

## Six Sigma in livestock farming

Many of us have heard about farms, stories about traditional diets, about long forgotten recipes in an actual kitchen increasingly assault by "flavor of the supermarket". Farms are a complex area, with a major impact on human health and the environment, on the rural economy and society as a whole.

Production of meat, eggs, milk, transport of these to warehouses, processing and selling them are processes that can be improved also using Six Sigma. Six Sigma is a data-driven systematic approach methodology **DMAIC** - Define, Measure, Analyze, Improve, Control to improve an existing process.

An example of a successful project in a farm is using Six Sigma is "Increase of integral milk sales". In first phase, **Define**, was found that in the shop from the village some customers talk that "the milk from you has sometimes taste bitter or sour - sometimes from day to day " or "color seems to be different" – was heard the voice of the customer (VOC).

For these reasons demand was increasingly smaller. Quantity required was delivered to the store, the remainder being used as food for other animals.

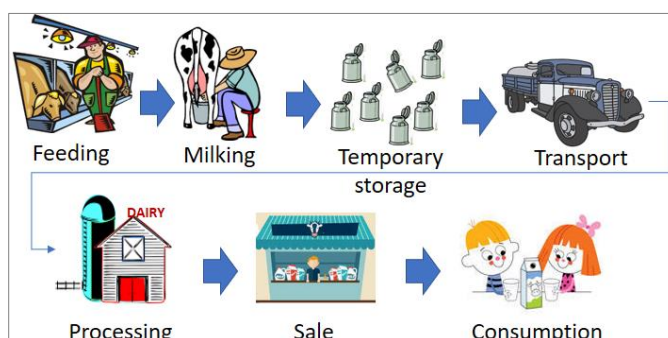
It has studied the process. (See picture below). It has been found that the time of temporary storage to the transport is very high. During this time the milk temperature is inappropriate. Also, sometimes the farm truck delay to transport the cans at dairy from the village.

In **Measure** milk was collected daily from two milking per day during one month and then analyzes were made. Acidity was greatly different from batch to batch, even in the same day.

In **Analyze** were used specific tools. One example of 5 Why: Feeding cows is bitter / Why? / Mold on feed/ Why? / Is Wet / Why? / Feed stored outside / Why? / In barn is raining / Why? / Roof cracked. Same as in the case of delivery time to the dairy: Why? / Milking takes a long / Why? / too much time to get the cow to milking / Why? / Have low productivity ... etc. Were found causes of inconsistency of milk taste: quality of feed (mold on feed), delays in transport.

An Action Plan has designed: See the picture below. After **Improvement** was noted an increase in demand for milk by 50%.

We invite you to Six Sigma courses organized by Effective Flux to reap the benefits of this methodology.



Process: Integral milk production

### Action Plan

No	Problem	Cause	Action	Responsible	Term
1	Inconsistent taste milk	Mold on feed	Inspect feed	Ionescu Mihai	Permanent
2		Food storage space missing	Repair roof	Enescu Gheorghe	21.04.2017
3			Move feed indoors	Chelu Marius	22.04.2017
4		Low productivity	Automatic milking machine acquisition	Ion Vasiliu	01.06.2017