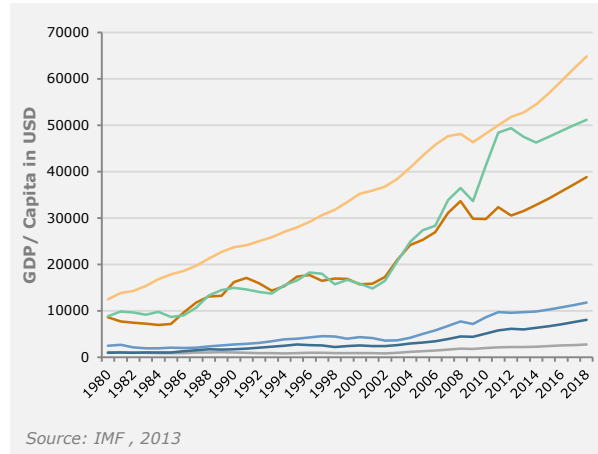


Challenging numbers

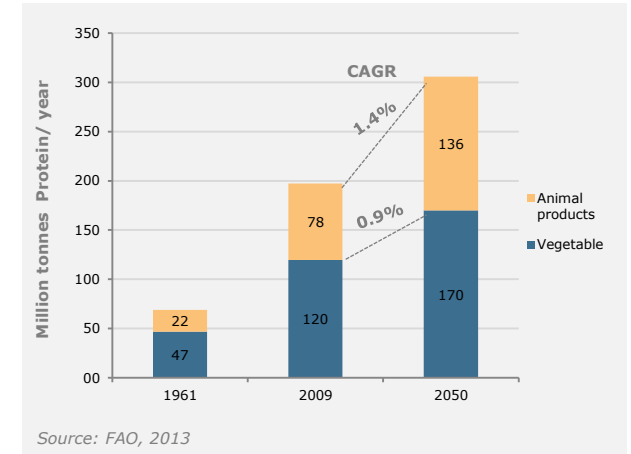
Population and ageing



Income growth

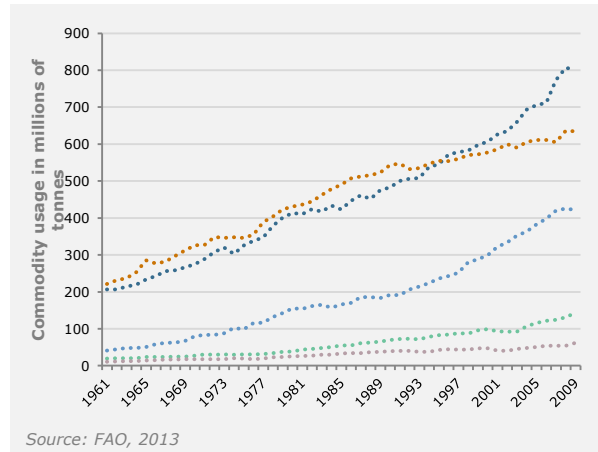


Changing diet



Demand for food

- World
- Africa
- North America
- South and Central America
- Asia
- Europe
- Oceania
- Average age of world population



- Maize
- Rape and oilseeds
- Soybeans
- Sunflowers
- Wheat

3

Investing in Food & Agri



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Opportunities within the Food & Agri Chain



- Seed
- Fertilizer
- Pesticide
- Herbicide
- Farm Equipment
- Energy

- Growers
- Cooperatives

- Grain Elevators
- Brokers and Traders

- Ocean
- Barge
- Rail
- Truck

- Primary Processing
- Food and Feed Ingredients

- Food
- Fuels
- Biofuels
- Industrial

Range of Investment opportunities in the Agriculture Sector



Real Assets



Farmland



Infrastructure



Processing

Private Equity



Integration / Operations

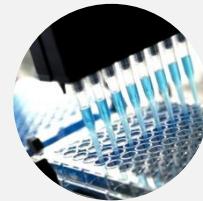


Upstream



Downstream

Venture Capital



Biotech



Enabling Tech



Supply Chain

Liquid Assets



Public Equity



Commodities

4

Why invest in Farmland?



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Why Farmland ?



Global Fundamental Drivers



Invest in Real Value



Long-term stable returns and diversifier in the portfolio



Invest in high-potential region with limited risks



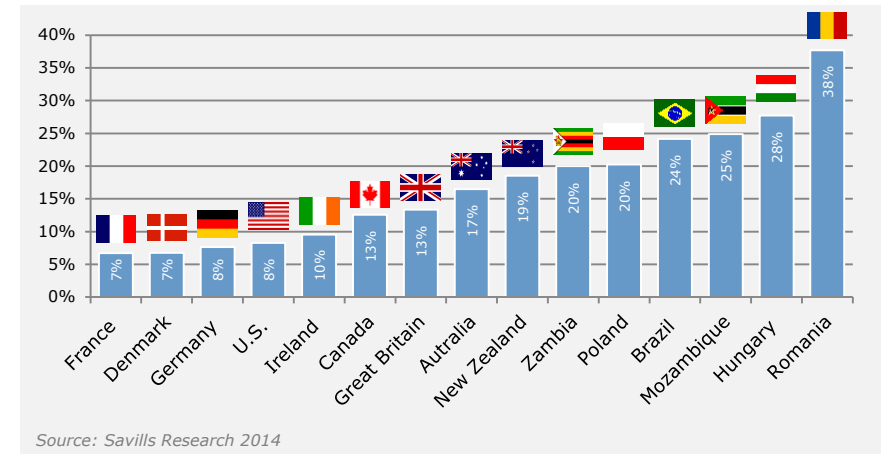
Increase in Earnings Capacity

Farmland in the context of other real asset classes



- Farmland investment is an asset that provides a legal claim on land that gives an investor the opportunity to grow agricultural produce in that land in perpetuity.
- Like other real assets farmland is protected against inflation, since a farm is production
- In contrast to Real Estate there is no depreciation in farmland since the productivity increases over time

Annualised Capital Growth of values in USD/ha (2002-2012)



Real Assets have higher risk-adjusted returns (1992-2012)

	Stocks	Bonds	Private Real E Assets			Public Commodities and Real Assets		
	Russel 3000	Barclays U.S. Aggregate	NCREIF Real Estate	NCREIF Farmland	NCREIF Timberland	NAREIT	GSCI Agriculture	Timber Proxy
Avg Annual Return	8.53%	6.86%	8.02%	11.53%	10.93%	13.40%	2.04%	8.76%
Std Deviation	18.09%	4.28%	9.13%	7.14%	10.69%	22.07%	20.72%	22.28%
Sharpe Ratio	0.29	0.81	0.51	1.14	0.71	0.45	-0.06	0.24

Source: TIAA CREF 2013

Farmland is a real value investment

 **Farm Income** =  **Price** *  **Quantity**

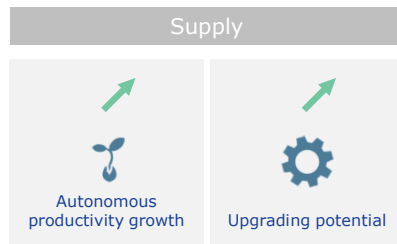
"Commodity price development will be the result of the aggregated effect of macro supply and demand drivers"

World Grain Prices development

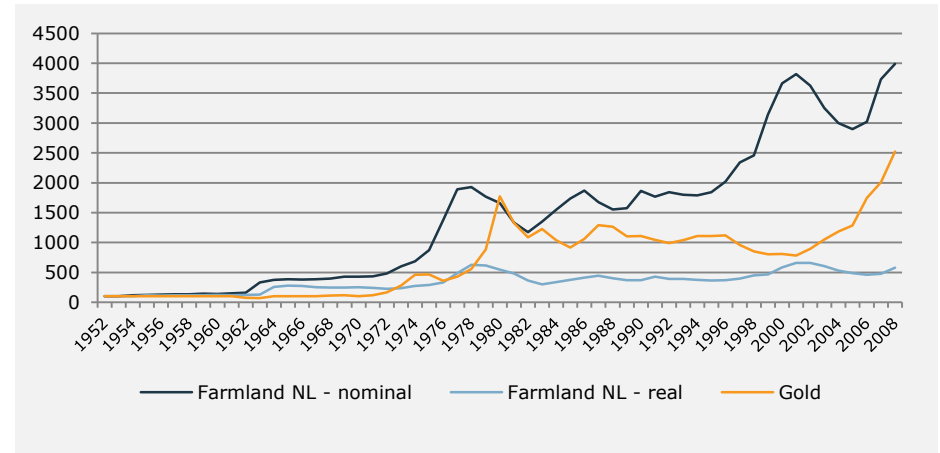


"By increasing productivity, income per farm rises, which creates real value"

