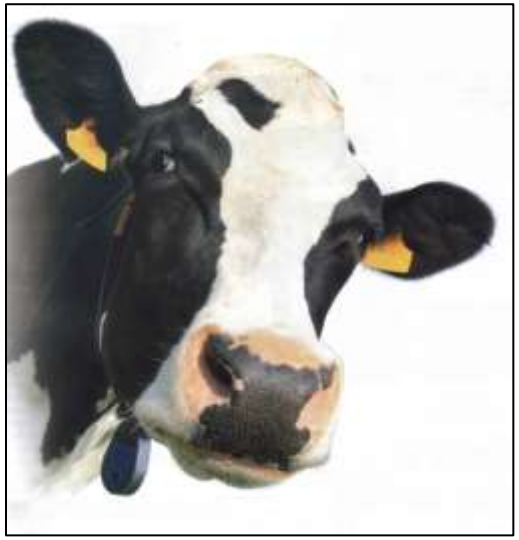
CATTLE PRODUCTION FACTS AND TRENDS IN GREECE



George E. Valergakis

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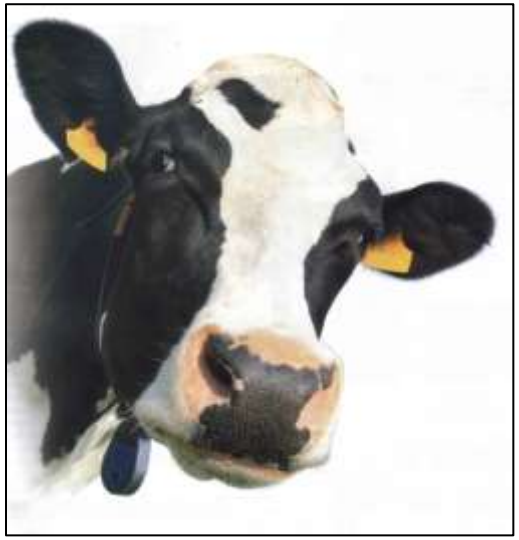
Dairy livestock production in Southern Europe, Thessaloniki 10th -11th September, 2015

SOLID | Sustainable Organic and Low Input Dairying

Overview

1. **The conventional dairy cow sector in Greece**
2. **The organic dairy cow sector in Greece**
3. **Thoughts on “low input” farms**

