

TITLE Professionalizing small scale pig farming in Eastern Europe - pilot Romania

Project leader: Robert Hoste, LEI Wageningen UR
At request of: Mr. Reinder Schaap, agricultural counsellor at the Dutch Embassy in Bucarest (responsible for the countries Romania, Bulgaria and Greece), and with support from Mr. Martijn Homan, agricultural counsellor at the Dutch Embassy in Budapest (countries Hungary, Poland and Slovakia).
Requested budget: 35,000 €
Countries: Romania, with spin-off opportunities for other Eastern European countries

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1 Motivation and project aims

1.1 Knowledge requirements for the target group

Backyard and small scale farming is very common in Eastern European countries. Such farms perform poorly, are hardly linked to professional suppliers and buyers and are posing an epidemiological threat to local producers and to western European countries as well. These small scale farmers have little opportunity to invest in professional husbandry systems.

A conceptual approach is proposed to professionalize their production system. Supported by a micro financing system, backyard farmers can purchase closed housing systems, they are linked into a supply chain supplying quality feed and buying the produced animals for processing and sale. The entire system, including micro-financing, the supply chain model and the technical equipment should be developed.

This pilot is to assess the feasibility and sustainability of such a system for farmers and the central and local governments, to interest a financing organisation, to interest supply chain partners to set up a common supply chain and to make a first attempt to set up a simple and affordable housing system for just a few animals.

1.2 Definition of the problem

Back yard and small scale family farming is very common in Eastern European countries. Davidova et al. (2013) write "In 2010 in the EU-27 there were 5.8 million semi-subsistence farmers". These are mainly found in the new Member States and especially in Romania. They define semi-subsistence as farms where less than 50% of the farms' output is sold.

According to Eurostat, 95% (2.7 million) of the farms with livestock in Romania have up to 5 Livestock Units (LSU)¹ only, with 54% of the pigs; this category covers the semi-subsistence farms. Next to this, Romania has a few ten thousands farms that could be described as small family farms with pigs. These farms are usually mixed with other livestock and with arable production and usually have 50 fattening pigs or 10 sows including progeny (typically 15-30 LSU in size). Opposite to the small farmers there are only 310 large farms with livestock, with 32% of the pigs in Romania. The FAO has proclaimed 2014 as the year of the family farmer; the Romanian Ministry of agriculture and rural development strongly supports this scheme.

The semi-subsistence farming system supports the economic standard of the rural (low income) population and the rural economy. Weather circumstances (like drought), however influence the ability to feed the animals and thus influence the availability of animals for milk and meat supply of families, thus leading to fluctuating living standard. The pig sector shows an ongoing reduction of its production volume (Calinescu, 2012), which is, at least partly, explained by the low profitability.

As animals in back yards are often kept (partially) outside, introduction of diseases is more likely (by birds, rodents, passengers, wind and other vectors), while other diseases, which normally can be managed well, are endemic here (like PRRS, PCV2, Influenza). Romania suffered from an epidemic of classical swine fever in the years 2005-07, which led to trade bans that lasted several years.

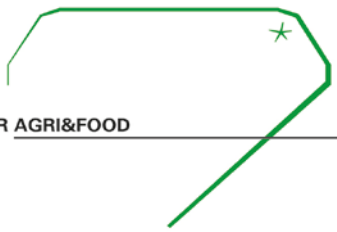
Back yard farming and wild animals are major components in the transmission of such disease agents, and as such they also pose a risk for spreading such diseases to the rest of the EU, including the Netherlands.

Professionalizing animal husbandry in those back yards and small family farms may lead to a reduction of the epidemiological risks, which makes this of international interest, because large-scale (animal) transports throughout Europe can spread diseases over large distances throughout Europe.

Backyard farming is a common farming system featuring in many countries, not only in Eastern Europe, but also in e.g. China and Africa. In the long run, experience with upgrading such systems aiming at reduced transmission of infections may help reduce the overall infection burden worldwide.

Given the sector structure, only 21% of the produced slaughter pigs are delivered to the meat industry. It is estimated that only 10-20% of the pigs in Romania is fed with industrially produced feed. (Hoste et al., 2007). The backyard and small scale pig sector in Romania hardly contributes to the (official) Romanian economy and poses an epidemiological risk for the pig production in the entire EU. Professionalizing may contribute to an improvement of both aspects and to improve the connected businesses like feed and meat industry.

¹ 1 Livestock Unit corresponds to 2 sows, 37 piglets up to 20 kg or 3,33 other pigs.



1.3 Aim(s) of the project

The aim of this project is a feasibility assessment of a concept of professionalizing back yard and small scale family farming, aiming both a better standard of living for those farmers and reduce epidemic risks, which is advantageous for the professional pig farming sector in western European countries as well.

This pilot is to assess the desirability of such a system for farmers and local governments, to elaborate a suitable cooperation model, to interest financing organisations, to interest supply chain partners in feed and meat processing and to make a first attempt to set up a simple and affordable housing system for small scale husbandry. Attention should be given to epidemic aspects, like feed quality (no swill) and piglet supply.

1.4 Target groups:

Backyard farmers, micro finance organisation, other partners in the pig production supply chain in Eastern Europe (in this pilot we focus at Romania) and Dutch housing and equipment companies.

This concept of a professionalized supply chain for small scale pig farming is likely to be valid for other eastern European countries.

1.5 Economic context:

Poorly performing small scale pig farms, which are hardly linked to professional suppliers and buyers and posing an epidemiological threat to other producers, locally and elsewhere in Europe. These small scale farmers have little opportunity to invest in professional husbandry systems and have hardly any access to loans.