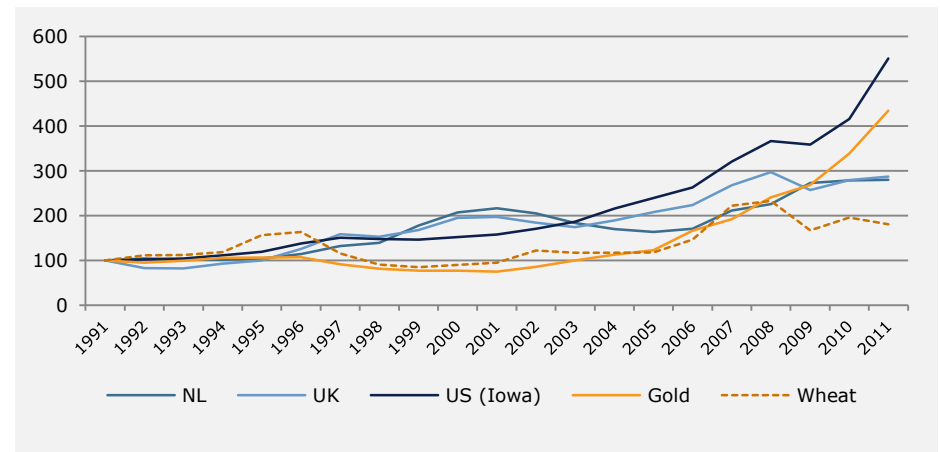
Quantity



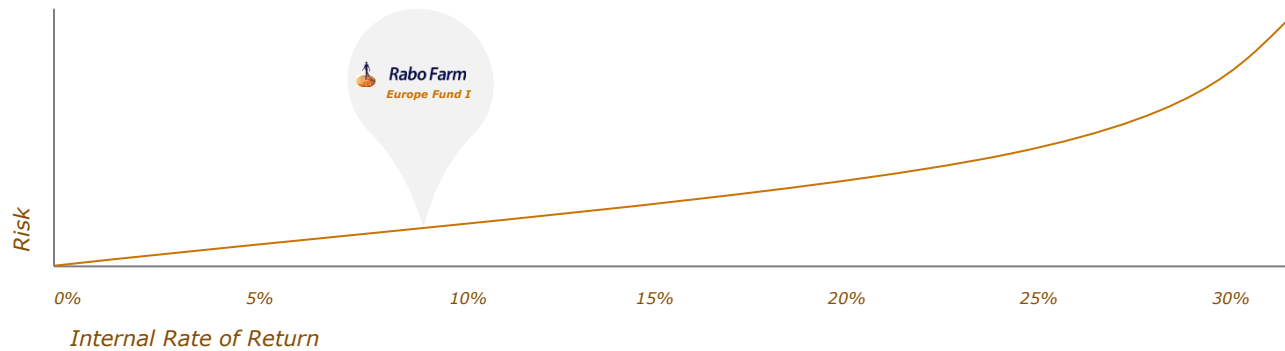
Dutch Farmland vs Gold and inflation (1952=100)



Farmland indices (1991 = 100)



What Risk-Return Profile do Farmland Investments have?



Low Returns / Low Risk

 Developed Countries

United States / European Union / Australia

Non-EU Europe / Brazil

Africa / South East Asia

 Owning Assets

Lease out Assets

Work own Assets

Work Leased Assets

 Plug-in Play Farms

Top Quality Farms

Underdeveloped Farms

Greenfields

 Pure Equity

No Leverage

Working Capital Lines

Fully Geared

 Annual Rotation

Annual Row Crops

Dairy / Cattle Farms / Easy Permanent Crops

High value Permanent Crops (Olives / Vineyards)

High Return / High Risk

Undeveloped Countries 

Using Assets 

Turn-around 

Geared funds 

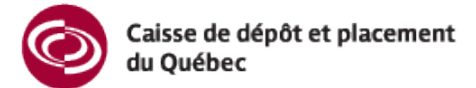
Non-Annual Rotation 

Institutional investors increase their exposure into farmland investments



European Parties investing in farmland*

International Parties investing in farmland*

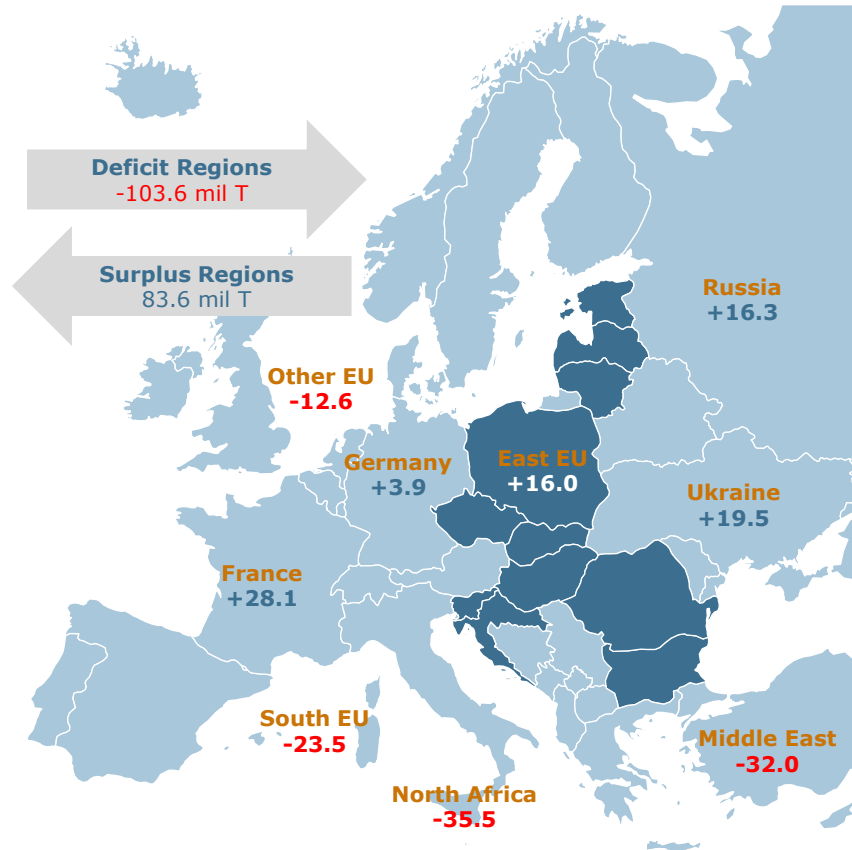


* Based on public resources

Central and Eastern EU big supplier of global demand for Cereals

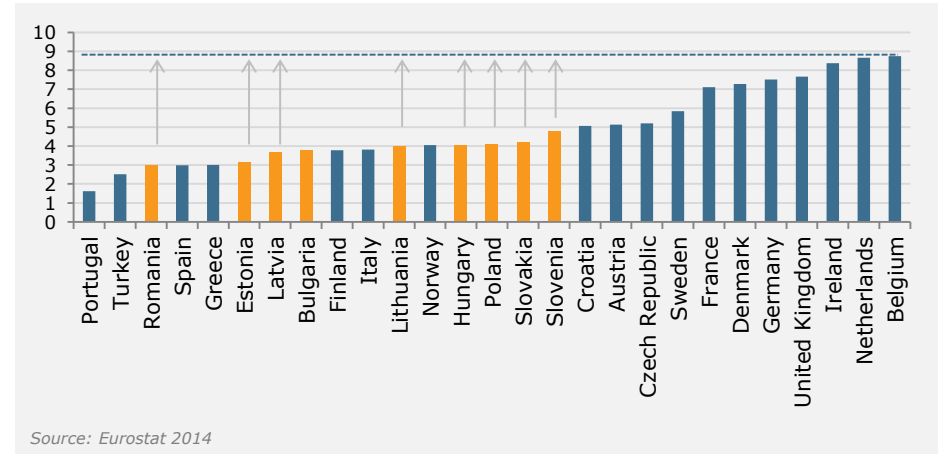


Net export of grains in key regions and countries (average 09-13)



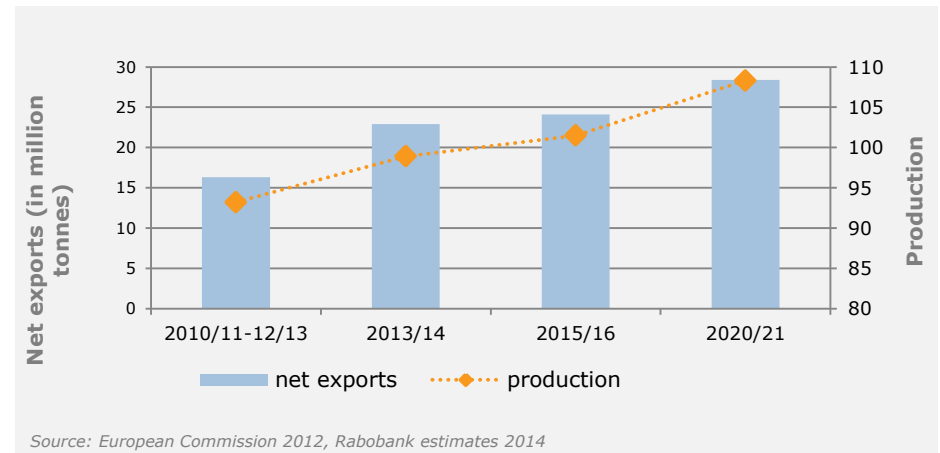
*Black Sea Region includes Ukraine and Russia

Wheat Yields in Europe (average 2008 – 2012)



Source: Eurostat 2014

Production and net exports of Grains & Oilseeds from East EU



Source: European Commission 2012, Rabobank estimates 2014

5

How does farmland gives you Returns?