THE DAIRY CATTLE SECTOR IN GREECE

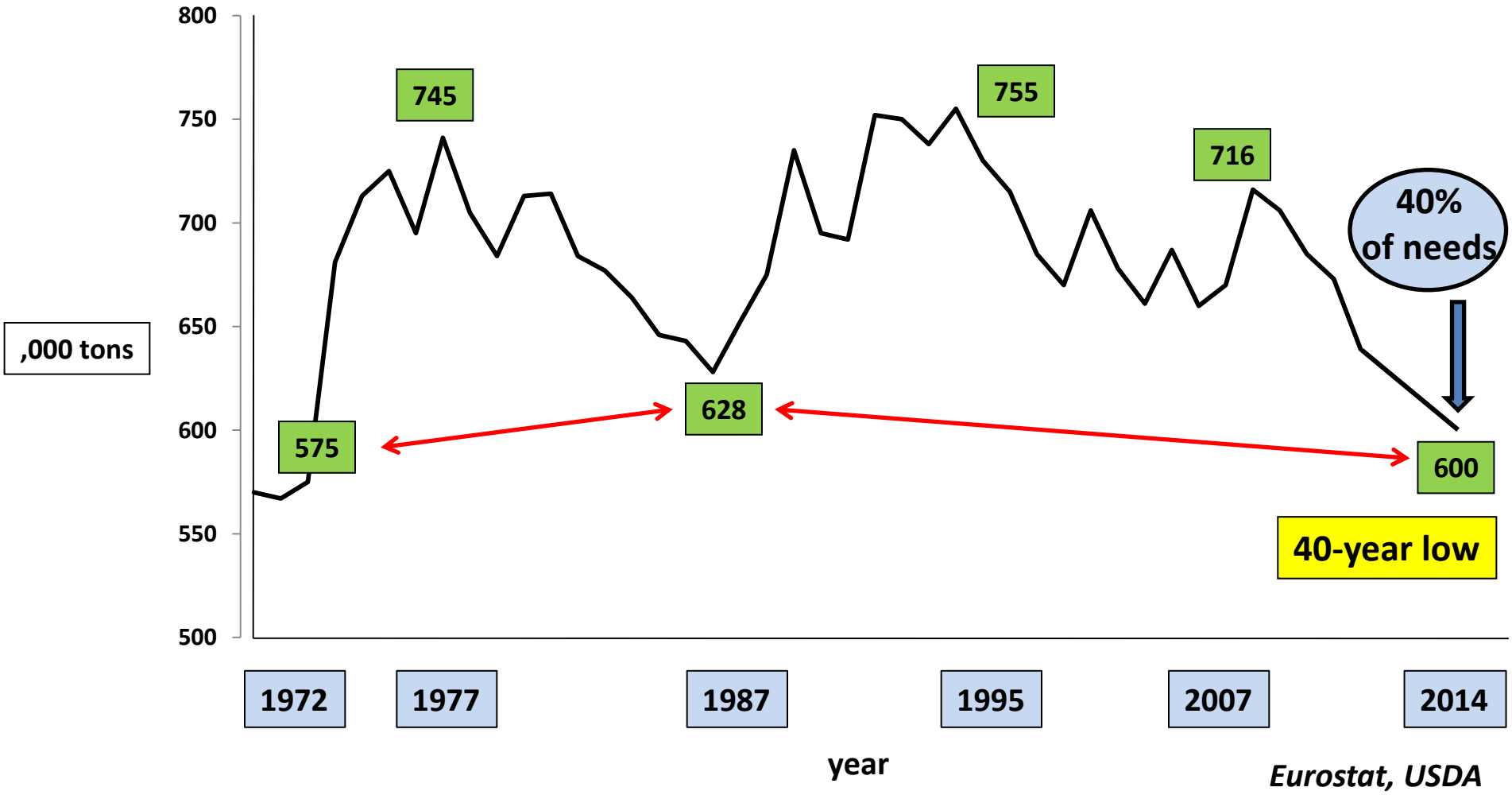


90,000 cows – 1,500 farms

Holsteins >99%

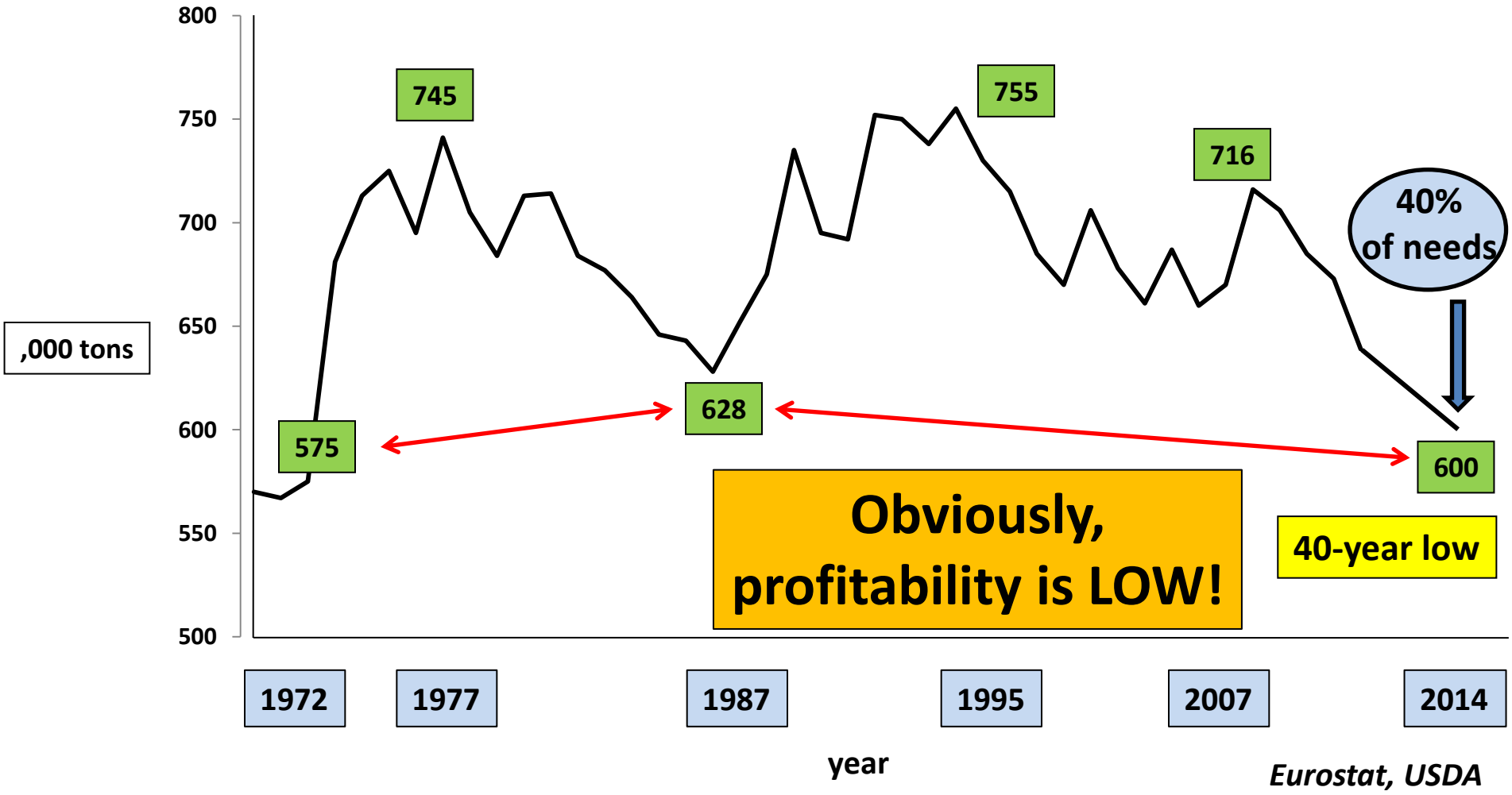
- **Freestall barns with/without exercise paddocks**
- **Open, dry lots with sunshine/rain shelters**
- **Corn silage/alfalfa hay based TMRs**

COW MILK PRODUCTION IN GREECE



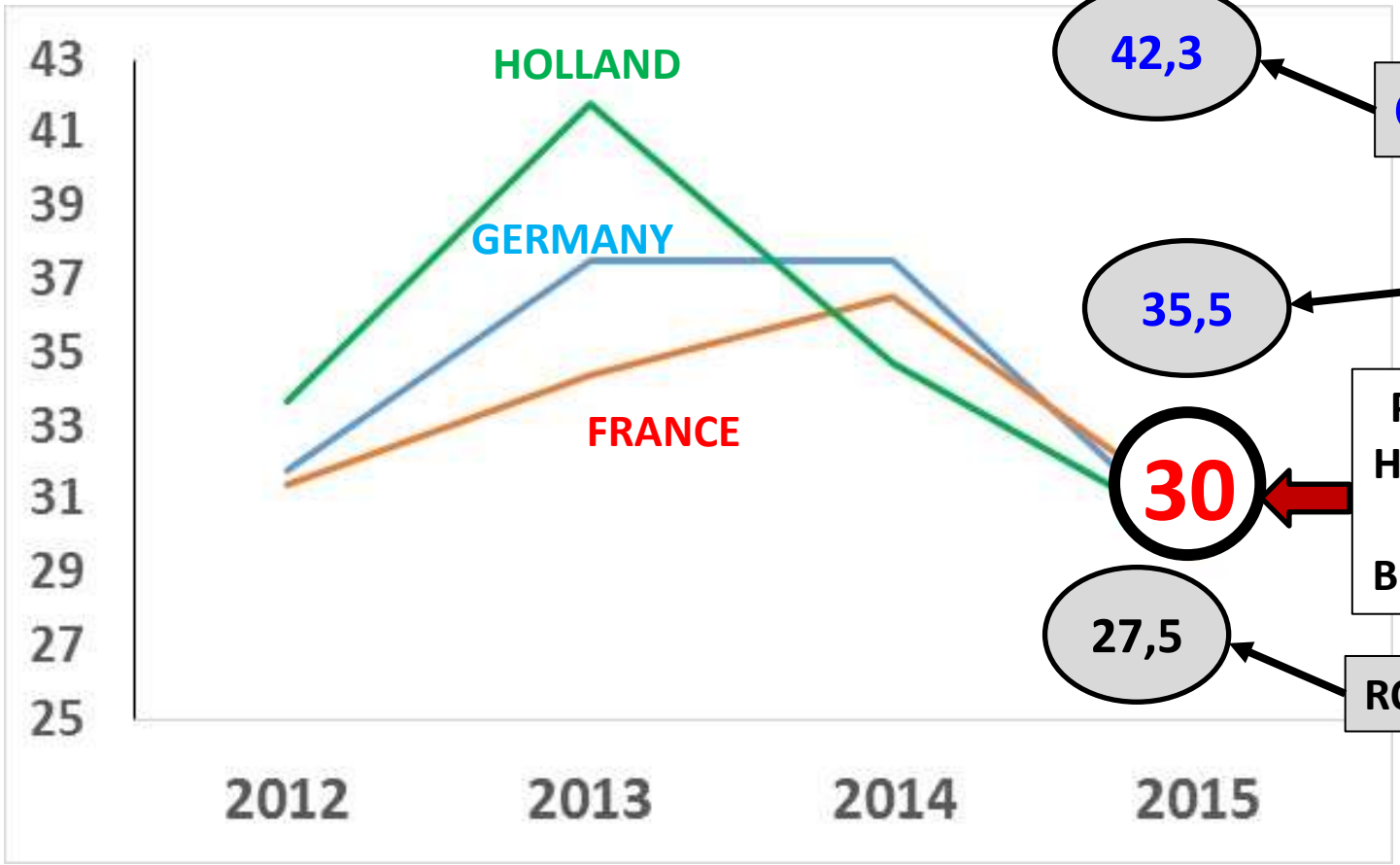
Eurostat, USDA

COW MILK PRODUCTION IN GREECE



Eurostat, USDA

Is it because of LOW milk prices: *NO!*



It is because of a HIGH production cost!

Estimated <u>mean</u> production cost: 38-40 cents / kg

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POTENTIAL REDUCTION of PRODUCTION COST *(10,000 kg/cow/year)*		
	€/cow/year	*cents/kg of milk*
Nutrition	290	2.90
Reproduction	240	2.40
Mastitis	230	2.30
Lameness	190	1.90
Heifers	150	1.50
TOTAL	1,100	11.00

