



RESEARCH
PROGRAM ON
Livestock

*More meat, milk and eggs by and for
the poor*



Thermometers to improve traditional dairy products

Key messages and solution

- Using a thermometer is essential to ensure safe thermal treatment of milk
- The thermometer ensures product quality by indicating the correct temperature to inoculate dairy cultures
- To guarantee the safety of dairy products, they should be kept at a safe temperature.



Benefits

Using a thermometer:

- Improves quality products
- Controls processing steps

Problem statement

- Producers process milk into products without applying any thermal treatment. Zoonotic diseases such as Brucella then forms a serious health threat. Such risks could be avoided by the proper milk thermal treatment which will be checked by a thermometer.
- Further, processing steps of the different dairy products is done without any thermal control. For instance, farmers face the problem of low churning efficiency which can be improved by churning at the proper temperature.
- A thermometer is an important tool to increase yield and quality of products through controlling critical processing steps of different dairy products (pasteurization, culture inoculation, incubation, churning, ... etc).



Evidence

- The intervention was tested in Tigray, Abergelle and Yabello with goat and cattle farmers. The intervention is simple to understand and to apply.
- The use of thermometer was attractive to youth as they were able to understand the concept. The use of the thermometer is linked to milk pasteurization which some farmers start to apply.



Suitability

- The intervention is appropriate for pastoral and agro-pastoral as well as settled communities who are in the dairy processing business.
- The thermometer is available in the local market at the laboratory service provider.
- Resources required are some cash and the knowledge to read.
- The intervention contributes especially to human nutrition (safer food).

Resource requirements (low to high)

Land	○ ○ ○ ○ ○
Water	○ ○ ○ ○ ○
Labor	○ ○ ○ ○ ○
Cash	● ○ ○ ○ ○
Access to inputs	● ● ○ ○ ○
Knowledge and skills	● ○ ○ ○ ○

Impact areas (low to high)

Food security	○ ○ ○ ○ ○
Human nutrition	● ● ● ○ ○
Employment and livelihoods	○ ○ ○ ○ ○
Natural resources base	○ ○ ○ ○ ○
Gender empowerment	○ ○ ○ ○ ○
Market linkages	○ ○ ○ ○ ○

Value chain focus



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