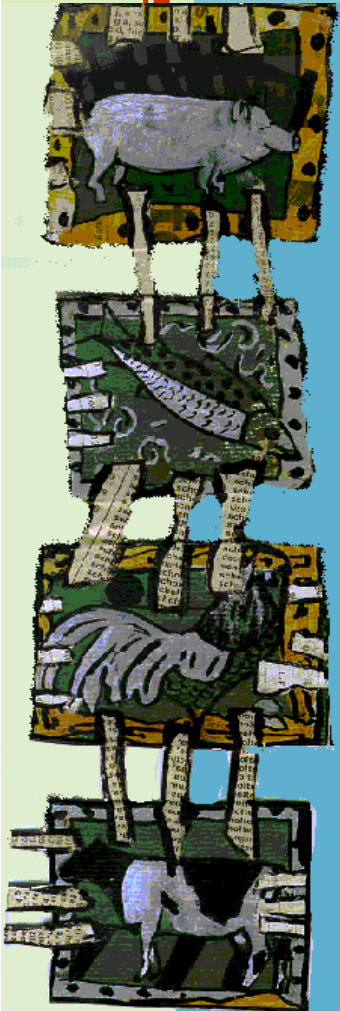

FUTURE PATHWAYS IN FARM ANIMAL BREEDING AND REPRODUCTION

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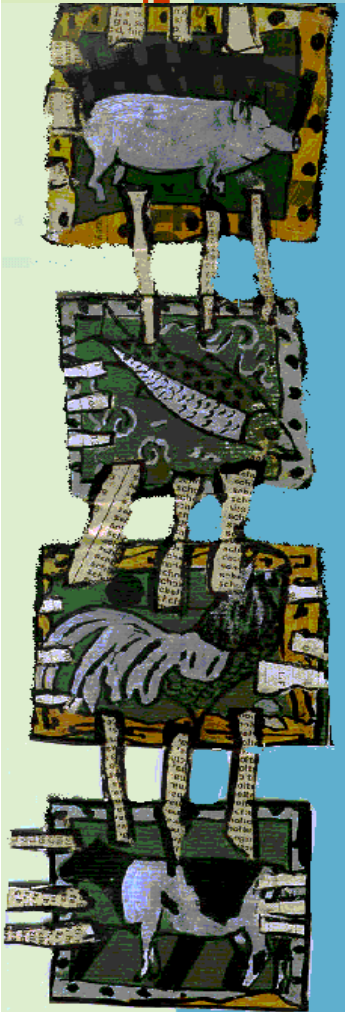


Farm Animal Industrial Platform

Farm Animal Breeding & Reproduction

Forum European Industry

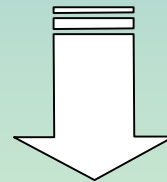
- < EU research funding
- < Research related regulations
- < Dialogue with society



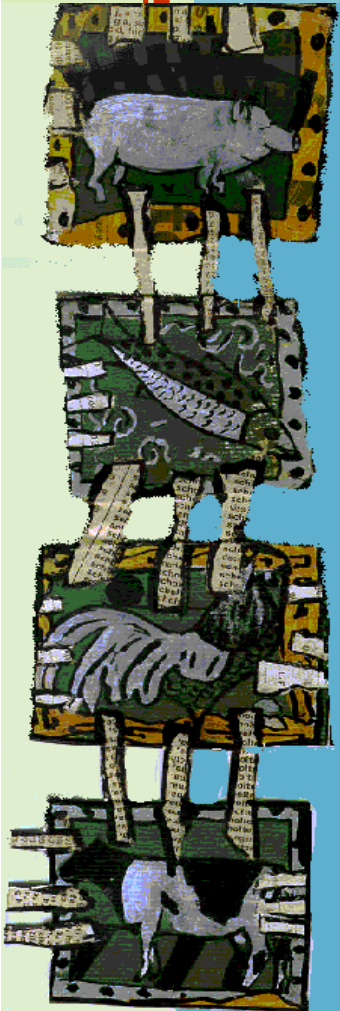
Farm Animal Industrial Platform

WHY?