George E. Valergakis, Laboratory of Animal Husbandry

Our approach

Improve farmers' technical skills → **Improve productivity and efficiency**

ARISTOTLE UNIVERSITY OF THESSALONIKI

Our approach

Improve farmers' technical skills

Improve productivity and efficiency

Lower production cost

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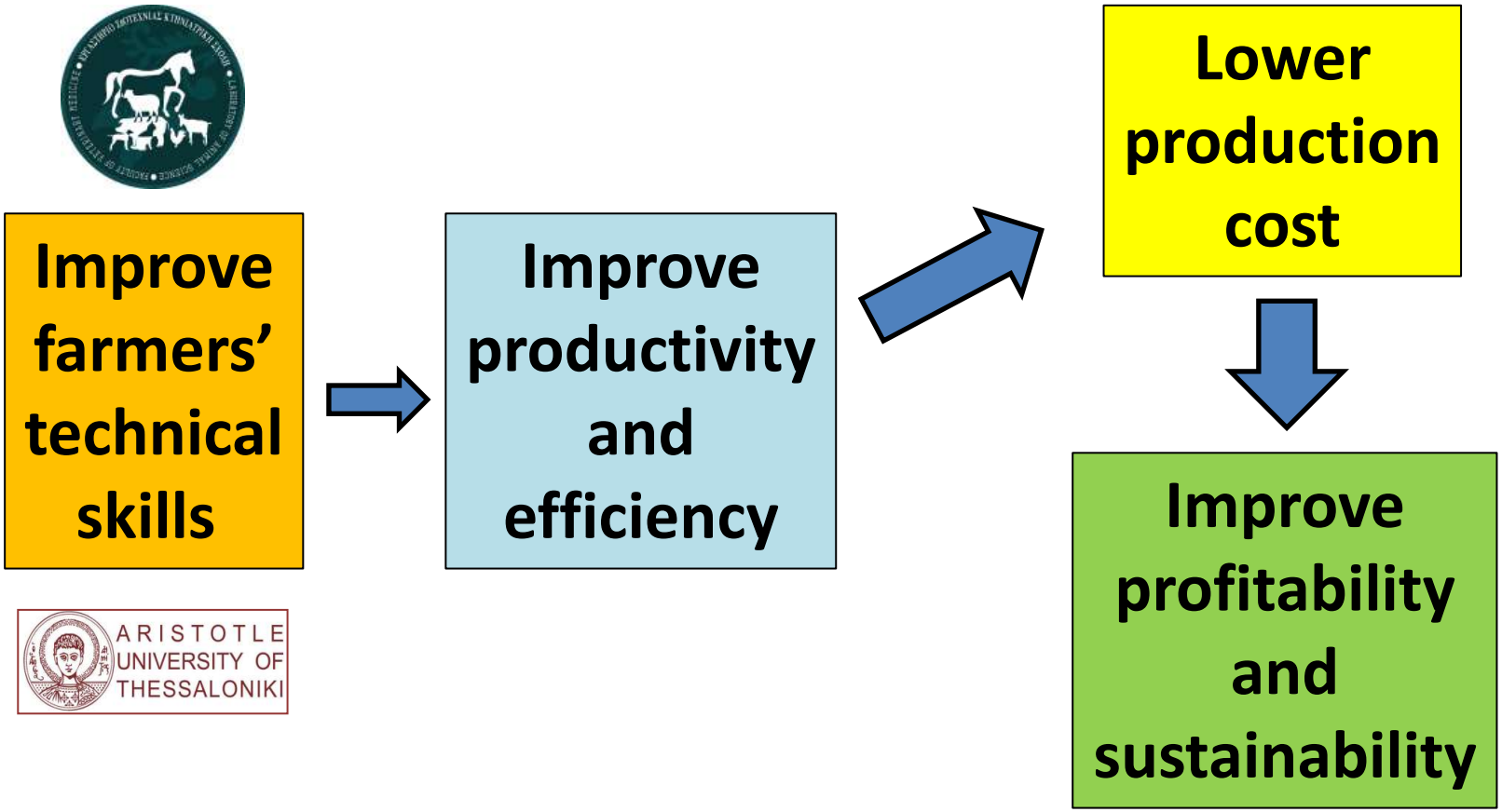

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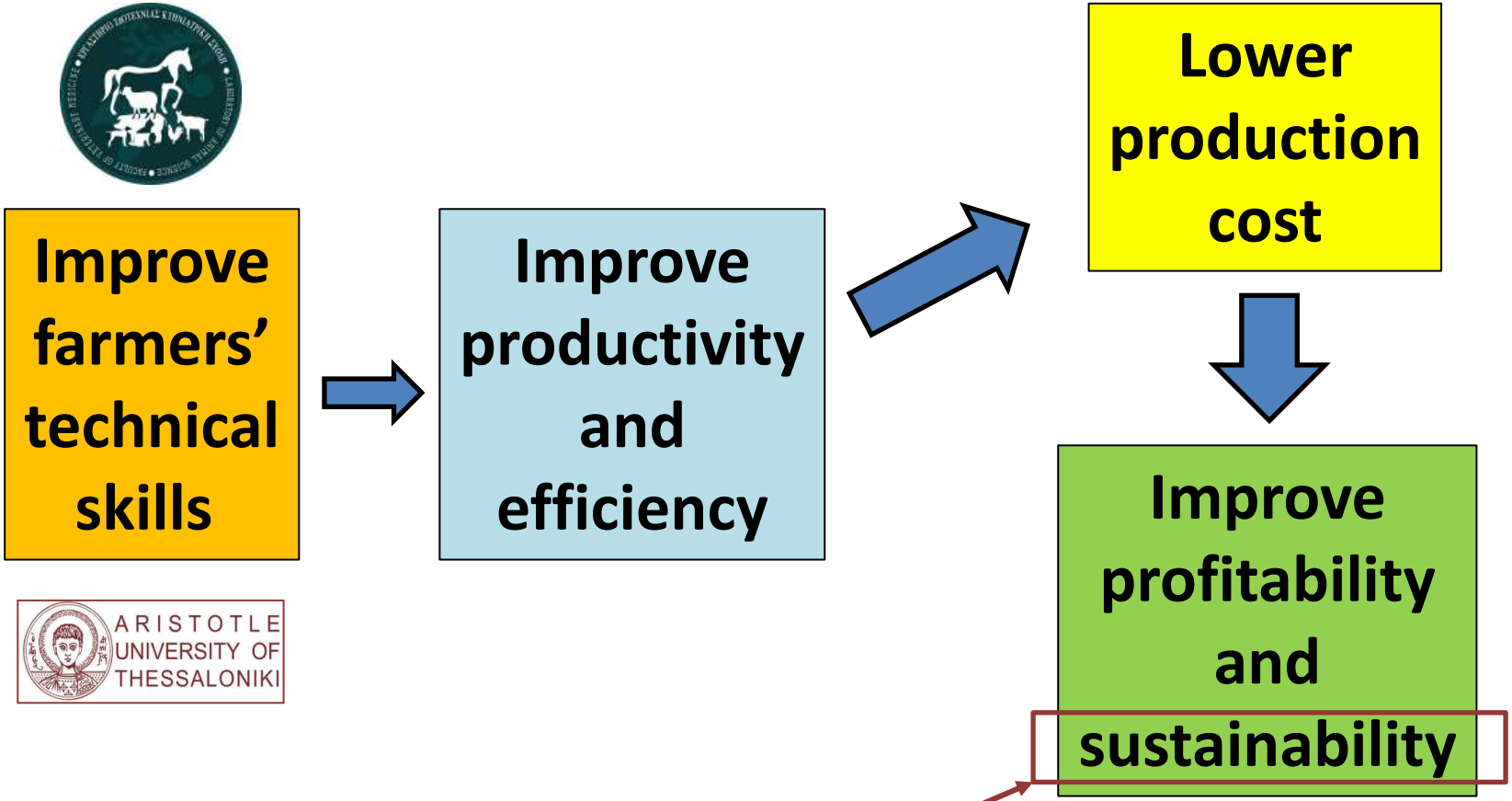

Our approach

Improve farmers' technical skills

Improve productivity and efficiency

Lower production cost

Improve profitability and sustainability

ARISTOTLE UNIVERSITY OF THESSALONIKI

Environmental and welfare issues are a priority!!!

The organic dairy cow sector in Greece

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10 farms **Small** ≈1,600 cows

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Same (or greater) inefficiencies of conventional farms

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High priced products vs. economic crisis

The organic dairy cow sector in Greece

10 farms **Small** ≈1,600 cows

Same (or greater) inefficiencies of conventional farms

High priced products vs. economic crisis

On-farm CHALLENGES

Organic dairies (*and "low input" ones*)…

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Greek organic dairies

- In most cases, not enough land
- Segmented in small plots
- Short grazing season

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Organic dairies (*and "low input" ones*)…

SUSTAINABLE?
Is there enough water?

Is it really "LOW INPUT"?