Rabo Farm

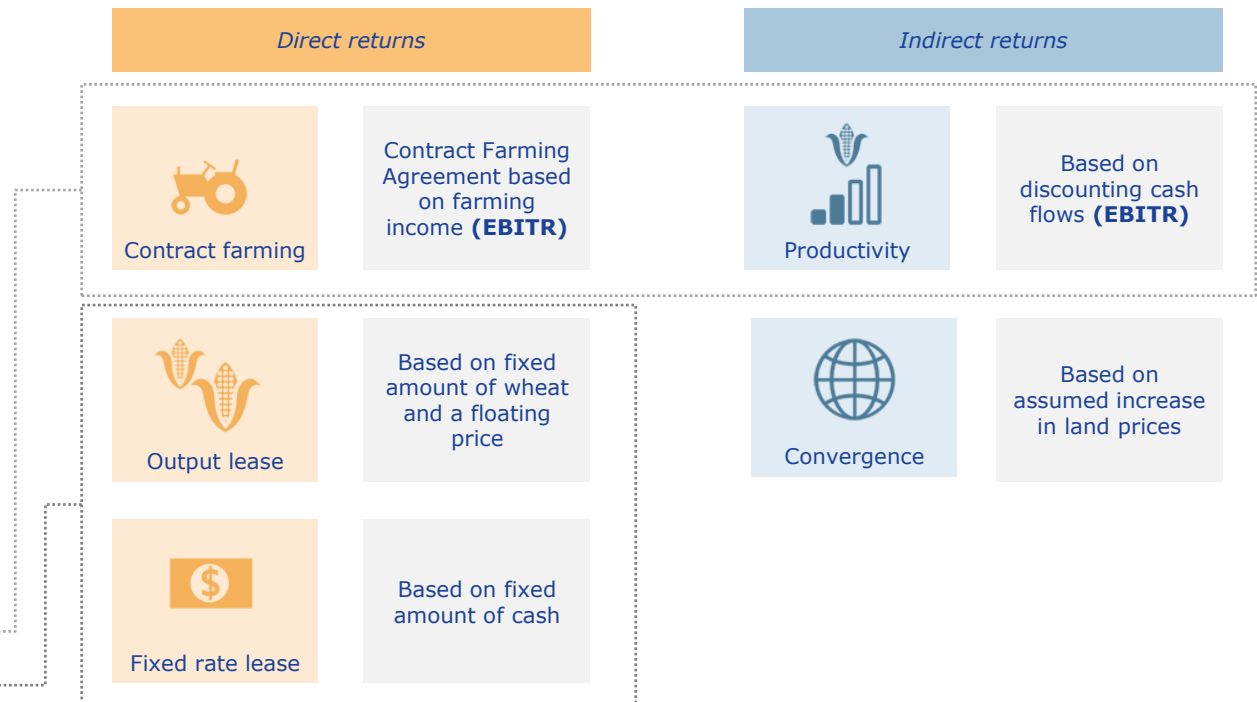
The Farm's P&L is the basis for our fund model

P&L for total farm

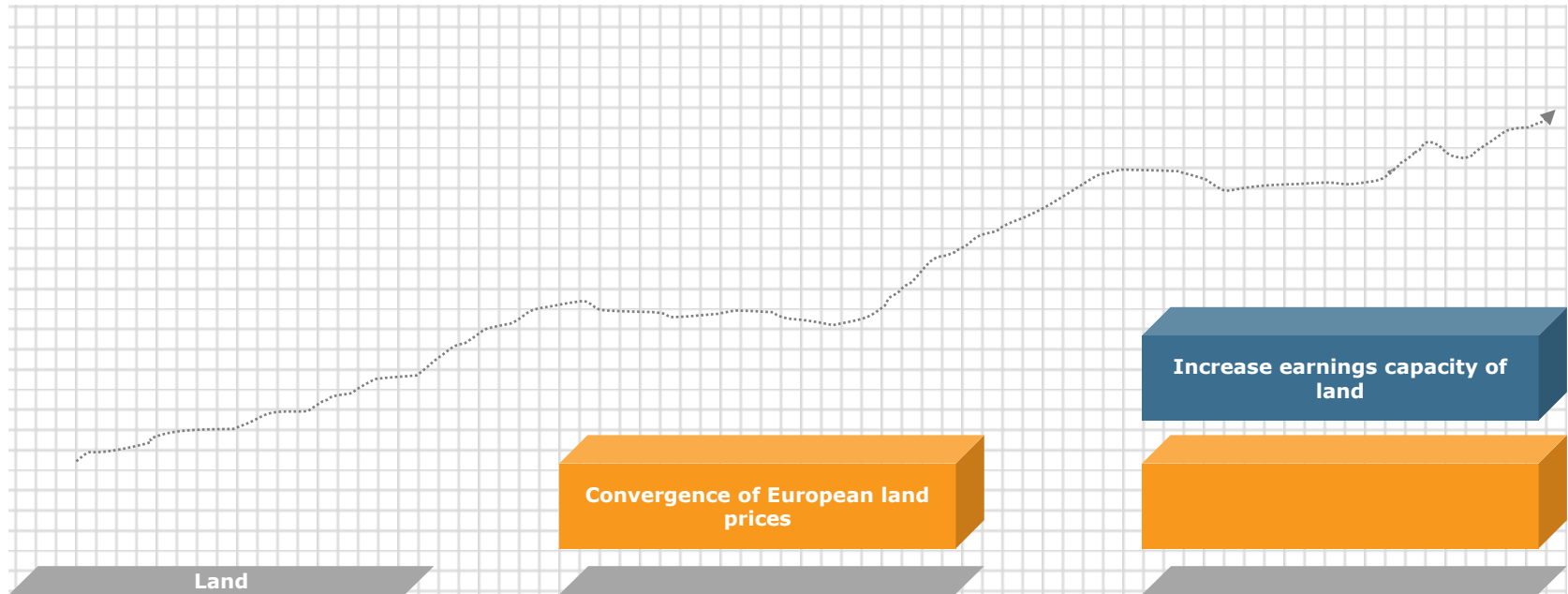
	Hectares
	Yield per ha
	Harvest tonnes
	Price/ tonne
Revenues	
	Seeds per ha
	Fertilisers
	Chemicals
	Lime
	Working capital financing
Total input costs	
Gross margin	
	Labour / contract costs
Romania	Drying and storage
	Other costs
	Total overheads
Poland	Subsidies
EBITR	
Rental payments	
Net farm income	

The "EBITR"

Earnings before interest, taxes and rent



The fundamentals of our real value creation



Converging European Union



Commoditisation of products



Common subsidy policies



Diminishing barriers to trade



Increase yield / ha



Less production volatility



Lower costs of production



Tap into higher profit margin crops

6

What strategy do we follow?



