How to implement effective coexistence plans?

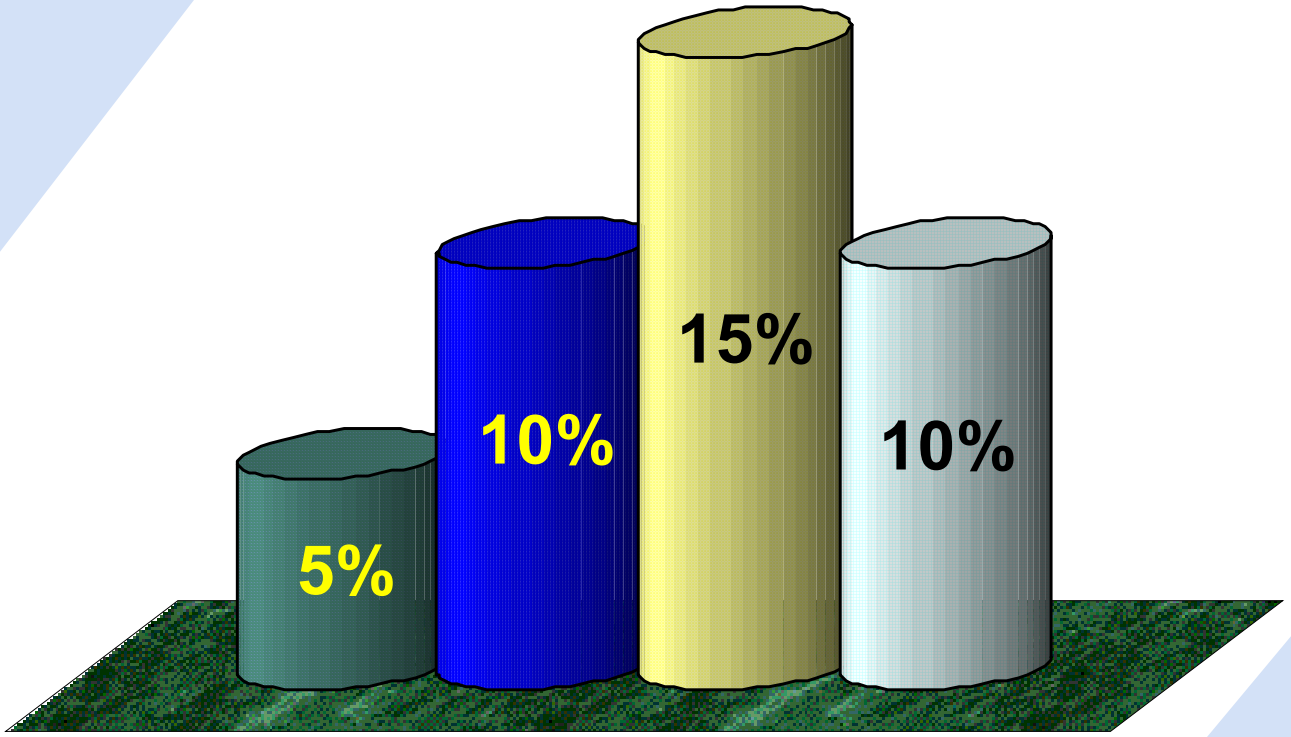
Gianluca Brunori
University of Pisa

UNIVERSITÀ DI PISA

What does ‘effective’ mean in Italy?

- GMO-free chains have an economic potential
  - Premium price
  - Reputation effect on the rural economy
- High quality products as a key to survival strategies in a changing policy environment
- Objective of coexistence plans: to safeguard the strategy based on high quality production