Greek organic dairies

- **In most cases, not enough land**
- **Segmented in small plots**
- **Short grazing season** → ***Climate: Hot and arid***

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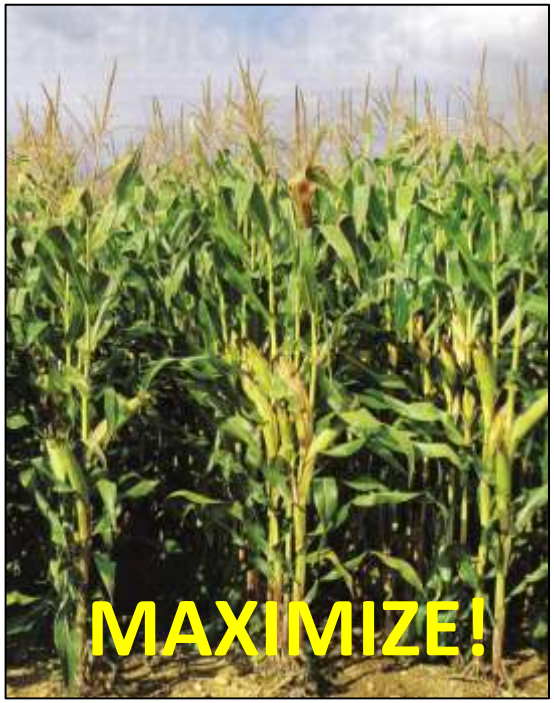

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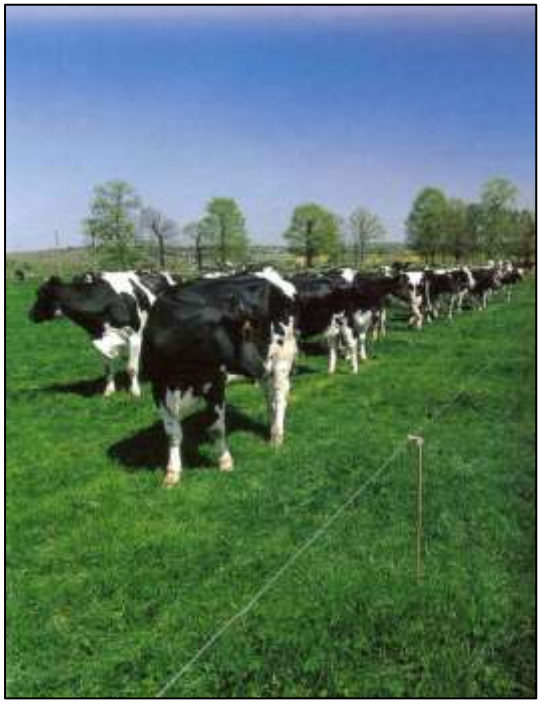

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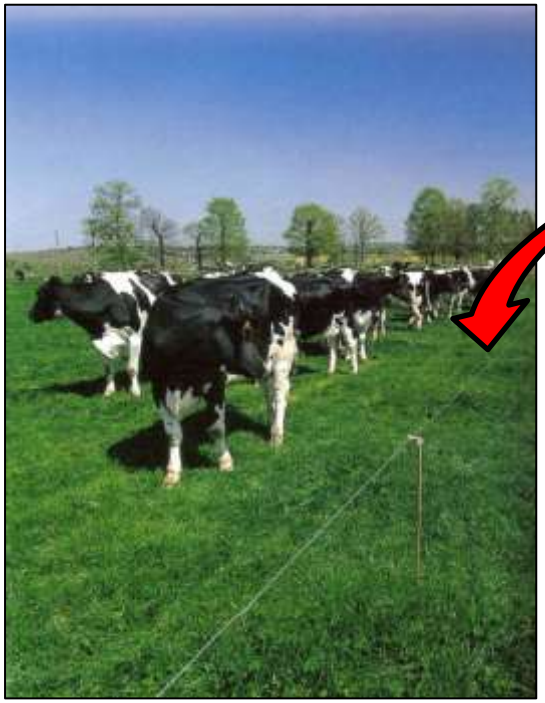

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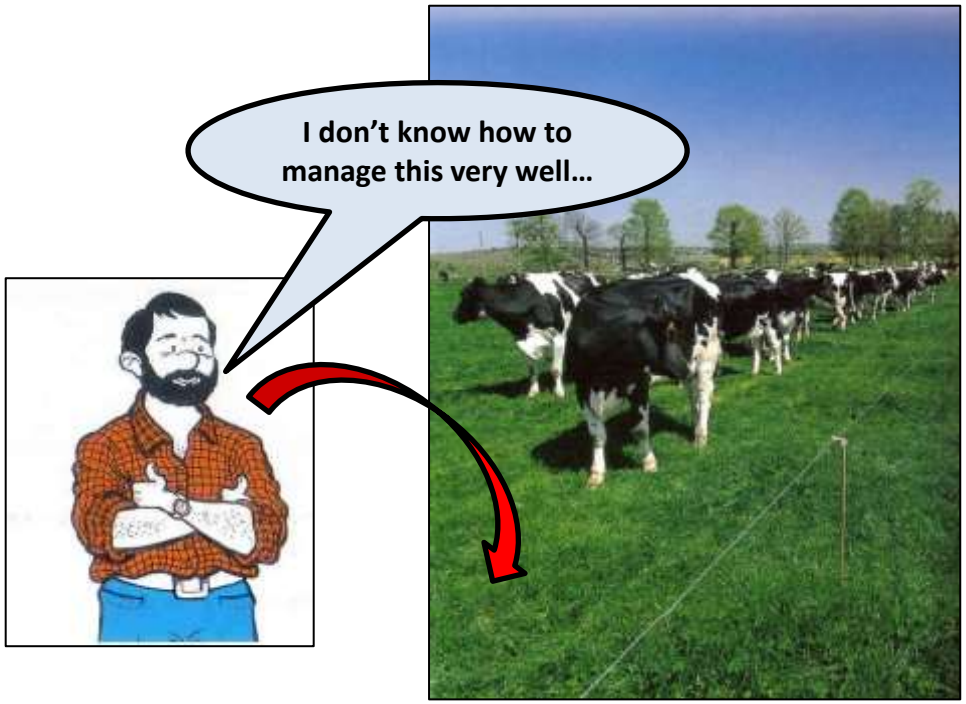

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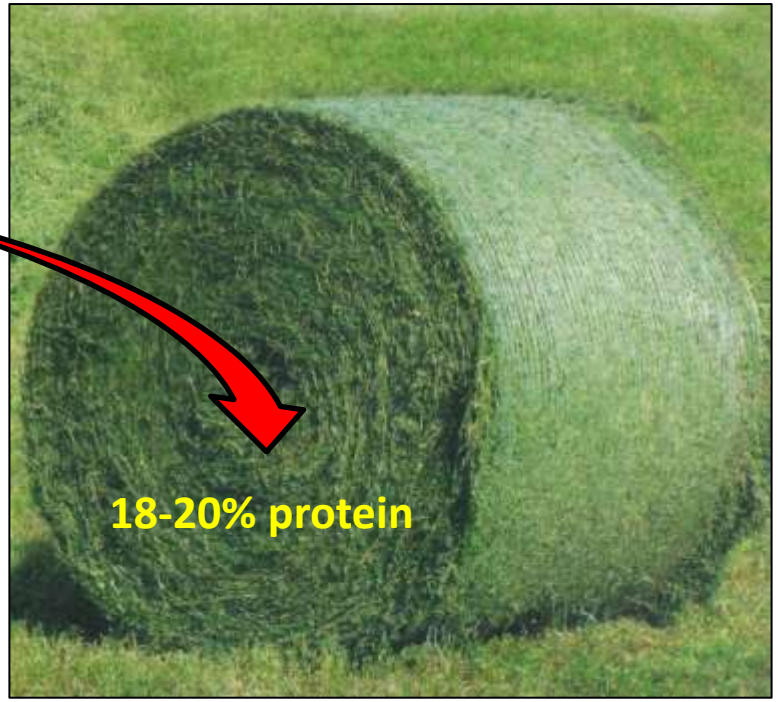

Greek organic dairies

- In most cases, not enough land
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Organic dairies (*and "low input" ones*)…

Corn silage

Alfalfa hay

Small grain silage

Wheat/barley straw

Greek organic dairies

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Organic dairies (*and "low input" ones*)…

HOME-GROWN CEREALS

Corn grain

Barley

Wheat

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Organic soybean meal: 850 €/ton

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Alternative: Home-grown…

Lupins

Peas

Organic dairies (*and "low input" ones*)…

HOME-GROWN CEREALS

Corn grain

Barley

Wheat

Organic soybean meal: 850 €/ton

Alternative: Home-grown…

Heat treatment!