Rabo Farm

A strategy that make sense; Closing the yield-gap and limiting volatility

How we see our sustainable contribution in increasing the Earnings Capacity

Increase productivity

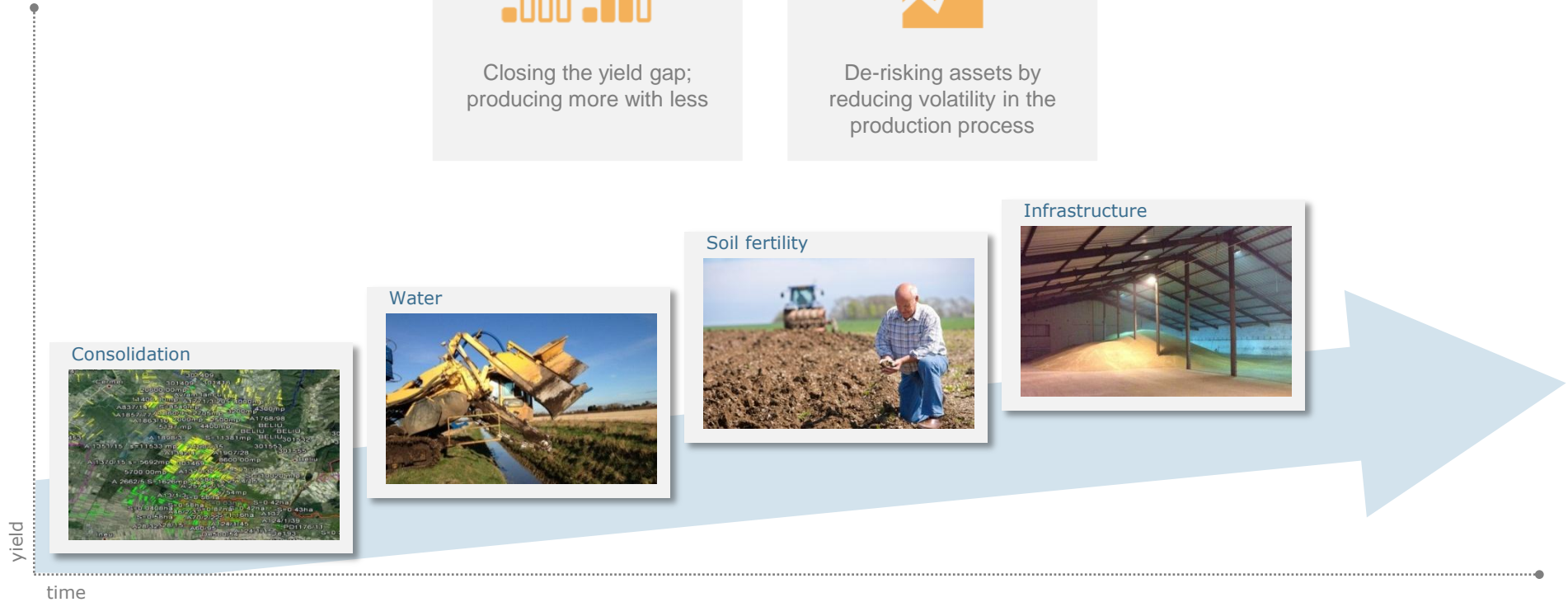


Closing the yield gap;
producing more with less

Stabilize production



De-risking assets by
reducing volatility in the
production process



How do our investments look like?

Consolidation

- 1 Consolidation
- 2 Reshaping of plots

Soil

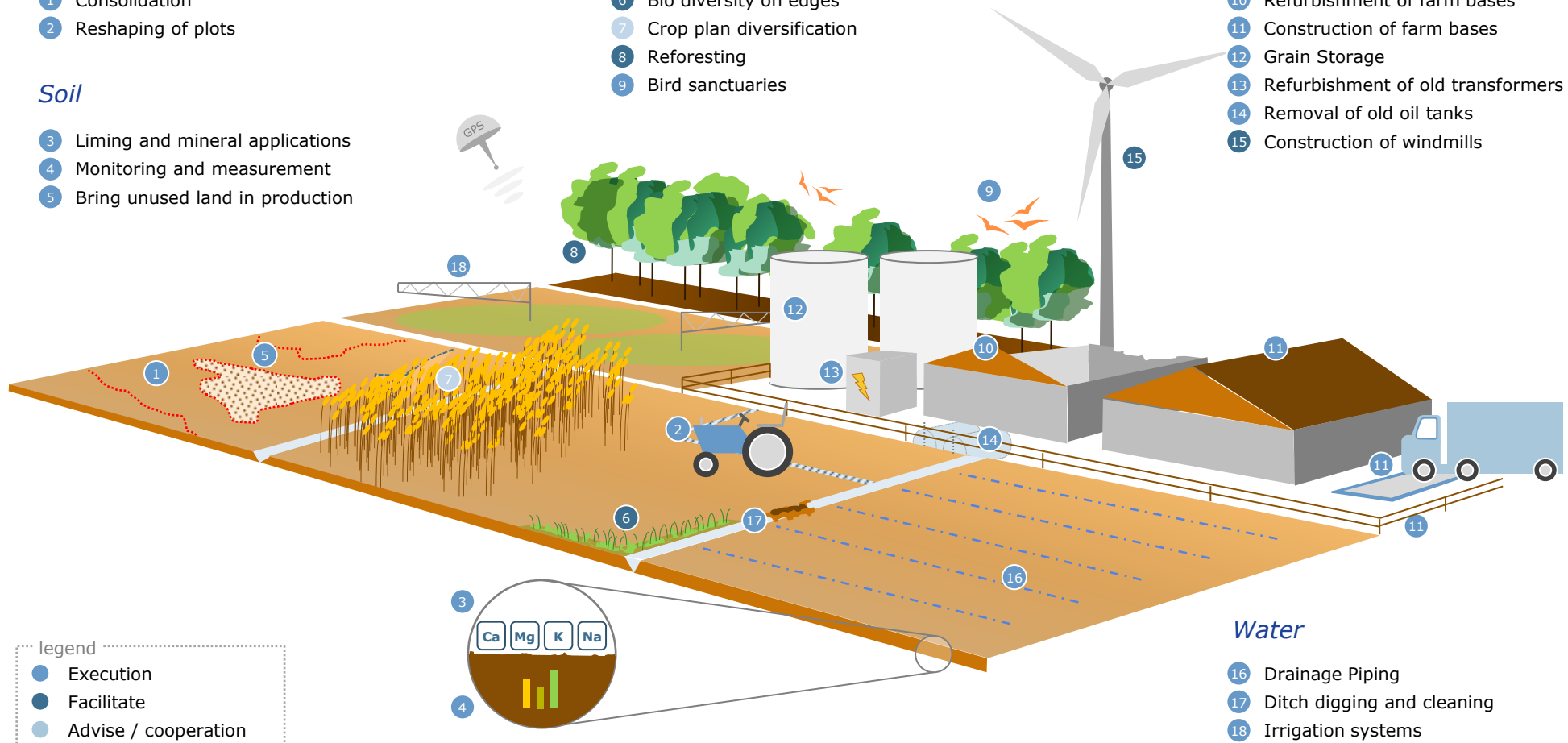
- 3 Liming and mineral applications
- 4 Monitoring and measurement
- 5 Bring unused land in production

Bio diversity

- 6 Bio diversity on edges
- 7 Crop plan diversification
- 8 Reforestation
- 9 Bird sanctuaries

Infrastructure

- 10 Refurbishment of farm bases
- 11 Construction of farm bases
- 12 Grain Storage
- 13 Refurbishment of old transformers
- 14 Removal of old oil tanks
- 15 Construction of windmills



legend

- Execution
- Facilitate
- Advise / cooperation

Water

- 16 Drainage Piping
- 17 Ditch digging and cleaning
- 18 Irrigation systems

Contact Details



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Appendix

A

Investment Case Poland Jazowa



Rabo Farm

POL 001 – Jazowa

Before farm base refurbishment



After farm base refurbishment



Liming



Farm base refurbishment



After farm base refurbishment



Drainage



Case Study 2 Regaining farmland and liming



Farmer

Rabo Farm



Explanation

Rabo Farm holds the land where the farmer leases. In order to improve the yield on the farm Rabo Farm and the farmer start a liming program where Rabo Farm provides the lime and the lease for the farmer will gradually increase.