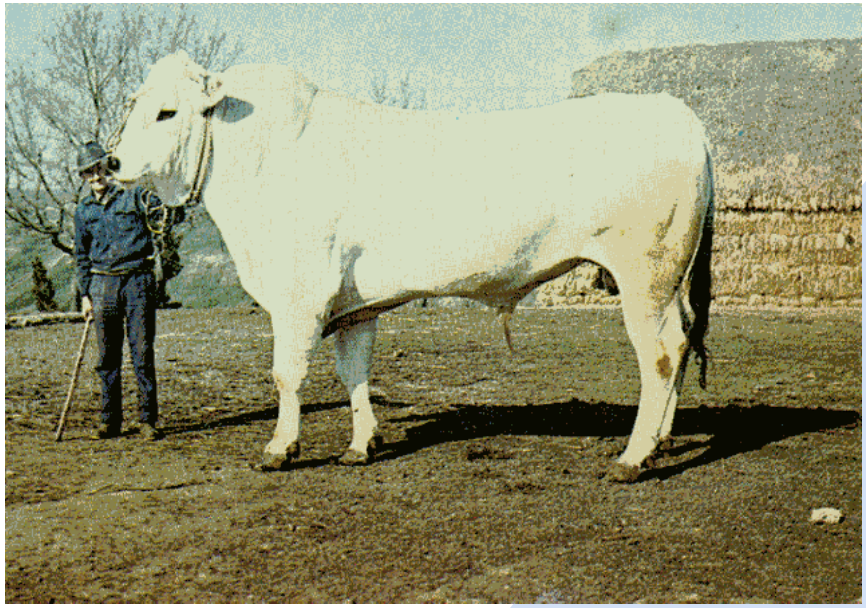
Weight of high quality production in Tuscany



UNIVERSITÀ DI PISA

Chianina beef production

- Premium price: 15%
- Sale to Supermarket
- The supermarket detects fortuitous presence of GMOs → no purchase
- What is the loss for the producer?



UNIVERSITÀ DI PISA

Costs at farm level

- Respect strip of cultivation
- Dedicated seeding machine
- Loading seeding machine only near to the field
- Dedicated combined harvester
- Time for cleaning harvester before and after harvesting
- Closed wagon to trasport the product
- Dedicated stock room

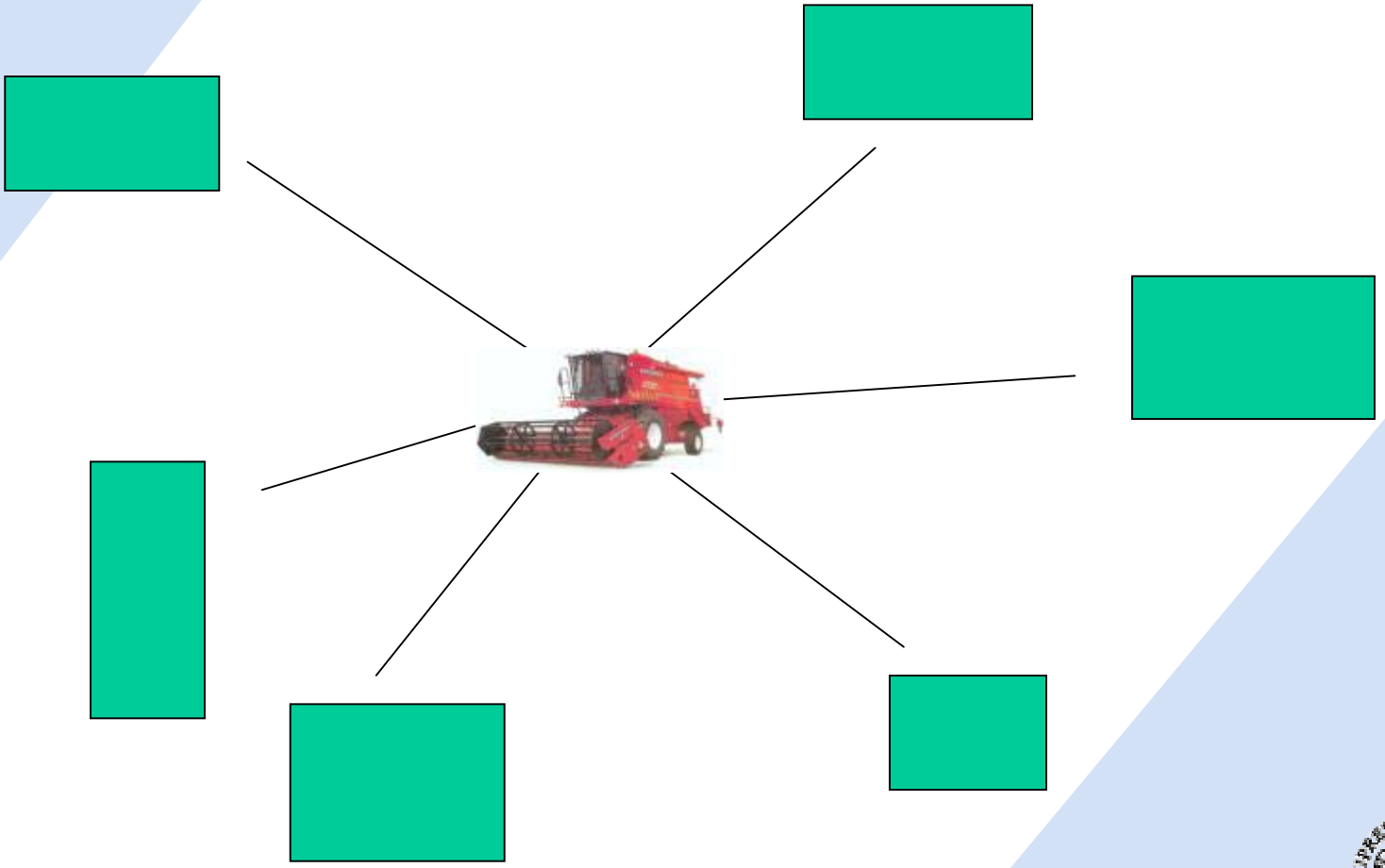
How to implement respect stripes?