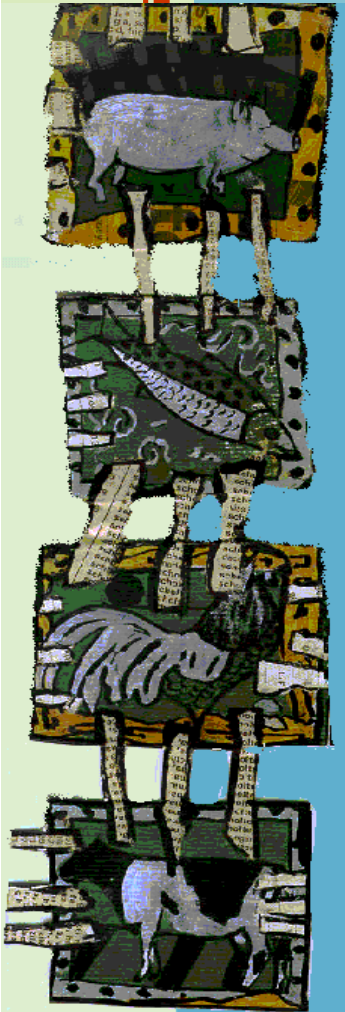
- < Explain breeding to society
- < Dialogue with society
- < Improve knowledge



European project
Farm Animal Breeding -
Implications for Society



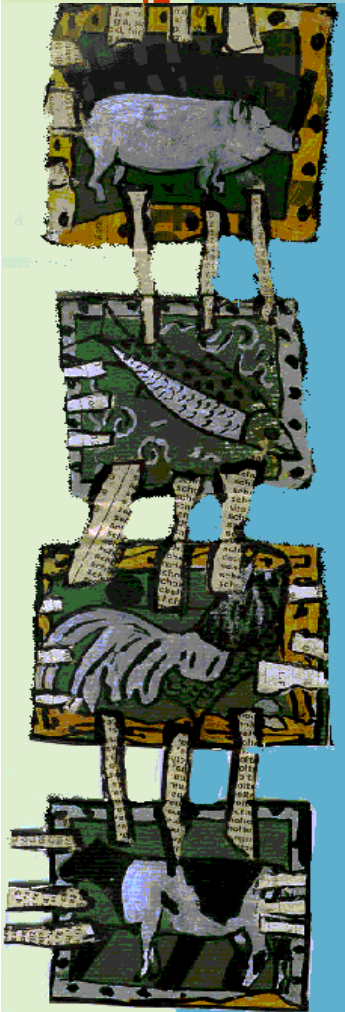
Farm Animal Industrial Platform



GOAL:

- < Explain breeding and reproduction
- < Indicate technological and society possibilities and constraints
- < Indicate future scenarios

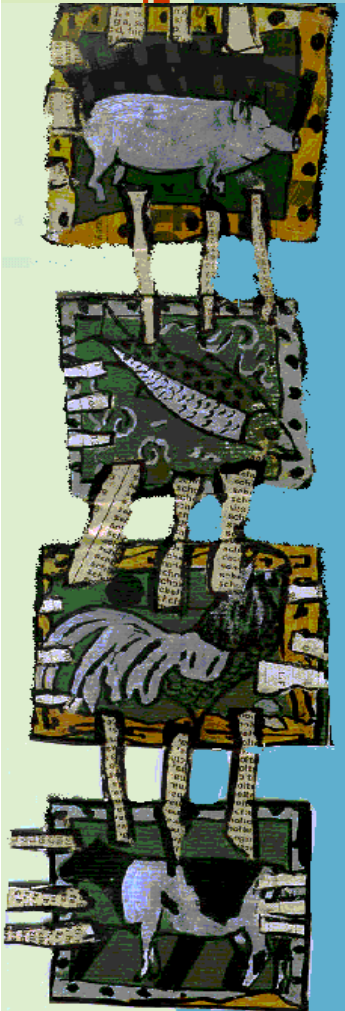
Farm Animal Breeding Implications for Society