Given the yield improvement the farmer as Rabo Farm will benefit from the lime program

Financial application

Farmer

- Yearly lime application costs

- Higher Rent

+ Higher Yields

+ Higher Profits

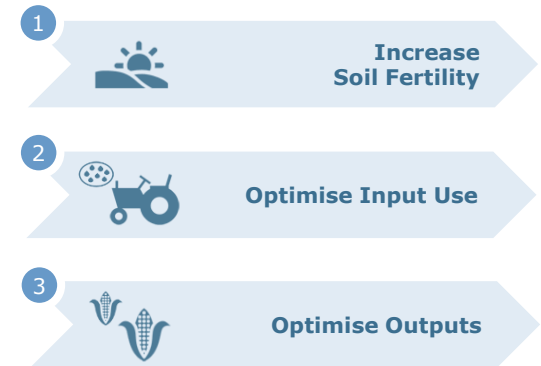
Rabo Farm

- Initial liming costs

+ Higher leases

+ Higher Profits

Adding Real Value by

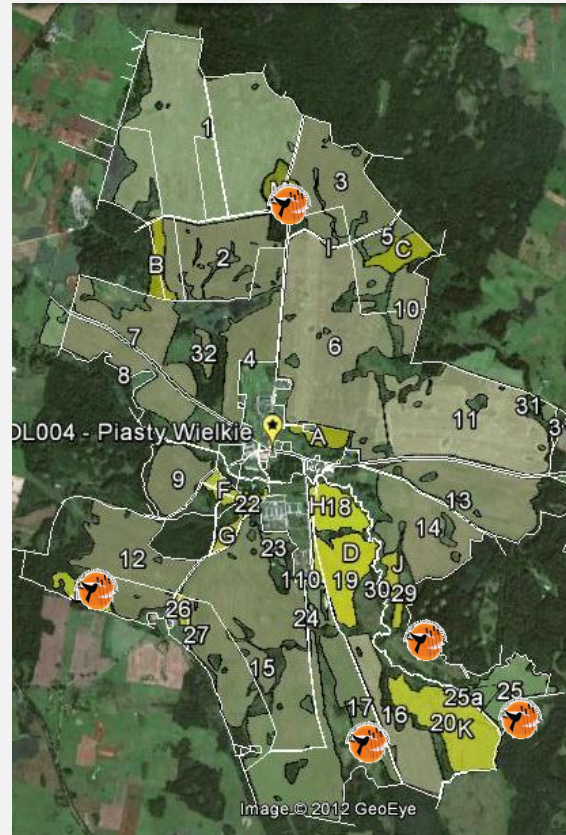


Case Study 2 Regaining Farmland and Liming

Farmland Improvements

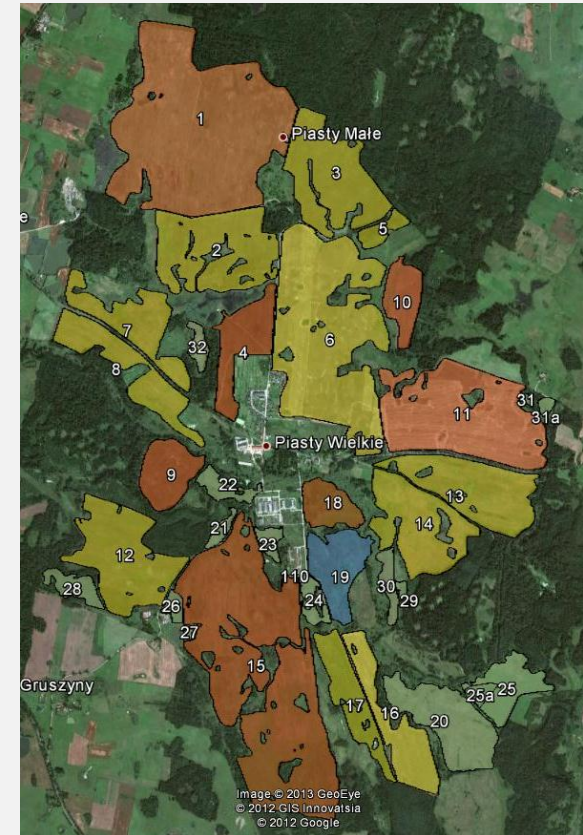



Reclaiming Farmland



-  *Natura 2000 Bird program 35 ha*
-  *Reclaiming fallow cropland 60 ha*

Liming Application to optimise Ph-value



-  *Application of 6t/ha*
-  *Application of 4t/ha*

Case Study 3 Drainage and land reshaping project



Farmer

Rabo Farm

Explanation

Rabo Farm holds the land where the farmer leases. In order to improve the yield on the farm Rabo Farm implements a drainage system on the land.

Good water management on the field improves sustainable yield of which the farmer benefits.

Given the yield improvement the Farmer as Rabo Farm will benefit from the drainage

Financial application

Farmer

- Higher Rents

+ Higher Yields

+ Higher Profits

Rabo Farm

- Drainage project

+ Higher leases

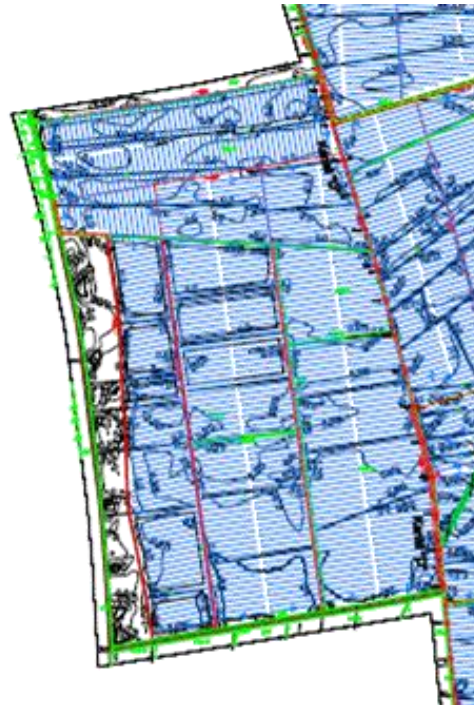
+ Higher Profits

Adding Real Value by



Case Study 2 Reshaping and draining 111 ha

Drainage System

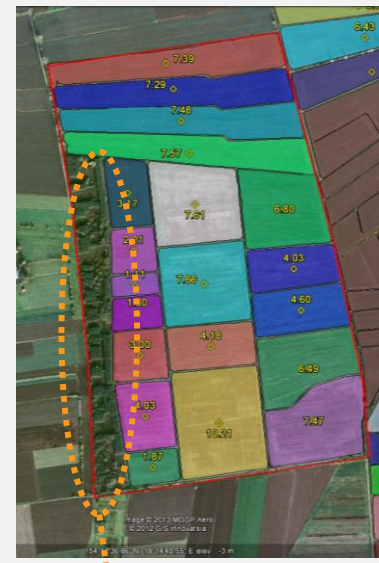


Reshaping and Draining of Land

- 170 km of drain pipes
- Increase of areal

	Old Situation	New Situation
Number of Field	20	4
Average Field size	5.6 ha	27.8 ha

Old Situation / New Situation



Preserved 10 hectares of forest that serves as wind curtain and may be used as nature compensation

Case Study 3 Drainage Project

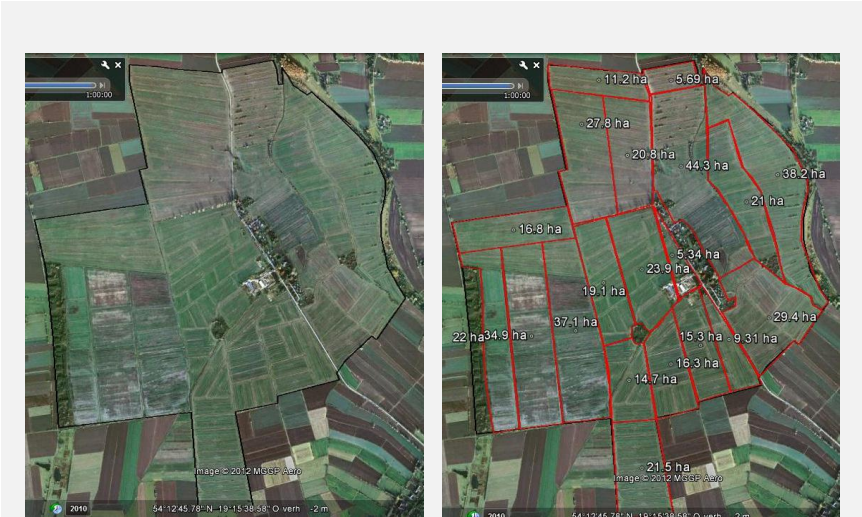
445 Hectares



Reshaping of Land

	Old Situation	New Situation
Number of Field	132	20
Average Field size	3.37 ha	22.3 ha

