

# **Businessplan for the development and innovation of agricultural farms in Poland (Stara Kamienica)**

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Picture 1: Our AMC group and Coach

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## **Abstract**

Ecotourism has become the fastest growing tourism market in the world because people like to spend some relaxing time in the nature by living in a very 'back-to-basic' way. Nemo is an organization that has taken ecotourism as an objective for sustainable development of agricultural and tourism in Izer region of Poland. This organization has the potential to make profit of the benefits of ecotourism in this beautiful landscape, which is in danger of being destroyed through mining business.

We are a group of master students from Wageningen University, doing an assignment for NEMO to strengthen the concept of ecotourism of this organization and to attract investors. In this regard, we made a businessplan. In this book we mentioned current hypothesis of ecotourism in Nemoland region and prepared a list of suggestions to offer to Nemo and stakeholders in stara Kamienica for improvement of ecotourism in various ways. We give propositions of better marketing strategies so that Nemo and also the local farmers can get profit in current circumstances.

NEMO wants to enlarge their network of cooperation with farmers for enhancing ecotourism. Therefore, we made a model that represents present cooperation with a local farmer and on the basis of that developed a model for a future network with farmers. We mentioned about legislation for their quality business. We provide detailed information about possibility of sheep farming and pros and cons of this business.

Soil quality and planting status is difficult in that region. However, we give possible hints for improvement of soil quality and various crops option to grow in that region. We also supply the information about source of finance so that farmers could get some money to commence their own business and can cooperate for enhancing ecotourism in that region.

In this report several issues are addressed and specific suggestions are given in order to strength ecotourism to become a positive and effective solution for the areas to overcome economic challenges.

# Chapter 1 Introduction

## 1.1 Introduction

We as MSc students from the University of Wageningen started a project for Nemo about the development of small scale agricultural in Poland, the area close to Jelenia Góra. During the project we visited Stara Kamienica and gathered as much relevant information as we could about the situation. We got to know the area in the interest of giving the best solutions about how the small scale farms development can be combined with tourism.

We saw the forest with waterfalls and the mountains could provide a beautiful landscape for the tourists. The relish of the traditional products, the smoked sheep meat, the special cheeses and breads and the vodka are produced nowhere just as in Jelenia Góra. It could provide opportunities to sell them to the visitors – we also tasted and bought something – and provide income for living to the local people.

In spite of the nice introduction there are many problems that the local people have to face. The roots of the problems are in the history of the region.

### History of the region

After the Second World War, German people who always invested and lived in the area had to leave the region, and Polish farmers from Ukraine were forced by the Russian Government to move to that place and the cultures were separated.

After the collapse of the communist system farmers in Poland completely face a new system called capitalism, they had to start thinking as entrepreneurs and their sales are not guaranteed anymore. At this moment they cannot find a new reality to adopt the new rules and the new thinking. (Nemo, 2005)

Because of the rich minerals of the area in 50's the Russian government opened uranium mining. After 2000 new investors from Germany and from Poland arrived. They're planning to open a mine again which will destroy the nature in the area. (Kasia, 2005)

After the government changed from communism to capitalism many subsidies for agricultural activities stopped. This caused most of the small scale farmers to stop their farms. Nowadays they live from social allowances and the farmlands aren't used anymore. The money they get is just enough for basic needs. The thought of communism is still very present in the people, what makes it hard for them to start new businesses and try to get an income themselves.

These are very serious problems because at this moment the small scale farming is not producing enough products and enough money to live and invest in the area. That is why local people prefer to go to cities and look for jobs and other opportunities. This fact and the threat of the mining cause the destruction of the area. This can influence also the tourism because it will affect the attractiveness of the region in a bad way. Also the crisis in the area of Stara Kamienica is because of the lack of investments, management and knowledge. Also the low milk prices and strict EU regulations are causes of big problems for farmers.

Nemo is an organization for Dutch tourists that are interested in hiking holidays in a 'back-to-basic' and close to nature way. In general Nemo created a market in Holland for tourism in Poland. They may combine it with promotion and selling regional products. Nemo is also able to organize trips, introduce the area, and serve information and accommodation to tourists.

Nemo's expectation from the project is to develop small scale agriculture farming in combination with tourism. This is possible because of the characteristics of the area, the financial subsidies both from the Polish government and the EU are available and there are farmers willing to cooperate and invest in new opportunities. They are the people who are really interested in developing that area.

## 1.2 Objectives of the project

In this part we try to seek the answer for how can we help Nemo to combine agro- tourism and regional product development to sustain the nature of the area.

Our main objective is to advice Nemo and the farmers by creating a businessplan for a model farm where Nemo cooperates with Josef Zaprucki, a local person who keeps sheep as a hobby. They can start developing the area with expanding the opportunities given for developing the farm combined with tourism; right after the businessplan is published. Therefore we first describe the situation at this moment. Then we give information and recommendations on different aspects which are important for the farmers, like sheep farming, soil improvement and use, certification, financial support and the marketing plan. These are all aspects the farmer meets when running his farm or other business.

The chapters of the businessplan contain practical tools for the farmers how to develop their farms and regional products and information for Nemo how to combine it with tourism. The chapters are organized with the themes of the sub objectives.