Weight of additional costs for mais cultivation

+ 11%

How to obtain compliance?

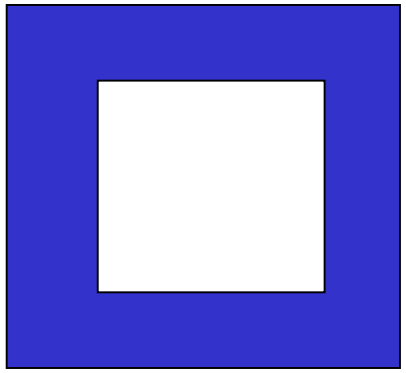
Gene flow in the space



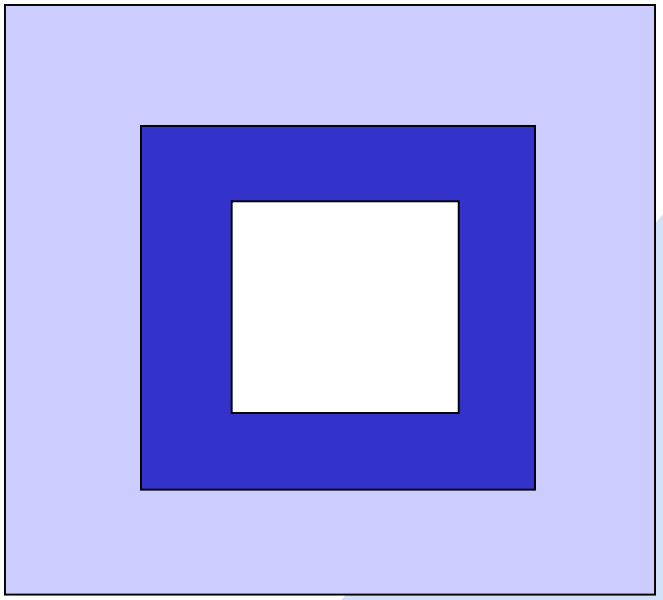
UNIVERSITÀ DI PISA

Gene flow in the time

First year



Second year



How long it takes before the soil is free from GMOs?

Ripercussion on the land price

UNIVERSITÀ DI PISA

What is the level of non compliance a government is willing to accept?

- If default cases are 1% per year, how will be the rate of pollution in 10 years?
- What is the level of sanctions to defaulters?
- How should the principle ‘polluter pays’ applied?
- What kind of control system should a regional administration set up?
- What is the cost of all that?

UNIVERSITÀ DI PISA

Problems only for Italy?

- New entrants will face in the next years the same problems we are facing
- Strategies based on multifunctionality and creation of value can apply also to them
- We should avoid to fall into irreversible situations

Final considerations

- Do not leave all these considerations only to experts
- Need for continous interdisciplinary research on these aspects

UNIVERSITÀ DI PISA

Thank you for your attention!

UNIVERSITÀ DI PISA