Old Situation / New Situation



B

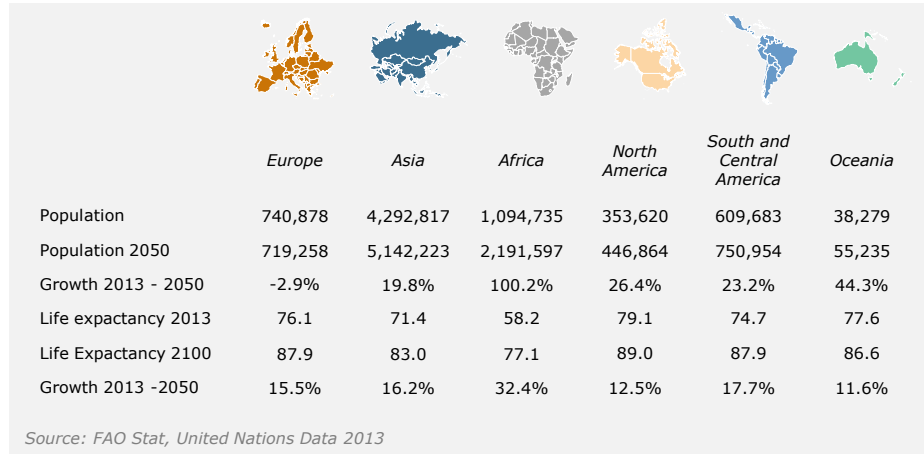
World food consumption



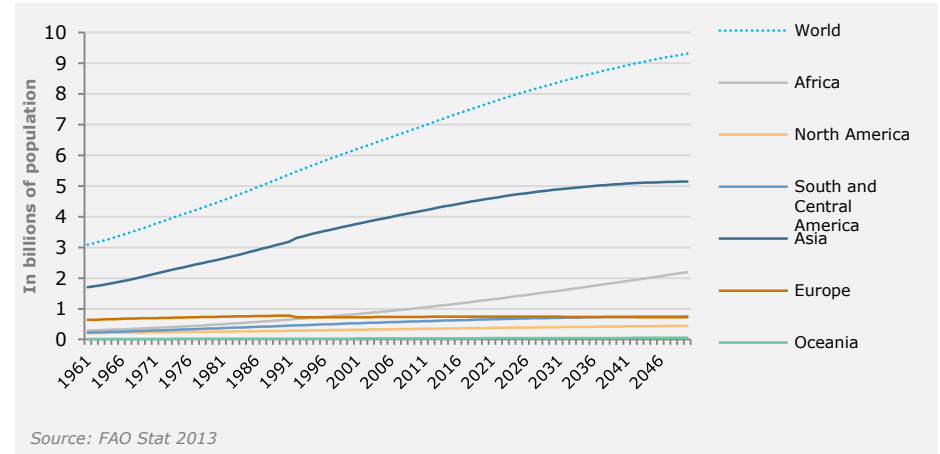
Rabo Farm

Population growth and life expectancy

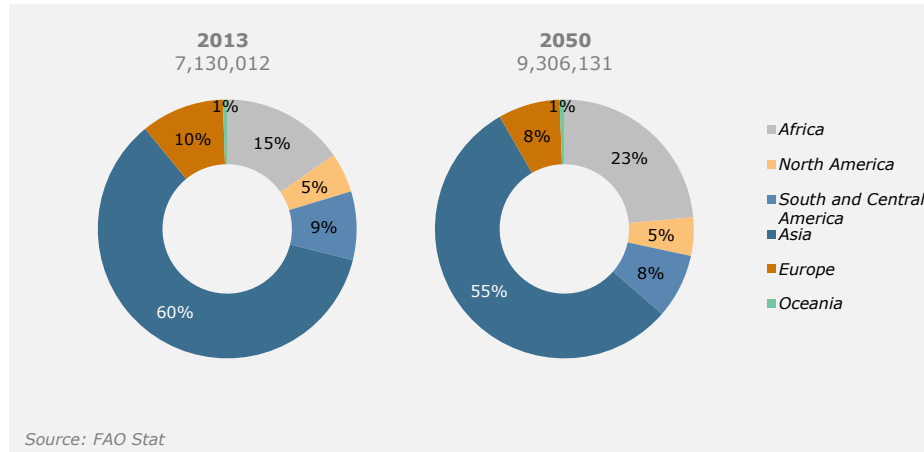
Continental differences



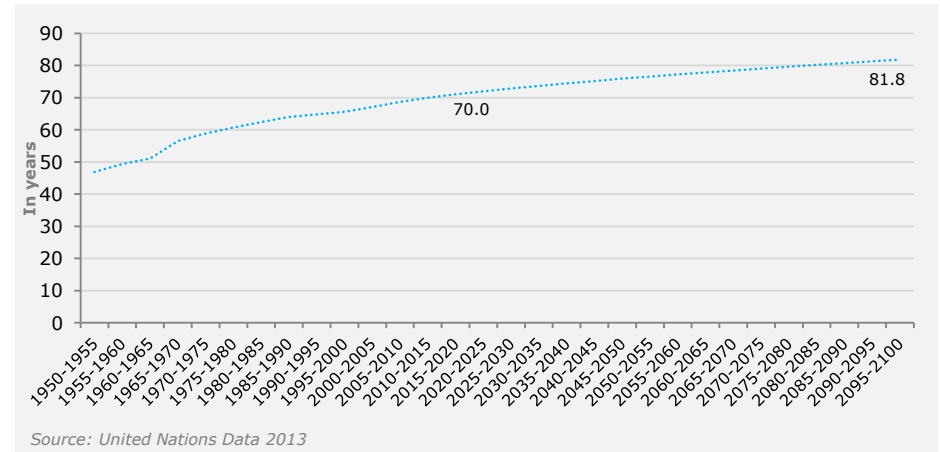
Population growth



World composition

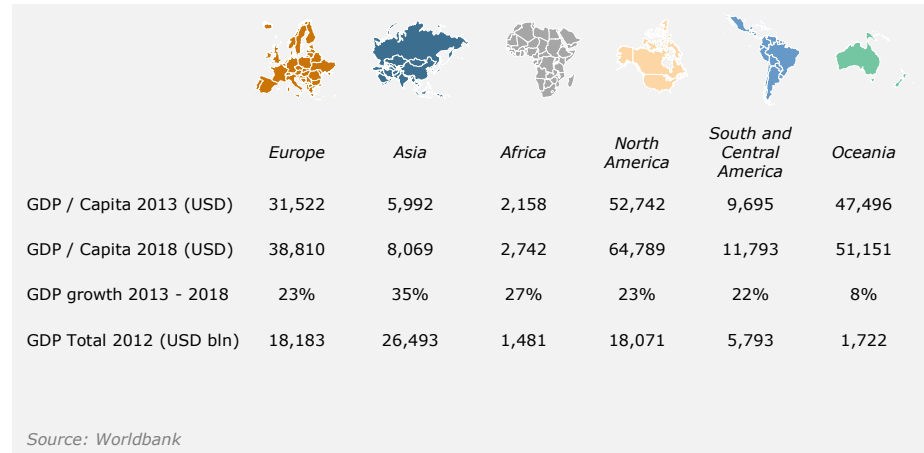


Life expectancy of World

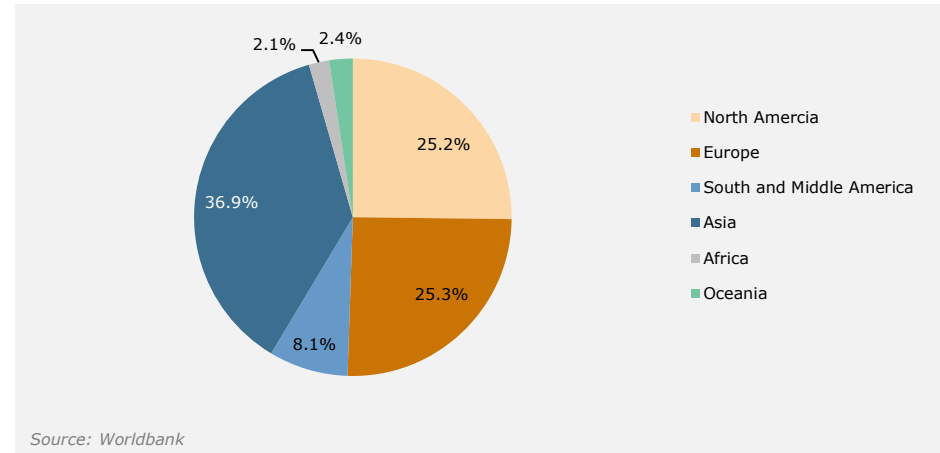


