



Dairy farm with processing department and energy production unit from renewable sources in Dâmbovița County, Nucet, Romania



European Network for Rural Development

Changing our mindsets Seizing opportunities in the Green Economy

A one-day ENRD Rural Seminar looking at practical Green Economy opportunities in the Rural Development Programmes.

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First, some facts about the county and project...

The dairy farm is located in Nucet, Dâmbovița county in the south of the Sub-Carpathians, between the plains and the southern hills.

The region has a rich agricultural heritage for growing vegetables (64% of total production) and livestock (34%).

In 2016 **19,170** dairy cows were registered in the county, yet only a small number of the farms on which the cows are bred could be considered major producers (above 100 cows), with the majority of farms being subsistence in nature.

Of **2,000** dairy producers in the region, only **7** are considered to be modern industrial farmers, having benefited from support through SAPARD and the NRDP.

Now, some green facts about the project



The effects of such a project are, just to name a few:

- efficient use of human resources , the production process is automatic
- manure management decreased manual labour
- collecting waste (appropriate containers for collecting waste and ensuring their proper management) and transport towards the biogas station.
- disinfecting the habitat and the waste storage contributes to biosecurity within the farm and decreases medication and decontamination
- reduced energy costs and operational losses caused by human error,
- creating new jobs and including persons from various social groups and equal opportunities for women,
- using performing technologies for breeding, exploiting and processing by using collecting and storage waste methods,



Being a new investment, it was elaborated to create activities such as:

- eliminating the pollutant potential,*
- avoid pollution of households and neighbouring populated canterers and preventing the transmission or contamination with diseases,*
- creating biosecurity conditions required for the units exploitation in terms of food safety.*

Within existing livestock farms, free compost of manure involves a high pollution degree, unpleasant odours and bacterial flora environment.

Thus, the controlled composting within the biogas station has led to a significant increase of the farm's biosecurity, which was established at the setting-up of the farm.

Within the controlled composting system, manure is being processed in the biogas station, in a closed fermenter which does not allow gas emissions to get in the atmosphere.



Effects of the project on environment and social level



The project received positive feedback from local farmers as well as from authorities, as it involved local farmers providing fodder stock necessary for the livestock.

Also, during the “Different School Week” organized by Dâmbovița School Inspectorate and with the participation of kindergartens, schools and high-schools from Nucet village and from neighboring areas, the pupils and students visited the farm and observed the animals in stages such as milking, rest, scratching, and also how energy within the farm is produced.

The children were registered at profile high - schools and received the invite to be employed at the farm following graduation. At the moment, **25 jobs** have been created, but planning to increase.

Advantages and disadvantages



- Milk and milk products enjoy high demand in the market, given the good quality.
- The closed circuits within the farm, for the use of milk in the processing department and use of manure in the energy facility, mean reduced production costs and increased traceability for consumers.
- Modernisation of feeding lines, economic lighting, heating and ventilation also decreased operational costs,
- Animal welfare is ensured by creating proper microclimate and technologies,
- Using advanced technologies in order to benefit from the biological potential of the area and reducing fodder consumption and water waste

- Hypermarkets, supermarkets and cash&carry, stores are reluctant towards new products (this being the biggest problem most farmers face);
- Several repeats of the procurement procedure for acquiring equipment given that the bidders didn't always understand the provisions within the terms of reference





How do feel about our project...

"I wanted to do something different, to help develop the community. The project was a challenge, had its difficult parts but overall it has been very rewarding, both in terms of products as well as personal.

As benefits there are obtaining superior quality milk, ensuring energy and these only to name a few. Implementing this project meant combining, in an efficient manner, the economic and environmental benefits and creating a model for potential local investors or from other counties to develop projects with the help of European funds." – **Viorica Bogdan, beneficiary**

I've longed to work in a new domain like photovoltaic or energy and heating from renewable sources.

When I was offered the chance to be hired by BEST TEAM CONSULTING for the energy and heating from renewable sources component,

I did not hesitate, even though I knew that there will be lot of work and a new domain, within a modern farm.

- Ion – Irinel Avanu, engineer and coordinator of the biogas unit

Monitoring this dairy farm and renewable energy project has been an interesting experience, due to the fact that it represents an investment model and a successful project for the region and county regarding projects funded from European funds.

- Veronica Oprea, County Office for Financing Rural Investments, Dambovita