



Synthesis of Results & Policy Recommendations

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1. Evidence from feed research

- The use of home-grown or local feed may help reducing external inputs as well as undesirable negative outputs.
- The use of agro-industrial by-products and other novel feeds may have a relevant role in some regions and/or time of the year in order to face temporary feed shortages, provided consumers do not perceive them as mere cost-cutters in dairy production associated with a reduction in milk quality.



2. Results from breeding research

- Modern, high yielding dairy breeds may not be appropriate for LI and organic dairy systems.
- Alternative breeds are likely to possess certain advantages, which may not lead to a clear superiority over conventional breeds, but which should nevertheless be taken up and further developed in breeding concepts specifically addressing LI and organic dairy systems.
- A large within-breed variability exists in the genetic merit of breeding animals. This allows for the selection of appropriate animals by low input and organic dairy producers, if strengths and weaknesses of the herd are considered. Crossbreeding may offer an alternative if strategically planned.



3. Evidence from environmental research

- High reliance on grassland based forage is associated with improved milk fatty acid composition in relation to human health but also decreased milk yields and, consequently, higher carbon footprint even if the increased carbon sequestration related to grassland is taken into account.
- On the other hand, when grassland is associated with more biodiverse pastures and reduced use of imported feed, it is also beneficial for the environment.



4. Evidence from consumer research

- The vast majority of consumers consider **milk as a commodity** and are unlikely to be willing to pay more (than the additional premium they might already be paying for example for organic milk) for changes in animal diets or animal welfare, unless they are aimed at either:
 - reducing the risk of GM contamination;
 - improving the quality of milk especially in terms of human health (e.g. reduced cholesterol, increased antioxidant, vitamin, and unsaturated fatty acids content, etc.)
- Organic milk and dairy products already comply with these requirements.



5. Evidence from socio-economic & SC research

- There are large differences in input use intensity across EU regions/countries
 - LI-HI can be defined only with reference to a specific context
 - The LI-HI continuum also applies to organic farming systems
 - Low Input is a distinct approach to milk production, specifically targeted to grassland and pasture farmers
- In general, dairy farmers will innovate if their peers do and if they see the usefulness of the innovation on their own farm.
- With the exclusion of few pioneers, livestock farmers are risk-averse, especially given that a large portion of the farm capital is invested in the livestock.



6. Policy implications

- Current CAP with generic income support linked to generic minimum environmental standards is not efficient
- There is a need of policy measures and rules tailored to local, context-specific environmental and economic conditions
- Generic measures such as **nitrogen taxes** or **grassland subsidies** aren't assured to be effective and efficient in all contexts
- There is a need to go beyond cut-and-paste policies (RDPs)
- Support the integration of crop production and animal husbandry production, especially in LI and organic farming, at farm or bio-region level
- The success of any innovation strategy hinges upon an **increased networking and collaboration** among the various supply chain actors.
- **Participatory on-farm research** though it often cannot provide conclusive results is beneficial, for it stimulates innovation processes and should be supported within EIP, RDPs, etc.

