

CZECH REPUBLIC – VYSOCINA

Building a bio-gas station in Desov

This case study described here can be characterised as an typical example of an activity that can potentially positively affect durable linkages between agriculture and other sectors in the rural economy. More specifically, this investment project can potentially result in more effective use of agricultural resources, a diversification of local rural economy, an increase of local value-added, a generation of local jobs and can contribute to utilisation of renewable energy resource.

1. Project details

Nature of the project

Purpose: To build a modern biogas station for the utilization of agricultural materials to produce biogas and subsequently electrical and thermal energy.

Content: Station building and equipment (annual capacity of inputs is 1 700 tn, annual production of electricity is 180 MWh).

Inspiration: The owner of the farm Desov has decided to diversify his economic activities and income by building this unit.

Policy coherence: The project is coherent with strategic aims of the rural development policy (only on the national level), especially the aims to promote diversification of agricultural activities, utilize local agricultural production and increase links between primary production and other economic sectors.

Links between agriculture and the rest of the economy

Main agricultural sub-sectors involved: Maize growing and pigs breeding are the main agricultural sub-sectors involved. Other economic sectors involved include mainly transport, trade and electricity production.

Description of these links: The biogas station is self-sufficient in terms of inputs. Forward links mostly concentrate on sales of produced electricity (which is the main product) and fertilizer (which is the result of biological material transformation).

The project is realised in the framework of a broader initiative directed to implementation of diversified activities.

Scale of the project

Size: Small/middle sized biogas station (2 smaller co-generation units).

Time scale: July 2008 – June 2009

Coverage: Local (Desov)

Beneficiaries and supporters

Beneficiary: The owner.

Supporters: The private agency was hired to prepare the investment proposal.

Finance

Funding:

- a) own financing: total cost 796,000 EUR
- b) Rural Development Programme for the Czech Republic, Axis III, Measure III.1.1: total cost of 1,056,000 EUR

Budget: 1,852,000 EUR, over 4 years

Results

Direct results: Results can be considered as positive and as expected. Sales of electricity produced are stable as the price and take-off of the bio-energy is guaranteed by state.

Main target: Community at large.

Wider benefits: This is very modern unit which can serve as an inspiration for other farmers to diversify their activities. Also, electricity produced by this unit represents an alternative energy coming from renewable energy resource and helps to sustainable development of the region.

2. Relevance of case study experiences for others

Problems: The main problem was related to funding from Rural Development Programme. The approved subsidy was paid when the biogas station had been finished. Therefore the owner had to finance the total amount of the investment from his own financial sources.

Transferability and mainstreaming potential: The project can be replicated successfully elsewhere with respect to local conditions. The main differences between individual biogas stations consist in input materials. However, its results have not been adopted by a wider range of farmers as some of them still do not understand the principle and effectiveness of diversification of agricultural activities.

Innovation: The project is not seen as innovative in Vysocina Region at present, but it was innovative at the time of investment proposal preparation (2007). There are another approx. 15 biogas station in Vysocina Region today.

Institutional aspects: The owner was fully responsible for the project. However, he received advice and information on funding opportunities from LAG MORAVSKOBUDEJOVICKO.

Social aspects: The project created 1 full-time local job and 1 part-time local job.



Environmental aspects (for projects that are not strictly environmental): The project is based on modern effective technologies that contribute to environmental protection (as they meet requirements of development programmes of the Czech Republic and Vysocina Region).

Sustainability: The project is self-sufficient currently. The owner expects to improve his links with local farmers and local shops to sale the fertiliser as secondary product of the unit. The cooperation with contractual power station is expected to be long-term.

Lessons to pass on: The main lesson learnt is related to the importance and necessity of private contribution to the investment (as the approved investment support funds for rural development measures are paid after finalization of the project). Also, it is necessary to have sufficient and reciprocal confidence in customers.