Income and income growth

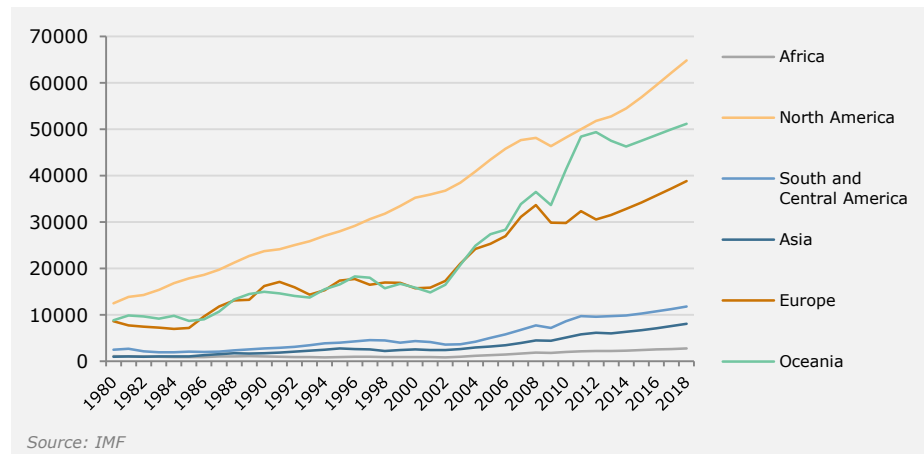
Continental differences



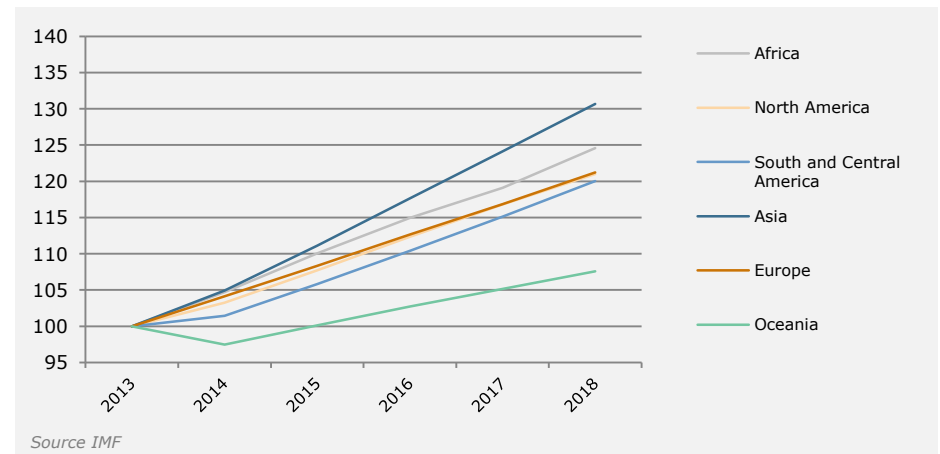
GDP deviation of total World GDP



GDP/Capita in USD

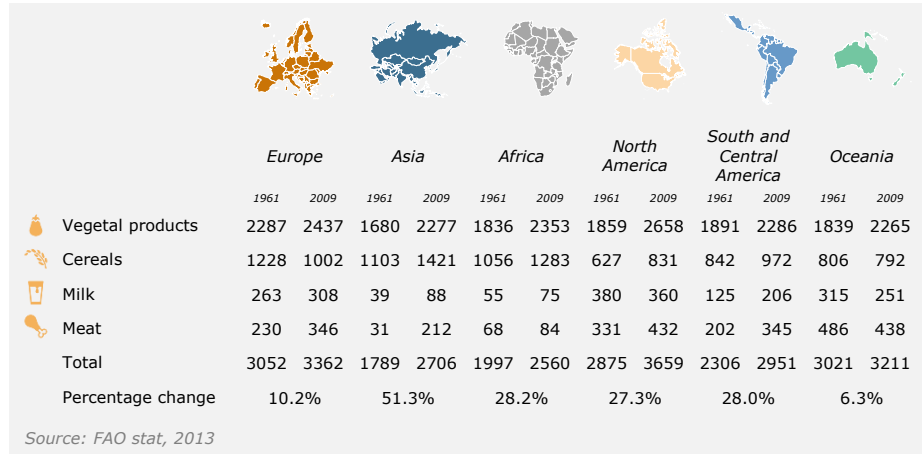


Indexed forecasted GDP/Capita growth

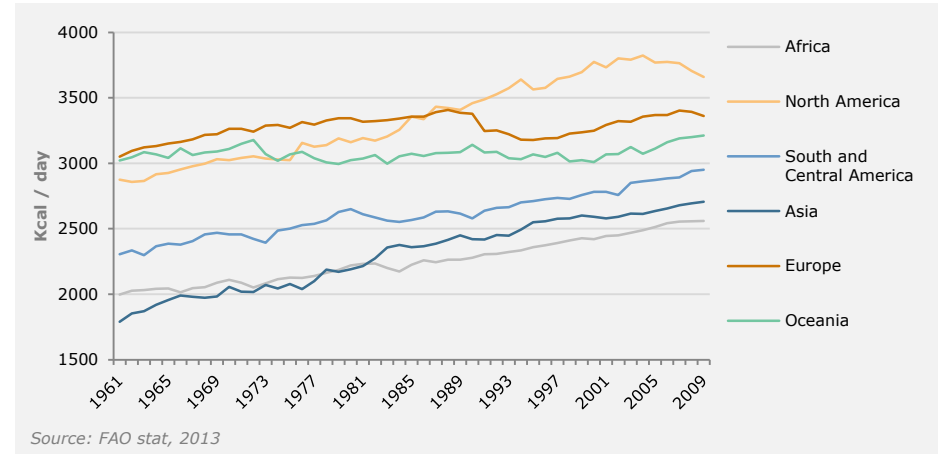


A changing diet demands different demands

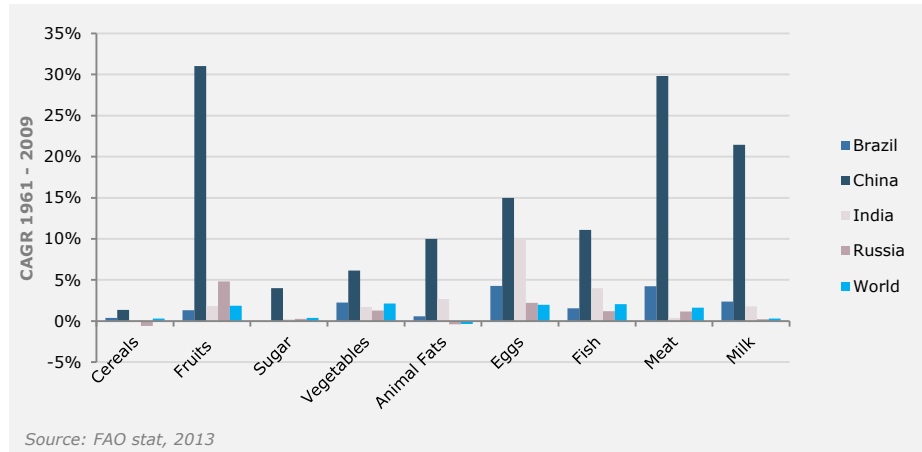
Consumption Patterns 1961 vs 2009 (Kcal/Capita/Day)



