

THE PROJECT

300

farmers

12

heads/farmer with

16.5

ton/farmer of annual milk production

6

milking cows

Holstein

weighing

600 KG

and producing

20 L/day

Baltata cu Negru Romaneasca (local breed)

weighing

600 KG

and producing

6-7 L/day

PROJECT TEAM



OPEN FIELDS FOUNDATION



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BYPRODUCTS VALORIZATION

TO REDUCE FEED COSTS & INCREASE FARMERS' AUTONOMY



- A **33% increase** of milk production per cow
- A **x 10 increase** of milk collected and CBU needs representation
- An improvement of **animal welfare**



To valorize:

- **Agro-industrial byproducts** (e.g. beer dreche)
- **Agricultural byproducts** (e.g. wheat straw)



Today, **80%** of the farmers of the project have introduced these byproducts in their ration.

CHANCE FOR ALL IN ROMANIA



CHANCE FOR ALL

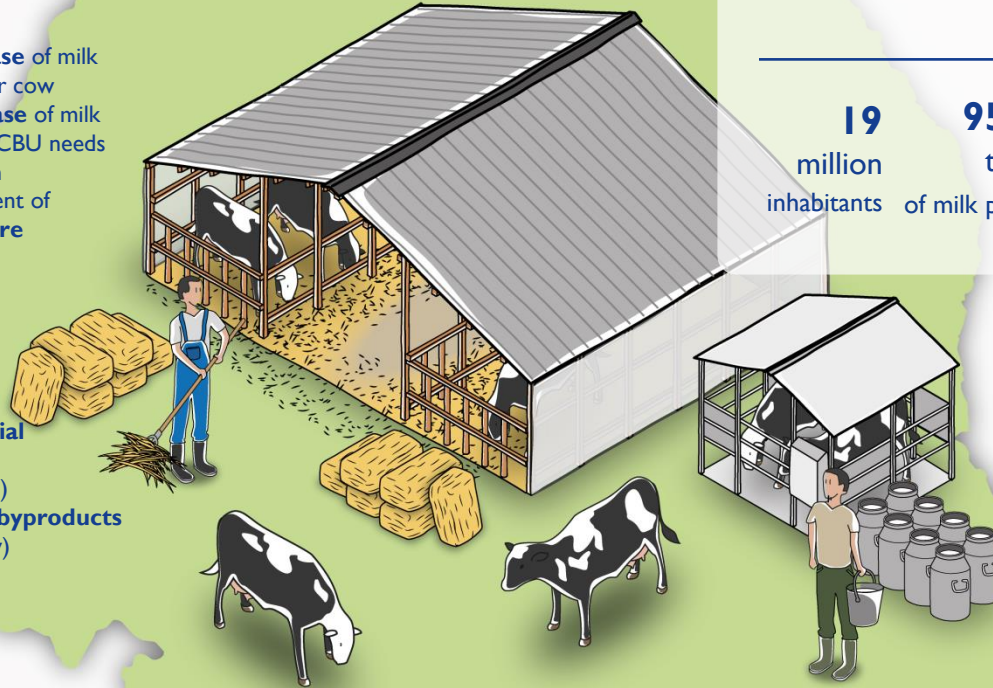
THE COUNTRY

19 million inhabitants

953,405 tons/year of milk production

126,151 tons/year of milk importation

ICONIC PRODUCT








LOCAL DAIRY FARMS

In Romania, we count up to 1.2 millions of cows. 80% of cows are in farms with 1 to 5 cows per farm.

Milk is collected by dairies; there is almost the same quantity from direct selling by milk producers.

FEED AVAILABLE LOCALLY

Currency conversion: 1 € = 4.5 ron

Fodder/ Byproducts	Energy value	Protein value	Rumination power	Digestibility	Cost (Local currency/ KG DM) DM: Dry Matter
Corn grain	Excellent	Weak	Very good	Excellent	0.6 ron/Kg
 Wheat bran	Good	Good	Medium	Medium	0.2 ron/Kg
 Wheat straw	Good	Weak	Excellent	Weak	0.2 ron/Kg
 Alfalfa hay	Excellent	Excellent	Excellent	Excellent	0.6 ron/Kg
 Beer drecche	Good	Very good	Weak	Weak	0.2 ron/Kg
 Beet pulp	Very good	Weak	Very good	Good	0.17 ron/Kg
Silage by corn/barley/alfalfa/triticales	Excellent	Excellent	Excellent	Excellent	0.145 ron/Kg