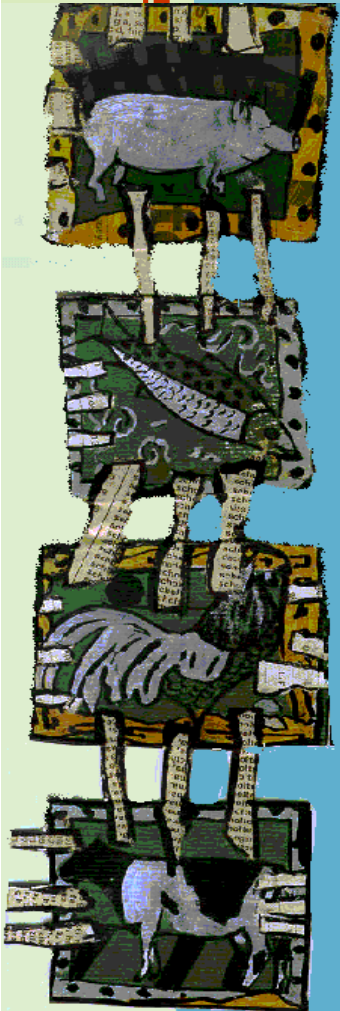
- Breeding and reproduction:
 - < FAIP/IPG
 - < Zootechnical Institute University Milan
- Ethics:
 - < KVL Frederiksberg
- Law:
 - < University Paris I
- Consumers:
 - < Consumer&Biotechnology

Farm Animal Breeding Implications for Society

- Breeding:
 - < FAIP/IPG
 - < Zootechnical Institute University Milan



The Future of Animal Breeding

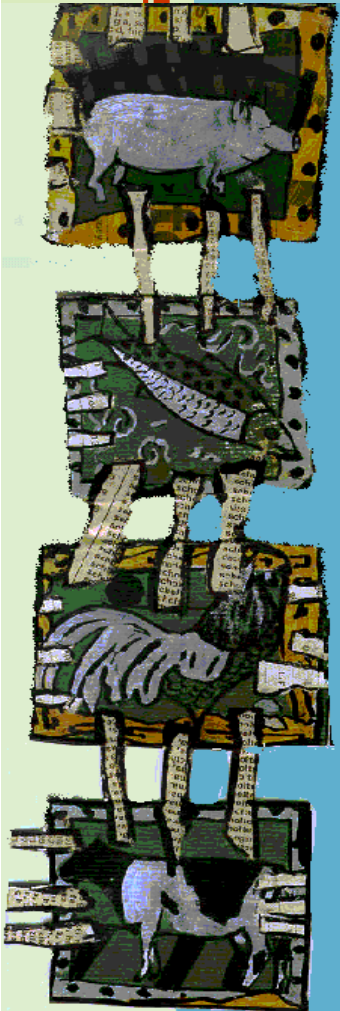


- n Sustainability
- n Structure of Farms
- n Market Globalisation
- n Structure of animal breeding industry
- n Computing and handling data
- n Biotechnologies
- n Biodiversity

Scenarios (1)

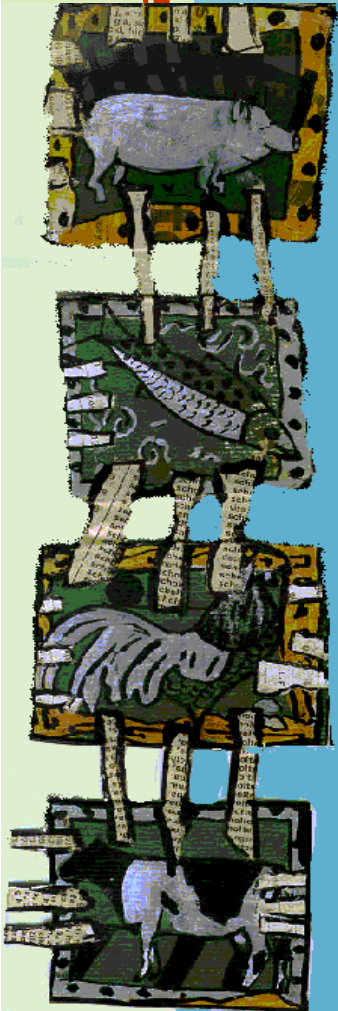
n Three models

- Conventional path
 - < similar to nowadays
- Alternative path
 - < e.g. niche markets, organic products
- Low cost path
 - < aimed to reduce production costs