Lupins

Peas

Are organic dairies in GREECE "low input" businesses?

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From a management perspective, NO!

Are organic dairies in GREECE "low input" businesses?

From a management perspective, NO!

In fact, what is a "low input" farm?

“Does the low input European dairy farm exist?.....a general definition…..
……..was difficult to develop.”

Jolien Hamerlinck, Jo Bijttebier, Ludwig Lauwers and Simon Moakes

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LOW INPUT farms: Those with the lowest 25% external input cost/grazing livestock unit

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feed
fertilizer
crop protection
energy

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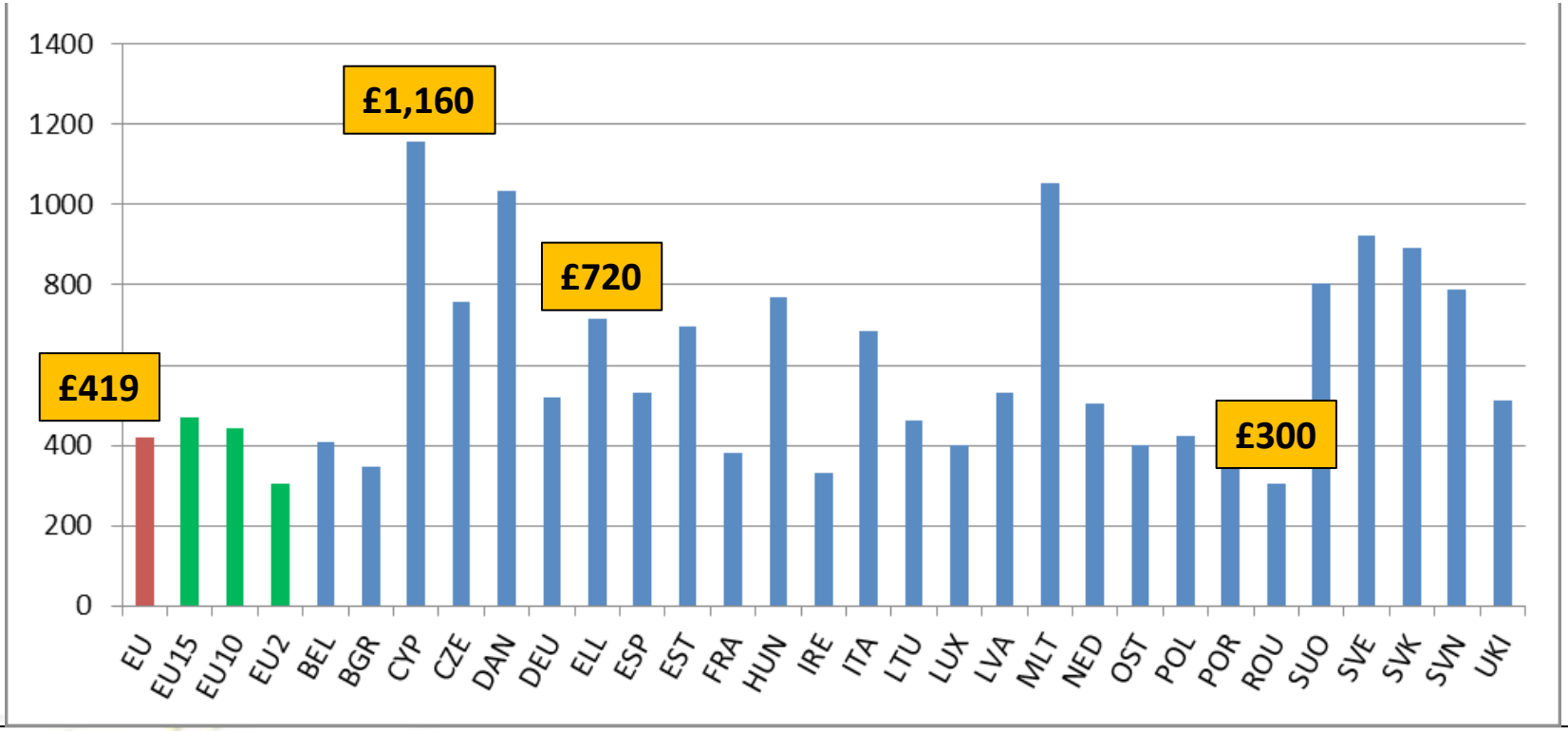

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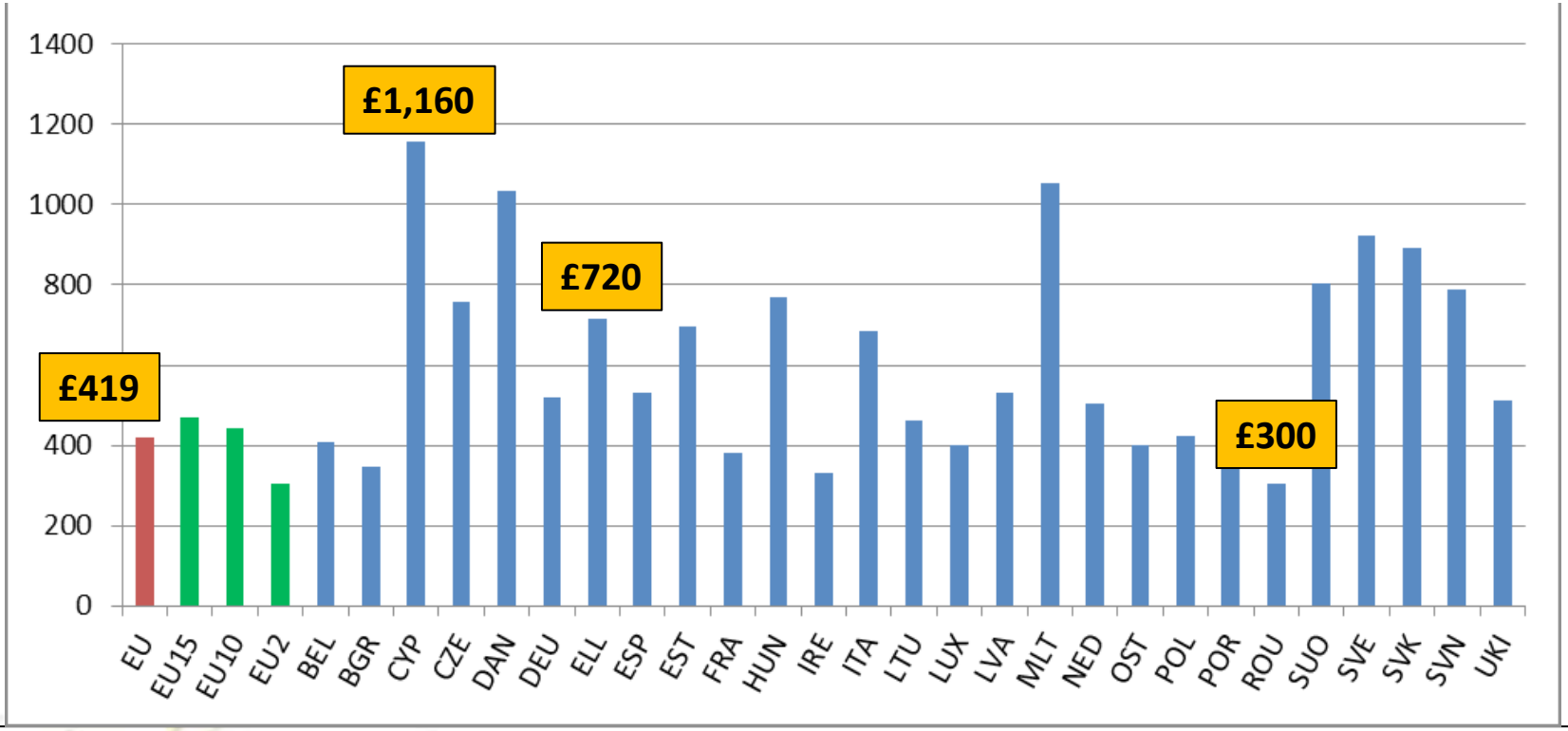

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Capital invested?
Labour?