Byproducts:



Agricultural



Agro-industrial

DAIRY FARMING OPERATING SYSTEM DESCRIPTION

Average from project farms reality

- FARM DESCRIPTION

Total area of farming operation: 600 ha spread (from 0.5 to 120 ha)

Total surface dedicated for feed production: 100%

Total surface for cattle pasture: 1 000 ha out of which 156 is managed by local association

Total feed production per year: 3000 tons of silage : corn, triticales, barley, alfalfa. In 2017, we expect to achieve 7200 tons of silage

- CATTLE DESCRIPTION

Milking cows: Holstein and Baltata cu Negru Romaneasca (BNR)

Weight: 600 KG (Holstein) – BNR (600 KG)




Yield per milking cow: 20 L per day (Holstein) – 6-7 L per day (BNR)

Total herd: 12 heads per farmer





Total milking cows: 6 per farmer

Total milk production per year: 16.5 ton per farmer

EXAMPLE OF FEED RATIONS VALORIZING LOCAL BYPRODUCTS:

FEED RATION 1	
For a cow which produces : 10 KG/Day of milk	
FEED	KG DM per day
Corn grain	4 KG
 Wheat bran	3.5 KG
 Wheat straw	6 KG
 Beer dreche	5 KG
Pasture	25 - 35 KG

Cost: **5.765 ron/KG**

FEED RATION 2	
For a cow which produces : 20 KG/Day of milk	
FEED	KG DM per day
Corn grain	5 KG
 Wheat bran	1.5 KG
 Wheat straw	2 KG
 Beer dreche	7 KG
Alfalfa hay	4 KG
 Beet pulp	20 KG

Cost: **10.225 ron/KG**

See more in Appendix (p6)

Byproducts:



Agricultural



Agro-industrial

BYPRODUCTS: KEY PROJECT INPUTS

The context:

To find feed alternatives to develop the small farmers and the animal welfare.

Some members of the project team realized zootechnical studies and they have learnt in the faculties that it was important to have byproducts in the cows' rations.

One of the project partners (Polaris Group) is zootechnical engineer and knowing how important good quality feed in cows' nutrition is, we created recipe and shared them with the project beneficiaries.

The idea:

To valorize local agro-industrial (e.g. beer drecche) and agricultural (e.g. wheat straw) byproducts.

Agro-industrial byproducts such as beer drecche and wheat bran are very cheap local byproducts and they are really good for cows in terms of nutritional value, animal welfare and also in terms of milk productivity.

These byproducts have to be taken as opportunities for our farmers but we have to take into account that project's farmers are really small and not technified.

Global implementation results of the project:

- **A 33% increase of milk production per cow**

These practices allow to pass from an average of 6 to 9 liters of milk per cow.

- **A x 10 increase of milk collected and CBU needs representation**

From 444 liters of milk collected representing 1% of CBU needs in 2013, we achieve in 2016 4 700 liters of milk, representing 10% of CBU needs

- **An improvement of animal welfare**

The impact:

Today, 80% of the farmers of the project have introduced these byproducts in their ration.

212 out of 300 farmers are implementing these practices in their farm.

The challenges:

- In Chance for All project, we are working with small farmers who cannot see themselves as professional farmers; they don't see their farms as a business. They have no education and the experience in farming is very low.

The dissemination of these practices:

- Existing means of communication:
 - **Field visits** : to spread the good practices among farmers
 - **Technical advices** to farmers with focus on feed management

Due to trainings, we succeed to change the mindset and the vision about farming and to show the benefits of investing in byproducts as feed for cattle.

“[About byproducts as feed for cattle] We have to take the opportunities from the market: the cheapest for our farmers and the best for their cows. (...) Little by little, the results we can see it in milk quantity, milk quality, and farms in general”

CATALIN ANDREICA, Project Manager

ACKNOWLEDGEMENT:

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APPENDIX

EXAMPLE OF FEED RATION VALORIZING LOCAL BYPRODUCTS:

FEED RATION 3	
For a cow which produces : 12 KG/Day of milk	
FEED	KG DM per day
Corn grain	5 KG
 Wheat bran	1.5 KG
 Wheat straw	2 KG
 Beer drecche	7 KG
Alfalfa hay	4 KG
 Beet pulp	17 KG

Cost: **8.415 ron/KG**