Scenarios (2)

Today's perception - traditional aspects



Traditional Aspects	Conventional path	Alternative path	Low cost path
Decrease production costs	++	+/-	++++
Decrease variation	+	--	++++
Balanced breeding	++	++++	+

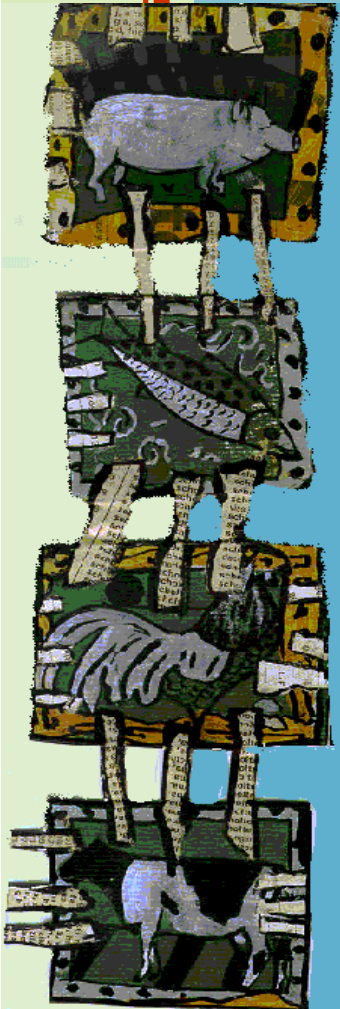
++++ used routinely

::

-- very unlikely to be applied

Scenarios (3)