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Labour?

⇕

Sustainability?

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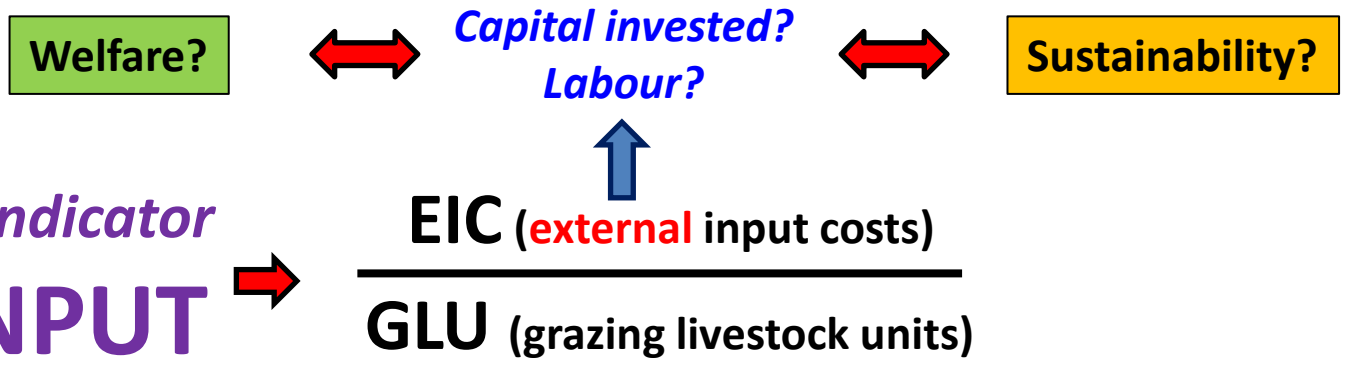

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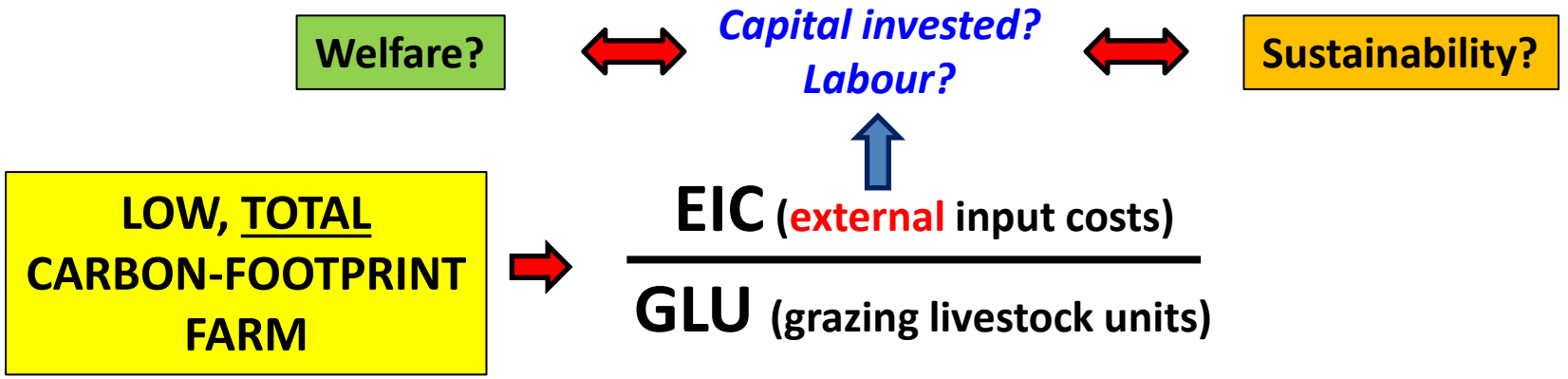

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Welfare? ⟷ *Capital invested? Labour?* ⟷ Sustainability?

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Denominator should be an output!

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This is a very useful table!!!

2007	Belgium		Finland		Spain		United Kingdom	
Weighted data set	LI	Non-LI	LI	Non-LI	LI	Non-LI	LI	Non-LI
Solid indicator	244,47	453,42	521,83	872,40	386,25	814,56	337,42	554,95
Milk production per cow	5418	7000	7907	8858	5704	6809	5568	7001
Dairy cows per GLU	0,52	0,58	0,62	0,67	0,77	0,78	0,50	0,63
Forage/UAA	0,96	0,78	0,61	0,67	0,93	0,97	0,98	0,96
Cows/forage	1,09	1,40	0,91	0,86	2,44	2,26	0,98	1,38
Dairy cows	54	48	23	28	50	41	63	112
Economic indicator	0,79	0,72	0,73	0,62	0,75	0,62	0,67	0,64
EIC/ton milk	95,74	116,81	106,47	147,91	91,74	154,40	132,03	127,11

Hamerlinck and Lauwers

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Hamerlinck and Lauwers

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Hamerlinck and Lauwers

This is a very useful table!!! (or not?)

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Hamerlinck and Lauwers

What about the 300-cow, 10,000 kg of milk per cow farm?

So, what is a "true low input" farm?

