

More meat, milk and eggs by and for the poor



Dairy cultures to improve the quality of traditional dairy products

Key messages and solutions

- Fermented milk and fermented milk based products are produced using dairy cultures
- Using dairy cultures is a simple way to produce a day to day stable product with specific characteristics.
- Using dairy culture will improve the quality of processed products
- Using dairy cultures allows producers to deliver dairy products to meet consumer preferences and increase income



Benefits

Dairy cultures help:

- Provide the required viscosity
- Develop the desired flavour
- Give the proper texture
- Prevent pathogenic bacteria from taking over

Problem statement

- Traditional processing of local fermented milk dairy products is based on spontaneous uncontrolled fermentation of milk leading to many variations in product characteristics (acidity, texture, taste and aroma). Producers face the problems of weak texture, flavour and in some cases gas production.
- Dairy cultures give the unique flavour and texture to dairy products. They also help in product conservation and to extend product shelf life.
- Dairy cultures provide options to control acidification and diversify flavour profiles to meet consumer preferences.

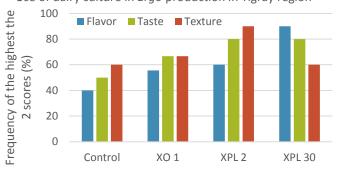


Evidence

 The intervention was tested in Tigray, Abergelle and Yabello targeting goat and cattle herders. The intervention is simple to understand and to apply. Product characteristics were developed using dairy cultures to meet the regional consumer preferences which was evaluated by sensorial evaluation.



Use of dairy culture in *Ergo* production in Tigray region



Suitability

- The intervention is appropriate for pastoral and agro-pastoral communities that are processing milk fermented based dairy products.
- The availability of dairy cultures is through dairy plants with help of NARS and international organizations. Resources required are some cash and some knowledge.
- The intervention contributes especially to human nutrition (safer food) and market linkages (consumer demand) and gender empowerment.

Resource requirements (low to high)	
Land	00000
Water	00000
Labour	00000
Cash	•0000
Access to inputs	••000
Knowledge and skills	•••00

Impact areas (low to high)	
Food security	00000
Human nutrition	••000
Employment and livelihoods	00000
Natural resources base	00000
Gender empowerment	••000
Market linkages	

Value chain focus

Input & services

Production

Processing

Consumption

Contacts

Muhi El-Dine Hilali, ICARDA, m.Hilali@cigar.org; Barbara Rischkowsky, ICARDA, b.rischkowsky@cigar.org; Barbara Wieland, ILRI, b.whiland@cigar.org

Acknowledgements

This is a product of the CGIAR research programs on Livestock and Fish (2012-2016) and LIVESTOCK (2017-2022) as well as the International Fund for Agricultural Development (IFAD)-funded SmaRT Ethiopia Project - Improving the Performance of Pro-Poor Sheep and Goat Value Chains for Enhanced Livelihoods, Food and Nutrition Security in Ethiopia. The project is led by ICARDA in close collaboration with ILRI, national and other international partners. The Project thanks all donors and organizations who globally support its work through their contributions to the CGIAR system. Organizations contributing to this work are: ICARDA, ILRI, EIAR, ARARI, TARI, and OARI