Today's perception - application of new tech

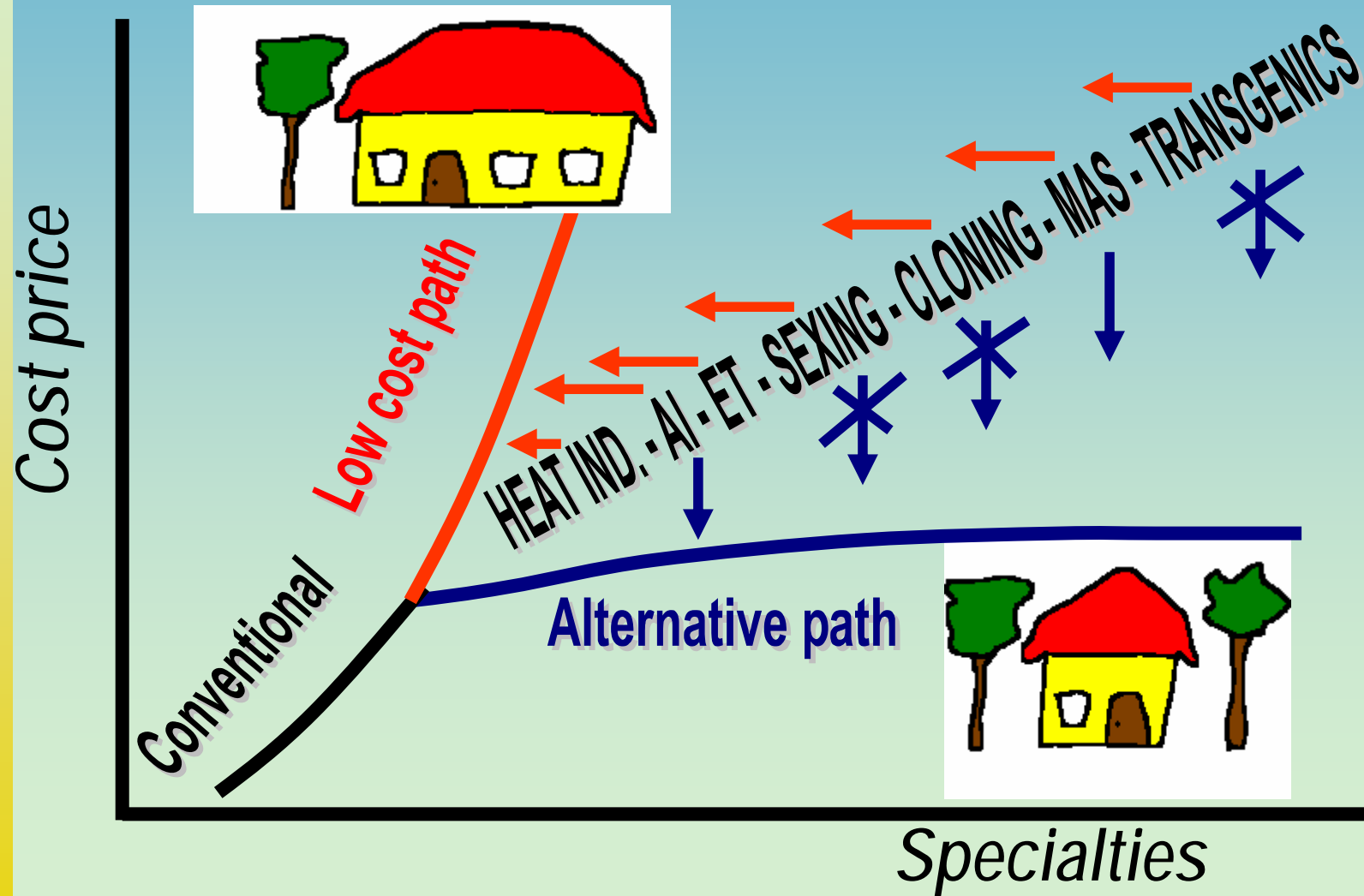


Technologies	Conventional path	Alternative path	Low cost path
MAS	+++	+++	++++
AI & Embryo Tech	+++	++	++++
Transgenesis	-	--	++
Triploidy (fish)	+	+/-	+++
Cloning	+/-	--	+++

