



THE DEVELOPMENT OF PLANT PROTEINS IN THE EUROPEAN UNION

OPPORTUNITIES AND CHALLENGES

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Panel “Supply Chains and Market Segments”

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Highlights of the workshop on “Supply Chains and Market Segments”

- **Most feed markets are spot/commodities markets:**
 - Short-term price/quantity adjustment
 - “Anonymous nutrient” in formulation = no specific identity for species
 - By-products development rise
- **Most food markets and some specific quality markets in feed** (soya GM-free, healthy or environmental-friendly products...) **are based on more highly coordinated supply chains:**
 - Most often with crop contracts & premium price
 - Highly coordination is chosen when it reduces the transaction costs
 - Crop contracts favour more long-term group commitment in regions



Other examples during WS...

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Highlights of the workshop on “Supply Chains and Market Segments”

Specific markets generate a stronger “leverage effect” on crop subsidies, because commodities markets do not generate long-term investment for plant proteins cultivation in our territories.

While highly coordinated supply chains favour stronger long-term investments, which in turn, leads to collective progress.

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Highlights of the workshop on “Supply Chains and Market Segments”

Second nutrition transition has started

- Global market protein ingredients +€ 31 billion 2018 (+15% CAGR through 2025) with € **11 billion on plant proteins for food**
- Strong **growth of alternative proteins especially in Europe** compared with North America.
 - *Low diversity: on 2,2 million tons plant-based protein ingredients 56% soy, 43% wheat ... but less than 1% for pea, rice, potatoes, rape seed faba bean, lupin, sunflower, (Improve data)*
- Decrease of meat consumption in Western Europe: **flexitarian model** is growing (especially France, UK, Germany...)
- **Organic market is pioneer:** many products innovations launched
- **Healthy food awareness rise:** products innovations by supermarkets
- **Increasing market for seniors** (30% Europeans 65+ in 2050)



Highlights of the workshop on “Supply Chains and Market Segments”

A nutrition transition based on two main types of food models

Whole-grains based foods: a stronger identity to species and regions, both tradition and modern gastronomy, recipes with cultural mixing...

Ingredients-based foods: identity by the functional properties, all types of foodstuffs, no identity by the species or regions

**Shelling,
dehulling,
crushing, flours...
20-25% proteins**

**Strong increase of production costs
→ requiring economies of scale**

**Fractionation,
extrusion concentrates,
isolates
40-80% proteins**

- Scientific knowledge of the nutritional properties is growing
- Strong constraints on flavours
- No strict opposition regarding “meat/animal-sources”: both Simili/Alternatives & Mix products
- New processes like fermentation...

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Highlights of the workshop on “Supply Chains and Market Segments”

Market segmentation is increasing as there are more diversified consumer profiles and even more variability in their habits.

Challenge:

to preserve various alternatives (both processes and species)
and avoid future lock-in in a *dominant design*

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Opportunities identified

- Currently, the strongest increase among protein crops cultivation is the **European GM-free soya**, as the demand for **feed** & food is increasing
- European countries are oriented **towards more sustainable & healthy diets** through various initiatives... *Ex: Green Protein Alliance*
- Protein is not the only driver of pulses development, the challenges also are on:
 - **double business models** in ingredients markets (starch/protein, oil/protein...)
 - **fibres** intake needs for consumers
- **Low-process and high-process technologies are both interesting**
- Europe presents **various agricultural regions** to valorise various protein crops, and to keep and develop “**authentic**” various foods (“**identity foods**”)
- Animal-/Plant-based protein equilibria consumption is not the only debate: how to **develop food identities on legumes ?**



Way forward

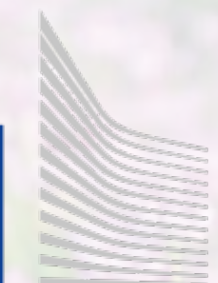
Protein plant subsidies both food & feed, should run with other policies

- **Support for highly coordinated supply chains**, as incubators of long-term progress to catch up the competitiveness gap of minor crops compared to major crops
- **Public recommendation on protein consumption:** could we achieve an European convergence around a new equilibria 50/50 or 60/40 plant/animal-based proteins in 2050?
- **Shift in diets & re-conception of livestock systems** in Europe are two sides of the same coin *to reconnect crop and livestock (circular models), new equilibria in livestock areas in Europe...*
- **Consumer education** (on nutrition, environmental impacts...) & **labelling strategies**

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Thank you for your attention

HEALTHY AGRIFOOD SYSTEMS

Nutrition transition should go hand-in-hand with agroecological transition

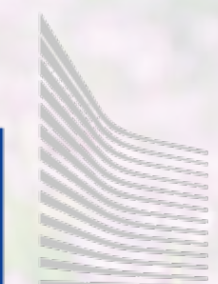
DIVERSITY

LONG-TERM COMMITMENT

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