

**Co-existence of genetically modified, conventional and  
organic crops**

**Vienna, 4-6 April 2006**

**Workshop on Segregation in farming and throughout the food  
chain – technical and economic aspects**

***SEGREGATION – CHALLENGES FOR THE TRADE IN  
AGRICULTURAL COMMODITIES***

**Klaus Schumacher  
CELCAA, Brussels**

***CELCAA –  
the European umbrella organisation  
of the agri-produce trade***

**The membership comprises European sectoral trade associations representing collectors, distributors, storers, importers and exporters of**

- cereals, oilseeds, animal feeds, oils and fats,**
- fruits and vegetables, flowers,**
- meat, poultry and game, eggs and egg products,**
- milk and dairy products, potatoes, tobacco, spices.**

## ***Co-existence: An Issue for CELCAA***

- 1. The EU is the world's largest importer of agricultural commodities intended for direct use for food, feed or for processing**
- 2. The EU's food and feed processing sector needs to import these commodities due to the EU's limited own supply, especially of oilseeds (emphasized by biofuels demand)**
- 3. Imports of these commodities often originate from exporting countries with considerable plantings and production of genetically modified crops**
- 4. Examples:**
  - Soybeans from USA, Brazil, Argentina**
  - Canola (rapeseed) from Canada**
  - Maize from Argentina**
  - Soybean meal from USA, Brazil, Argentina**

## EU Imports of Grains, Oilseeds & Feedstuffs (mln tons)

	2005/06	2004/05	2003/04	2002/03
<b>Maize</b>	<b>2.6</b>	<b>2.4</b>	<b>5.7</b>	<b>3.9</b>
- USA	0.1	0.1	0.2	0.0
- Argentina	1.0	1.4	2.1	1.6
<b>Soybeans</b>	<b>14.4</b>	<b>15.8</b>	<b>14.6</b>	<b>16.9</b>
- USA	1.7	4.6	3.5	5.7
- Brazil	10.0	8.9	9.6	10.2
- Argentina	0.3	0.1	0.3	0.6
<b>Soybean meal</b>	<b>22.5</b>	<b>22.1</b>	<b>21.9</b>	<b>20.4</b>
- USA	0.1	0.0	0.0	0.3
- Brazil	10.1	10.0	8.8	8.5
- Argentina	11.6	11.4	10.2	9.5
<b>Canola</b>	<b>0.4</b>	<b>0.1</b>	<b>0.2</b>	<b>0.1</b>
<b>Cornglutenfeed</b>	<b>2.6</b>	<b>2.9</b>	<b>3.6</b>	<b>3.4</b>
- USA	2.6	2.9	3.6	3.4

## ***Crucial Factors:***

- a) All major export countries that grow GM crops practice co-existence for many years. Growing similar crops for different markets is not a new challenge but reality.**  
(Examples: feed barley – malting barley; waxy maize – feed maize)
  
- b) An increase in plantings of GM crops does not automatically exclude growth in plantings of conventional or organic crops**  
(Example: organic area of soybeans and maize in the USA)
  
- c) Key for co-existence: thresholds for comingling or “adventitious presence” (AP) of one material on another by putting in place good agricultural growing, harvesting, storage and transport practices**