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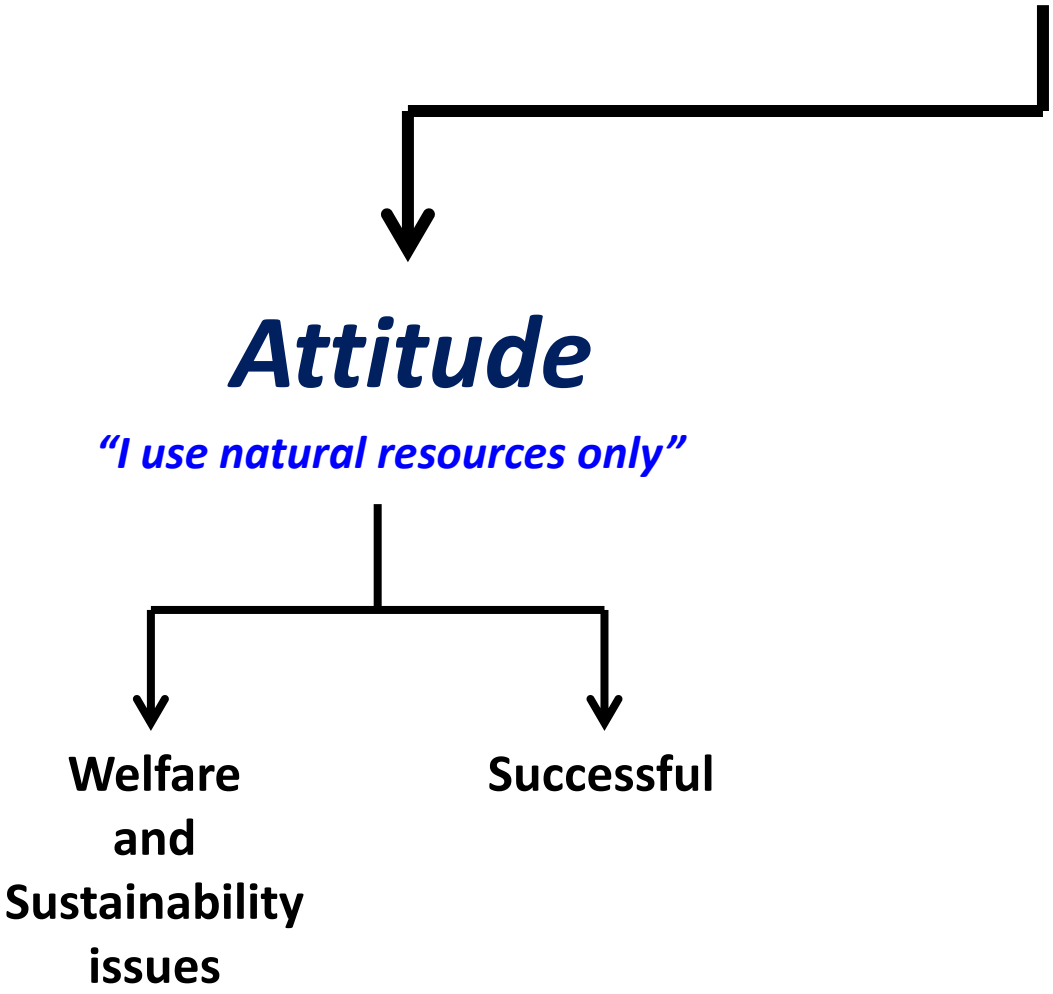
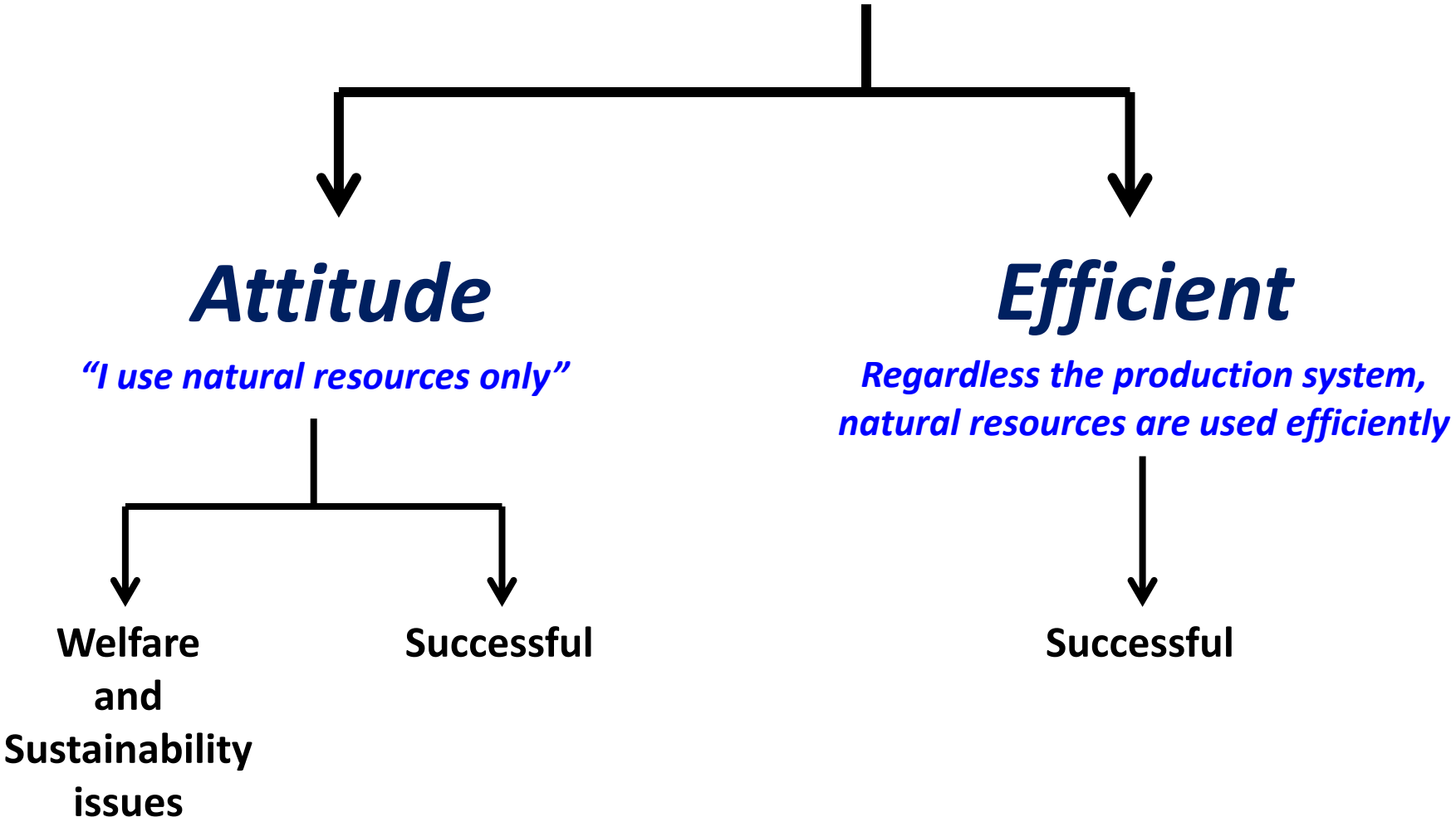
Attitude

"I use natural resources only"

So, what is a "true low input" farm?



So, what is a "true low input" farm?



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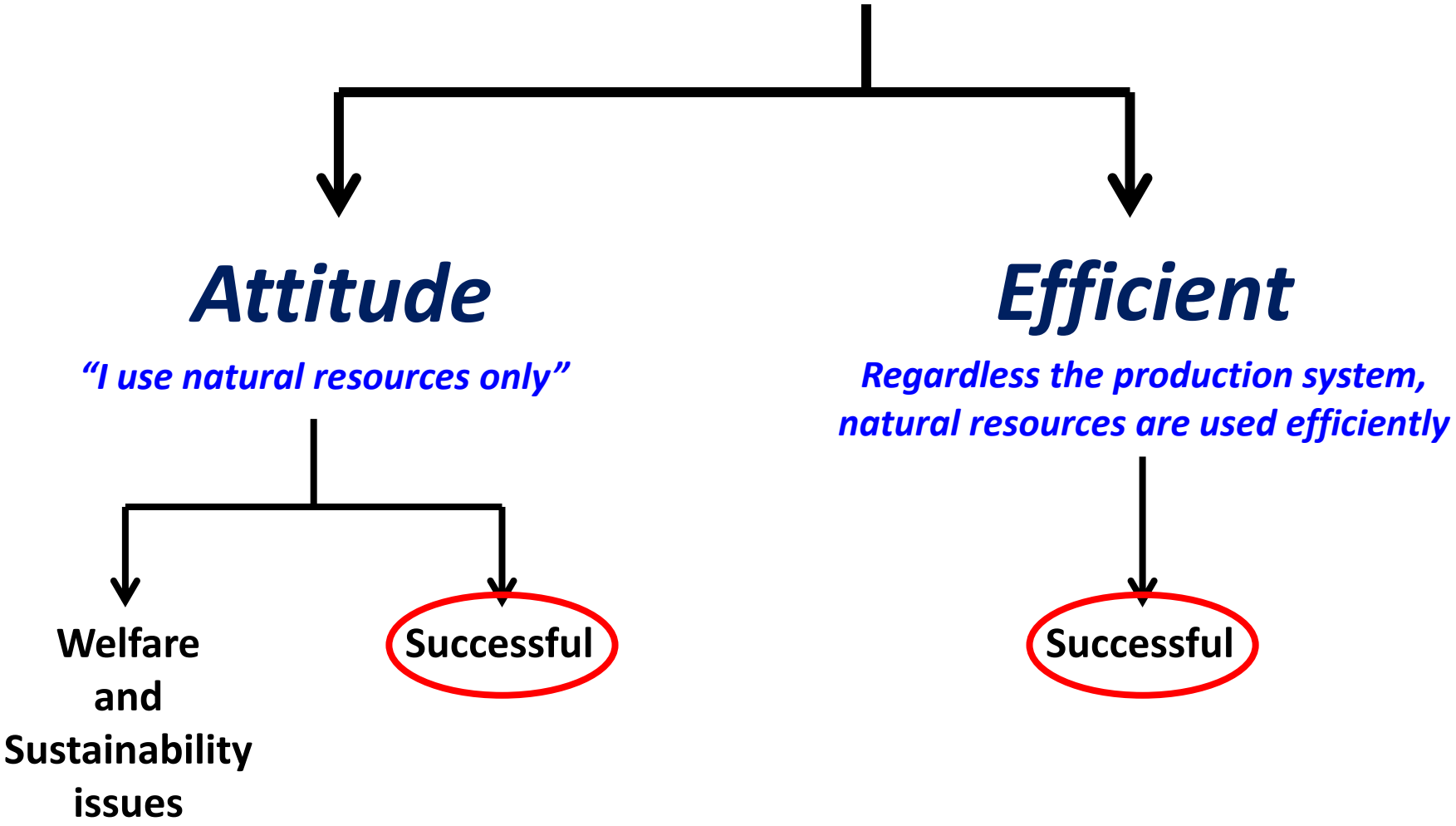