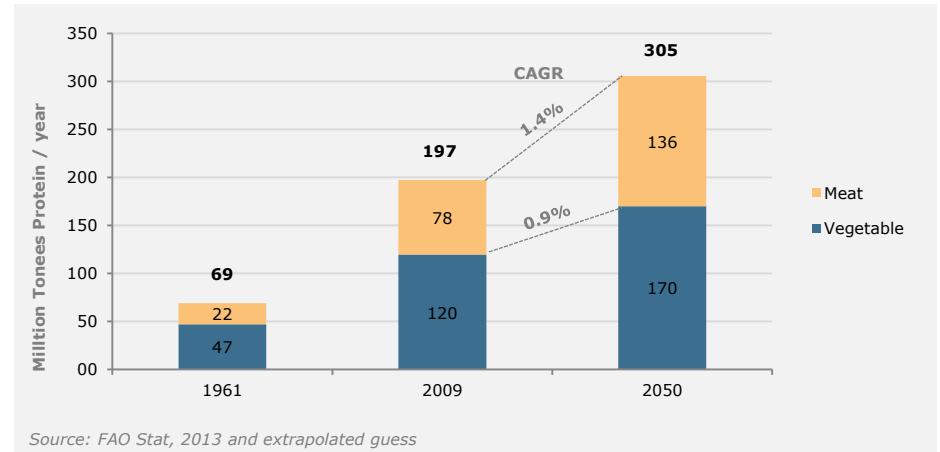
Food consumption



Diet changes

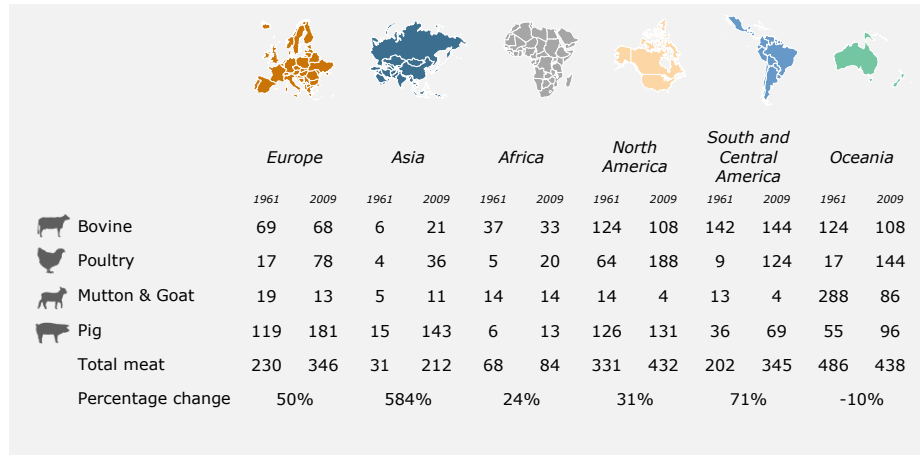


Total protein consumption

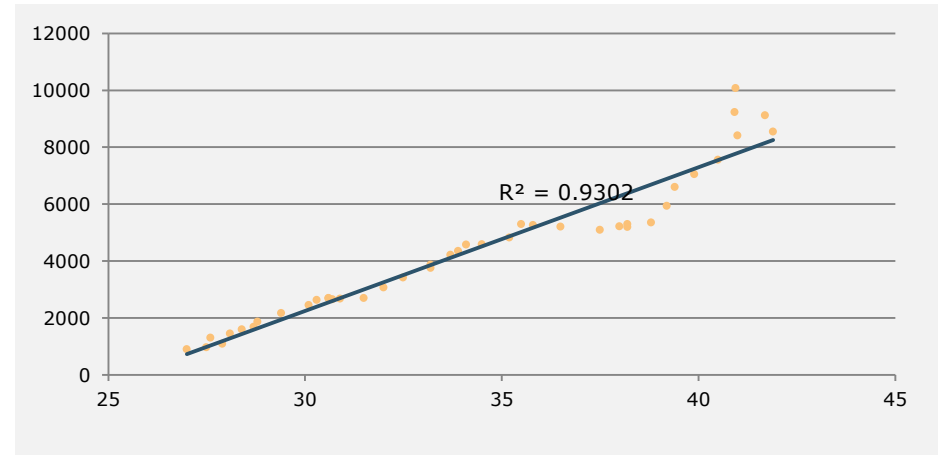


Meat Consumption

Meat Consumption Patterns 1961 vs 2009 (Kcal/Capita/Day)



Income and meat consumption correlation in the United States

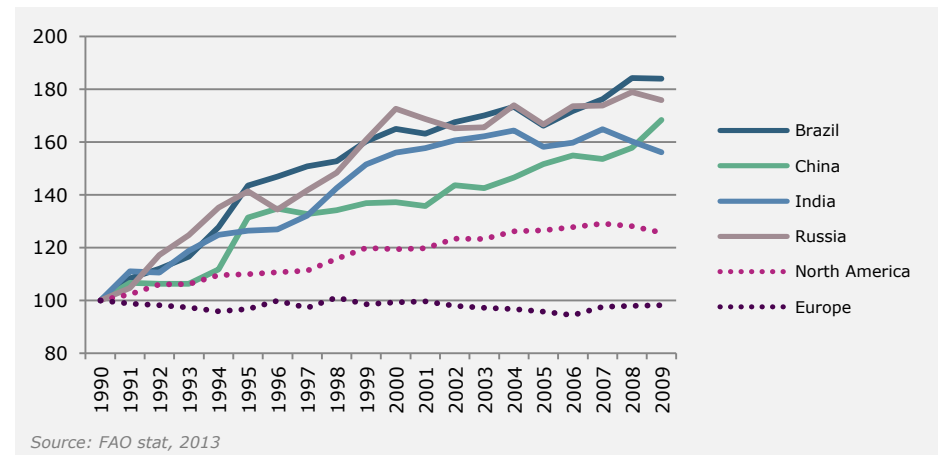


Feed conversion ratio's

	Feed Conversion Ratio	World Consumption (Million Tonnes)			Feed demand (Tonnes) (Based of FCR)		
		1961	2009	CAGR	1961	2009	%
Fresh water fish	1.2	4.6	40.4	4.6%	6	48	774%
Chicken	1.7	8.8	90.7	5.0%	15	153	934%
Eggs	2.4	13.9	59.3	3.1%	33	140	327%
Pork	3.0	24.4	105.5	3.1%	73	315	332%
Mutton & Goat	10.4	5.8	12.8	1.7%	60	133	121%
Bovine	10.4	28.4	63.8	1.7%	295	664	125%
Total Meat	n.a.	70.1	278.9	2.9%	n.a.	n.a.	n.a.

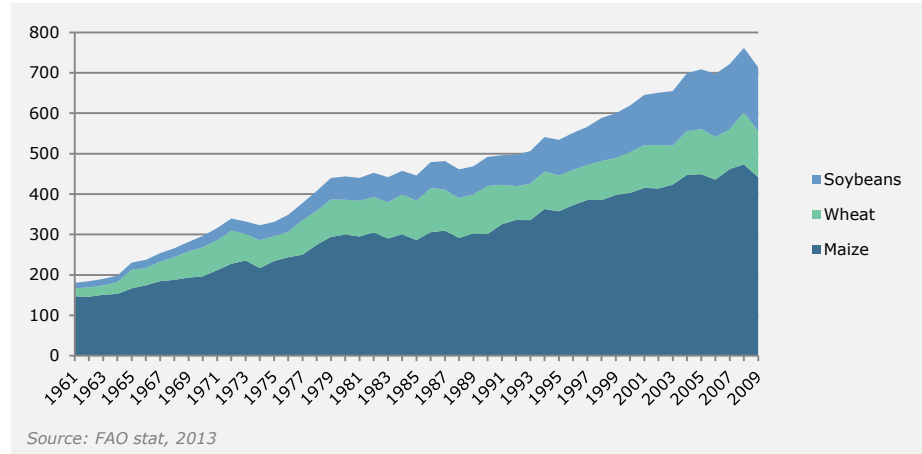
Source: Tolkamp, et al. 2010, BC Salmon Facts, FAO Stat, 2013

Meat consumption growth in BRIC countries (indexed)

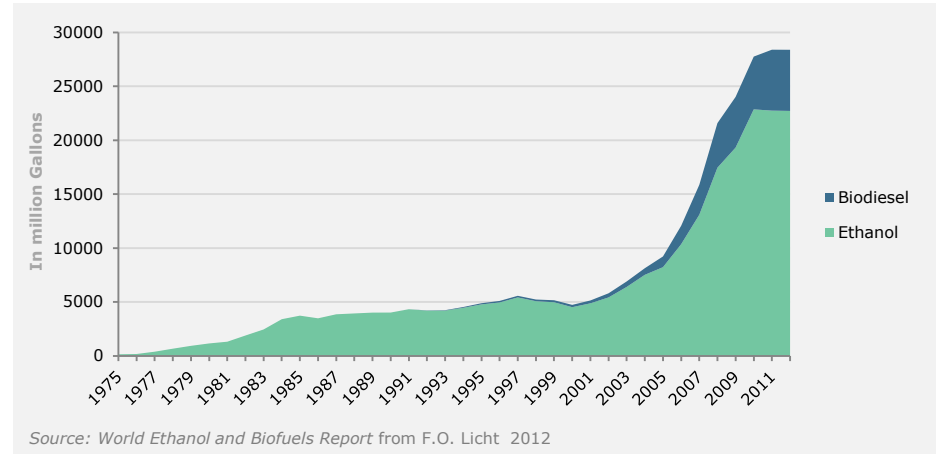


Changing use of foodcrops

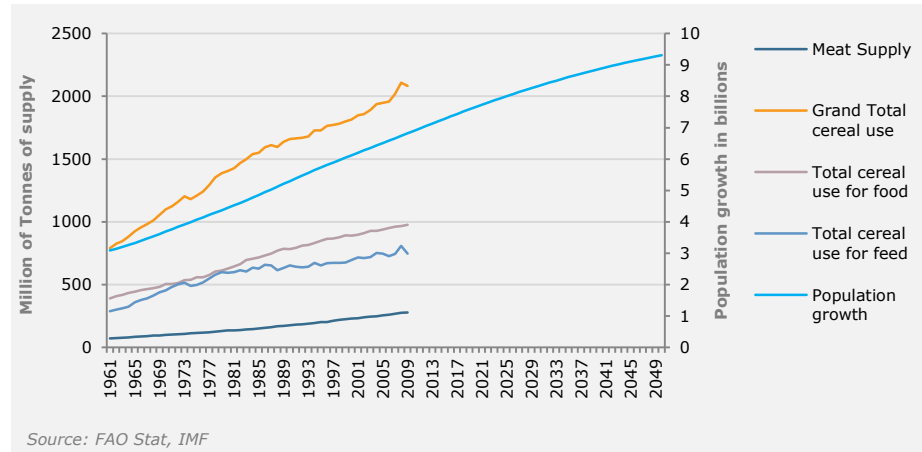
Commodity usage for feed (million Tons)



World Biofuel production over years



Population growth and changing diet on commodity demand growth



Energy conversion ratio 's