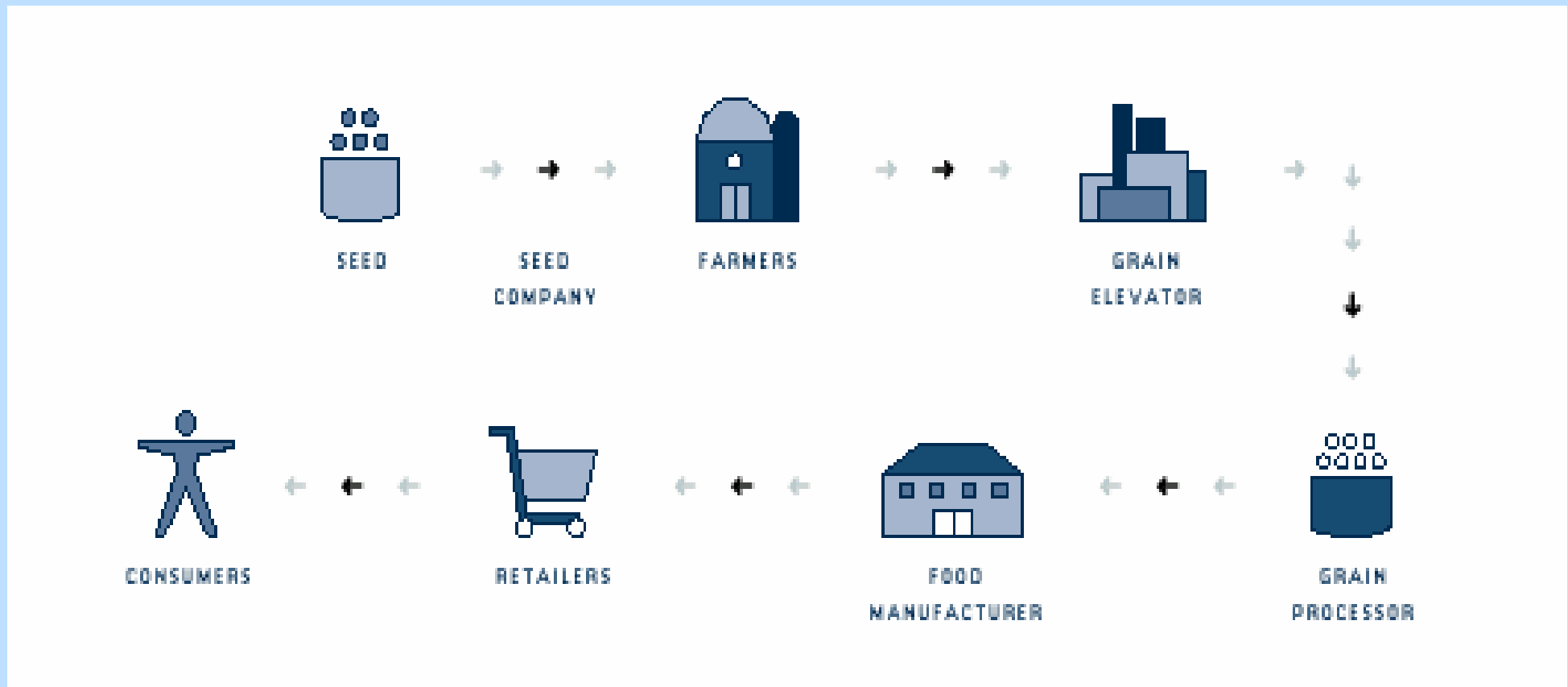
## ***Crucial Factors*** (continued):

- d) Commercial contracts take account of the different requirements of different markets**  
**Condition: no guarantee for absolute (100 %) purity**  
(Example: 5 % non-organic material in organic produce)
- e) Even systems of identity preservation (IP) do not guarantee absolute (100%) purity but allow for AP**
- f) The tighter the thresholds (the lower the level of AP), the higher the costs of segregation and IP**
- g) Co-existence measures which go beyond the EU's labelling threshold will represent a competitive disadvantage for all EU operators competing with the rest of the world**

## ***Co-existence and the characteristics of the bulk commodity handling system***

- **International trade in grains & oilseeds exceeds 300 mln tons**
- **Most international trade in grains and oilseeds used for food, feed or for processing is shipped in bulk (vessel size between 20,000 and over 100,000 tons)**
- **Bulk commodity handling system is characterised by high volumes to achieve low costs (economies of scale)**
- **The cost-effectiveness of the bulk handling system contributed heavily to today's low food prices**
- **Impossible to keep varieties (events) in the bulk commodity handling system totally separate**
- **AP (commingling) may occur in each link of the supply chain, even in the most stringent IP system**

# *Grain changes hands many times between the seed supplier and the food manufacturer*



Source: USDA Economic Research Service, Pew Initiative on Food and Biotechnology

## ***Co-existence and the bulk commodity handling system: zero thresholds impossible to achieve***

- **Adventitious presence (AP) of GMOs will occur in all international shipments of all commodities (GM, conventional and organic crops) shipped from countries having GMOs in commercial production**
- **Also, non-GMO shipments are exposed to AP of GMOs in the global transportation and handling system**
- **Consequence:**
  - **Thresholds are a must to secure co-existence**
  - **The lower the thresholds, the higher the costs for segregation**  
(recent studies by the International Food & Agricultural Trade Policy Council)

## ***Challenge - Asynchronous Approvals***

- 1. An increasing number of GM events are authorised for commercialisation around the world – directly impacting the EU's imports of food and feed products**
- 2. As a consequence, more countries (not only the EU) will be faced with the challenge of AP of events that have been authorised in one or more countries (including exporting countries) but not in the country of import**
- 3. This situation will continue to disrupt trade, pose high liability risks to the entire food & feed chain, erode confidence among consumers and increase the burden on regulatory agencies of importing countries**

## ***Challenge - Asynchronous Approvals***

### **Recommendation:**

**Codex Alimentarius member countries should consider a project to develop a science-based risk-assessment guidance for evaluating AP of events**

**This proposed project should be confined to address situations in which low AP levels of events that have been authorised as safe for food, feed or for processing in one or more countries are found in a country of import where it has not been fully authorised yet**