1.6 Economic Opportunities:

The idea is to set up a micro-financing system for small scale farmers, to offer them opportunity to purchase closed housing systems, and to link them into a supply chain for quality feed and for processing and sale of the slaughter pigs. The closed housing system for such small scale farms should be developed, which is an opportunity for Dutch housing and equipment companies. Dutch feed and meat companies and animal traders have the opportunity to do business with small scale pig farms in such a professionalised system.

1.7 Economic Threats:

A possible threat is a lack of cooperation in Romania. However, the agricultural counsellor of the Dutch Embassy, as well as the other involved parties, consider this as an interesting concept that is worth to be elaborated. Another threat is that no micro-finance financier is willing to cooperate.

1.8 Desired expertise dlo:

Knowledge of pig farming systems, husbandry aspects like housing and feeding, veterinary and epidemiological aspects, economic aspects, and cooperation within supply chains.

1.9 Expected results:

A feasibility study of such a proposed farming system for pig farming in Romania. If considered feasible, concrete action plans are described for several stakeholders in Romania and the Netherlands.

The concept will be relevant for other European and non-European countries with back yard farming.

2 Work plan

2.1 Approach and time schedule

Phase 1: Orientation and desk research – March-May 2014

Information will be collected on the current situation in the pig sector and supply chain. An outlook of future opportunities for the pig production in Romania will be conceived, based on a SWOT analysis (strengths, weaknesses, opportunities and threats).

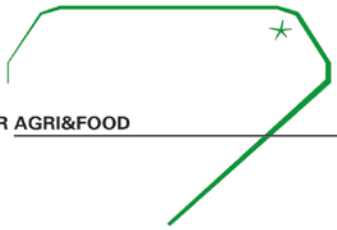
Phase 2: Interviews – April-June 2014

Country visits and interviews with several stakeholders in Romania and the Netherlands (meat and feed industry, financial organisation, equipment developer, government etc.). As part of this phase, LEI will participate in a study tour for Dutch SMB companies to Hungary, Serbia and Romania (March 30 – April 5) with several meetings with local stakeholders, as jointly requested by the agricultural counsellors of the Embassies in those countries.

Phase 3: Elaborating the concept – July-September 2014

Attempt to setup a consortium; defining action points for stakeholders and writing the business concept

Phase 4: Dissemination – October and November 2014



Presentations both for Romanian and Dutch stakeholders and interested parties and writing an article for an international professional magazine

2.2 Outputs

Business concept in powerpoint-format.

2.3 Dissemination to target groups

Presentations both for the interviewed Romanian and Dutch stakeholders.

Article in an international professional magazine.

3 Project organisation

3.1 Project team (Wageningen UR)

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3.2 Involved parties (besides Wageningen UR)

Name	Organisation	Role	Email address	Telephone No.
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Van der Lee Stalinrichting develops housing solutions.

Van Rooi Meat has experience in livestock and meat trade in entire Europe; they offered to share insights and to making local contacts.

De Heus Koudijs produce and sell animal feed in the Netherlands and other countries in and outside Europe. De Heus Koudijs currently conducts an own (internal) market study on strategic development in eastern European countries, including Romania. This study links well with our study. De Heus Koudijs has two local feed dealers in Romania, one of them is ProFeed. ProFeed will participate in the study.

Pro Agro National Federation is a professional organisation for agricultural producers, the feed and meat processing industry in Romania. Pro Agro is an umbrella organization that responds to the challenges faced by its members by promoting and supporting a sustainable rural economy in which agriculture is essential for the future.

3.3 Monitoring and evaluation

During the project there will be regular contact to the agricultural counsellor in Romania as to monitor the project. An evaluation of the draft result will be done by a senior researcher of LEI with relevant expertise.

4 Budget

Budgets 2014

Financial source	Budget
Topsector Agri & Food, cluster International	35,000 €

5 Summary

This project is a feasibility study of a conceptual approach aiming at improved performance and reduced epidemiological risk of small scale pig farms in Romania. In this concept, supported by a micro-financing system, small scale farmers purchase closed housing systems, they will be linked into a supply chain; they will be supplied with safe quality feed and the produced animals are sold for processing and sale. The entire system, including micro financing, the supply chain model and the technical equipment needs to be developed. This pilot is to assess the desirability of such a system for farmers and local governments, to elaborate a suitable cooperation model, to interest financing organisations, to interest supply chain partners and to make a first attempt to set up a simple and affordable housing system for small scale husbandry.

This feasibility study, if the model is considered positive, leads to a business plan with concrete action points. Results will be presented to Romanian and Dutch stakeholders and interested parties (communication will be in English).



6 Project keywords:

Backyard, pig production, housing system, micro financing, supply chain, epidemiological risks, Romania

Literature

Calinescu, D., 2012. *Support for Farmers' Cooperatives: Country Report Romania*. Wageningen, Wageningen UR.

Davidova, S., A. Bailey, J. Dwyer, E. Erjavec, M. Gorton and K. Thomson, 2013. *Semi-subsistence farming – value and directions of development*. Study for the European Parliament. IP/B/AGRI/IC/2012-65. [http://www.europarl.europa.eu/RegData/etudes/etudes/JOIN/2013/495861/IPOL-AGRI_ET\(2013\)495861_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/JOIN/2013/495861/IPOL-AGRI_ET(2013)495861_EN.pdf)

Eurostat. *Farm structure in Romania*.

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Farm_structure_in_Romania#Further_Eurostat_information. Accessed: February 2014.

Hoste, R., C.P.A. van Wagenberg, R.H.M. Bergevoet en L. de Schutter, 2007. *Investeren in de varkenskolom in Hongarije, Roemenië, Oekraïne en Rusland*. Den Haag, LEI, Rapport 2.07.17.