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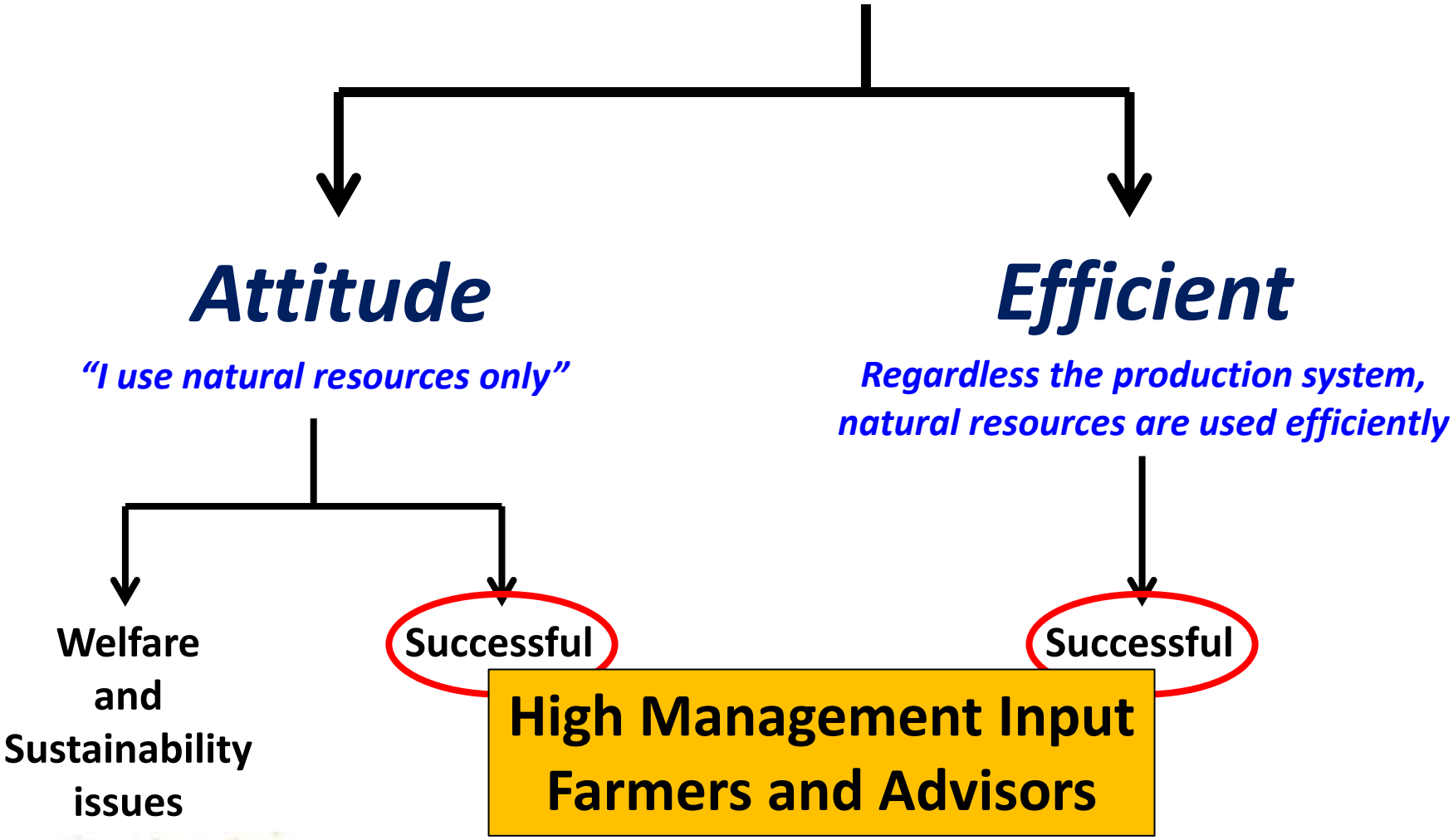

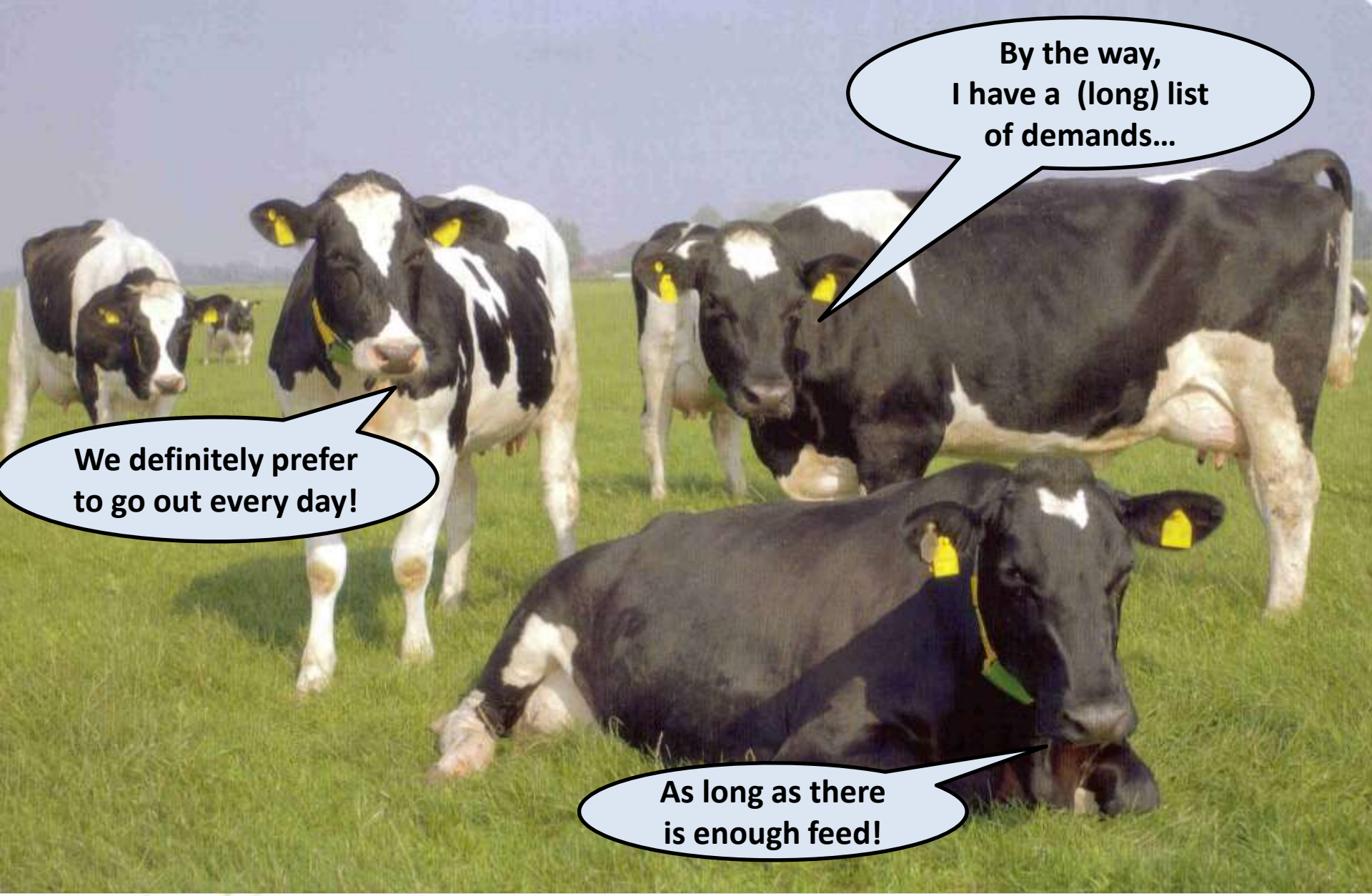
By the way,
I have a (long) list
of demands…
We definitely prefer
to go out every day!
As long as there
is enough feed!