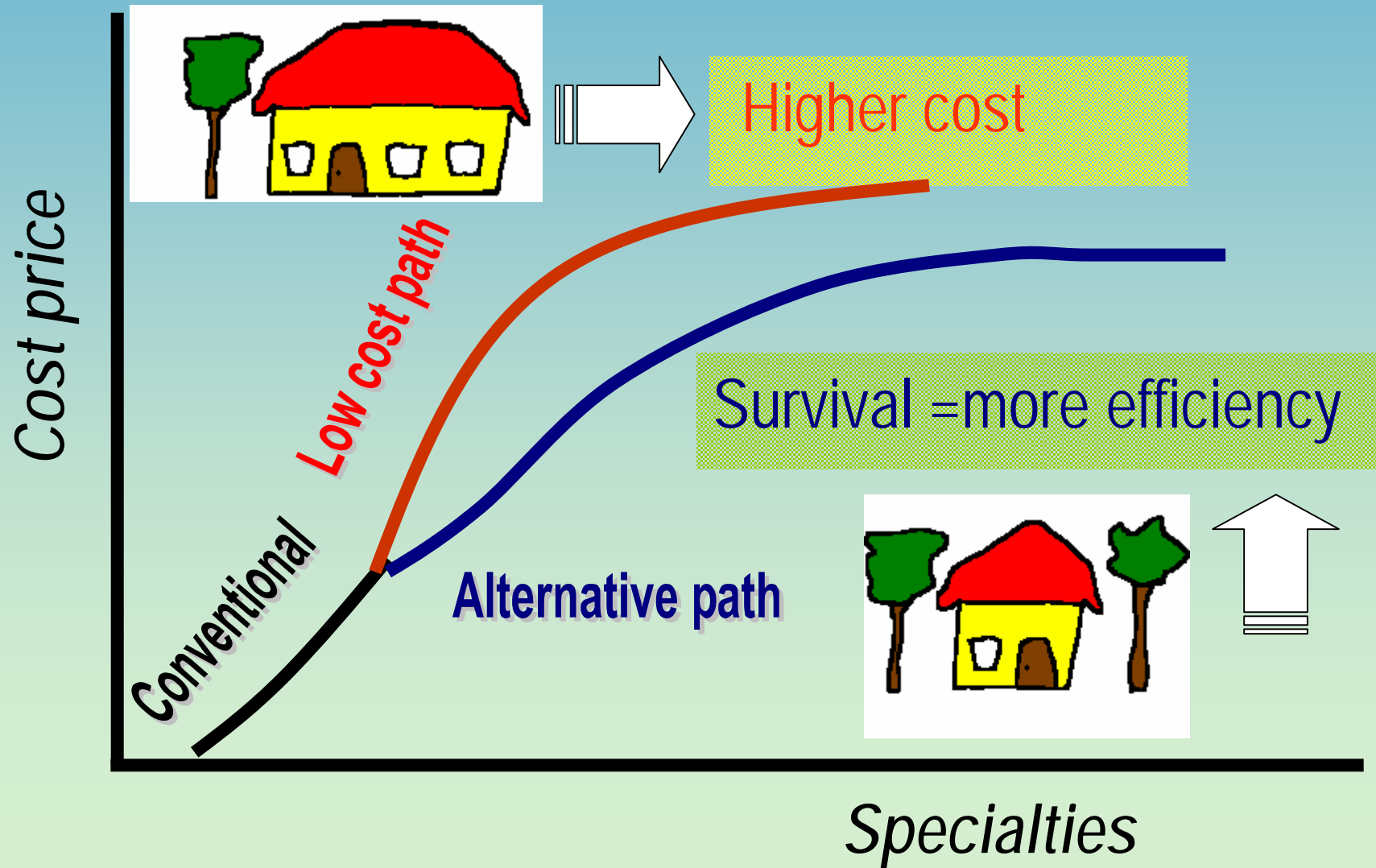
++++ used routinely

-- very unlikely to be applied

Discussion (1)



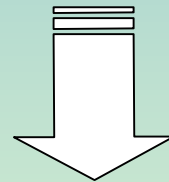
Discussion (2)



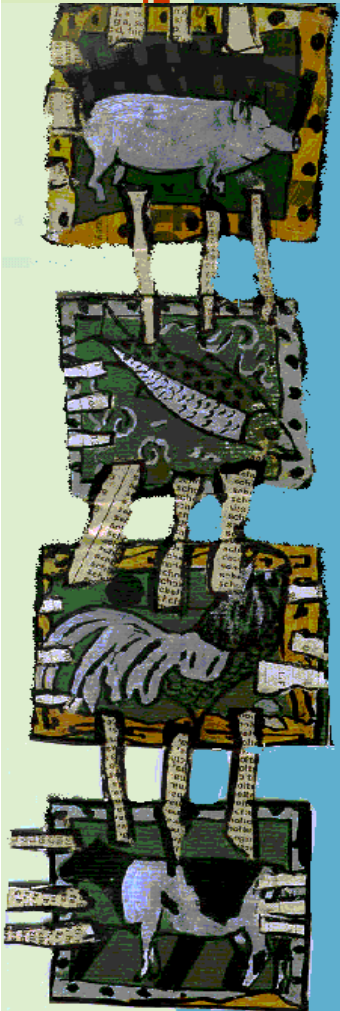
ELSA → SEFABAR

Alternative pathways:

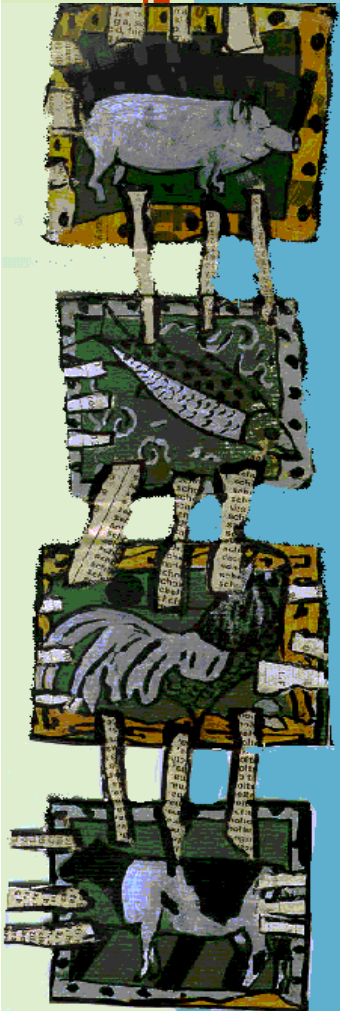
- < Unknown economic aspects
- < Unknown risks



European project
Sustainable European Farm Animal
Breeding And Reproduction
(*SEFABAR*)



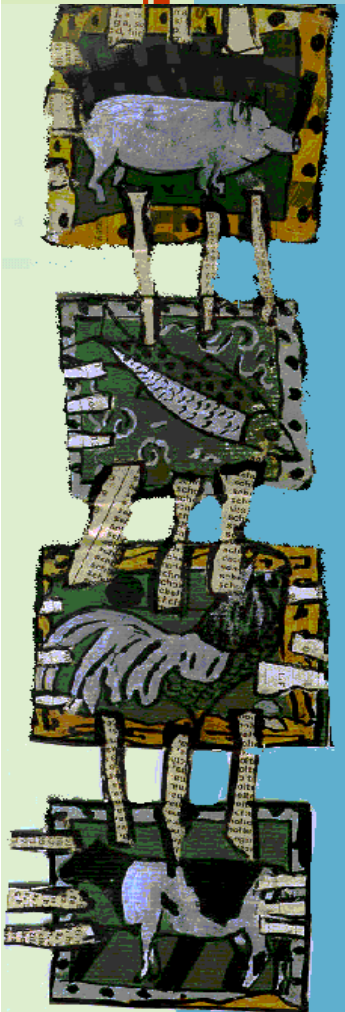
More questions.....



- n Will consumer pay for more extensive production?
- n Awareness ethics & welfare
- n Value different (European) cultures?
- n Trade barriers
 - Would EC pay in WHO negotiations?

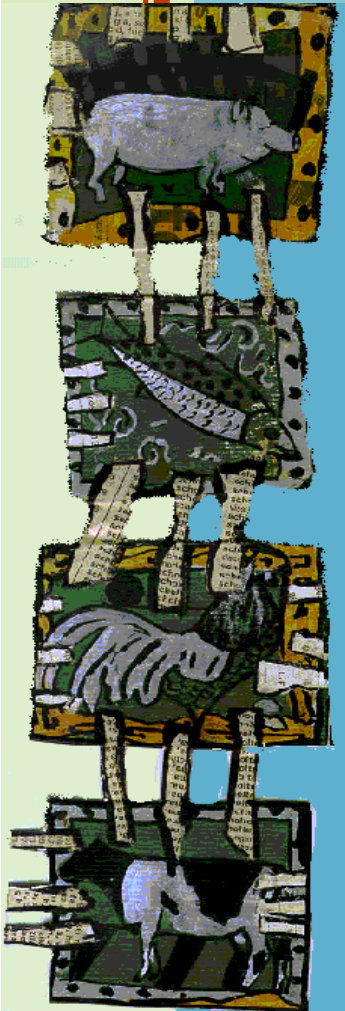
Follow Up

- Breeding and Reproduction Network
 - < FAIP / EAAP / WPSA / EAS
 - < scientists and industry
- +
- Case studies
 - < Bio-ethics
 - < Animal Welfare
 - < Cultural Differences
 - < Public Opinion
 - < Economy/World Trade



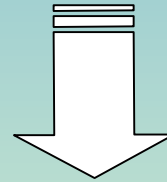
Goal SEFABAR

- What is sustainable breeding?
- Overview sustainable breeding research / business efforts
- Define sustainable breeding strategies
 - < species (ruminants / pigs / poultry / fish)



Goal SEFABAR

Integration with socio economic
case studies



Information material sustainable
breeding and reproduction

- to improve awareness
- for policy makers