## 1.3 Sub objectives of the businessplan

- Introduce farmers to Nemo and its' activities and goals by describing the activities of the organization. In this way they become aware about it and this will decrease the inter-relational distance. (chapter 2)
- Describe how Zaprucki can participate in the model as sheep farmer in Mała Kamienica by describing his production activities. He will function as an example for cooperation with a campsite for other farmers. The farmers will be aware that providing activities or products to tourists will give the chance to be economically independent from the government. (chapter 2)
- Show the possibilities of having a sheep farm in Stara Kamienica by presenting a possible cooperation between NEMO and a sheep farmer. Possibilities for farms with other livestock have been analyzed and seemed not viable in this society. Therefore a model for a sheep farm has been created. Practical tools for implementing this model will be given. (chapter 2)
- Inform farmers and NEMO about certification of the ecological and organic farm by giving an overview of all organisations and possible ways to deal with them. Certification is very important for farmers who have high production; otherwise they can't sell their products on the market. Regulations and information about certification and different institutes will be given. In this way, the farmers know what they have to do when they want to produce for the market. In some seasons no tourists will come, so the products have to be sold on the market. (chapter 3)

- Inform farmers about how and where they can apply for financial supports by presenting possible financial sources in EU and in Poland. There are funds and premiums for agricultural businesses in Poland. All information has to be combined about this, so the farmers will have an easy overview of all funds they can apply to and in what situation. Also, their strong and weak points for application for subsidy can be analyzed and improved. (chapter 4)
- Inform farmers and NEMO about sheep farming. The reason for this is that not enough practical information is available. Practical tools will be given to complete the model farm constructed in previous research for Nemo: (chapter 5)
  - o By presenting the possibilities for sheep farming in Stara Kamienica.
  - o By giving an overview of the possible improvements of land use in that area.
- Give information on the status of the soil and plants and how to deal with it as effective as possible. The quality of the soil is very poor, so special products need to be produced. Large scale profitable agricultural products can't be produced in a profitable way, since nearby better pastures are available. The focus needs to be on a niche market and local products. To be able to use the soil, recommendations will be given to improve the soil and make use of the soil as optimal as possible. (chapter 6)
- Improve the marketing of the agro tourism in that area. At this moment there is hardly a market for the local products of farmers in Stara Kamienica. Since consumers won't just drop out of the air, there needs to be a good marketing plan. Opportunities for marketing and different groups of consumers will be analyzed in the following way: (chapter 7)
  - o by creating a marketing plan for the combination of regional products and eco-tourism
  - o by creating an attractive map for the tourists about the surroundings of Stara Kamienica
  - o by creating an attractive list with pictures of the most important regional products

All this information together will give a holistic overview for all stakeholders about the opportunities for developing this area by small agricultural farming and agro-tourism.

## Chapter 2 Businessplan

### 2.1 Introduction

This businessplan will focus on the cooperation between Josef Zaprucki (farmer) and the organization Nemo (Dutch hiker and nature tourism centre) as an example of how collaboration between a campsite and a farm is possible. It isn't a model which has to be followed in every aspect: farms with other organization structures (eg. One-man farms, family farms) can cooperate in this way with Nemo (or other campsites). This can develop an organization which combines the opportunities of the landscape as optimal as possible and provides a good alternative against mining. This businessplan is created to supply the model farm with agricultural knowledge on the soil, information about plants and animals. Also we provide information about certification and financial support. The information will be

provided since not enough practical information about these subjects is available at this moment. With this information the farm can develop itself further in the future. This businessplan is meant to support Nemo and farmers who want to learn from the concept of the model farm. It's meant to give the farmers some additional insight in the opportunities for eco-tourism and farming. An alternative source of income will be established in their region. Information about how to use this opportunity in an optimal way will be given.

#### Current state of farmers in Stara Kamienica

Farmers in the southern part of the District Stara Kamienica have a lot of difficulties in continuing their farm. The soil isn't very fertile, they have few machines and materials for the use of the soil, the farm sizes are very small and the knowledge about farming in this area is most of the time lacking. The mostly farmers, with roots in Ukraine, came to this area after the Second World War. In the Ukraine they had different types of agricultural businesses. For many years they were afraid the farmers who owned the land before and in the Second World War would return and reclaim their pastures. This caused little investments in the soil and little knowledge about the way to use the land optimally. Above all, there is hardly a market for the few products they produce. Therefore, most of them already stopped farming and are now living from amount of money they get from the government.

In the past, they got subsidy from the communistic government to continue farming and they were certain of a market for their products. In many other countries only big state farms were supported, but in Poland were lot of small farmers, because they also got some support from the government. This is still visible and adds to the historical cultural value of the landscape. But it also gives little opportunities for the farmers to use high-tech tools on their small pastures, which are too small to effectively use the machines. That there is no money for buying these tools should also be considered.

In 1998 a house and some hectares of land have been bought by Nemo for starting a tourist campsite in that area. The nature and villages are very attractive to the members of Nemo. But the area is threatened by a mining company who wants to destroy the beautiful surroundings. Trying to find a way to give these farmers another source of income, directly related to their small scale farms, Nemo decided to cooperate with a farmer. The tourists who visit Nemo are interested in helping to develop the local area (and thus farmers) and they can do this in different ways. The present relationship and the situation they try to reach for are explained in

In the future, the model of figure 2.1 can be used for more farms, so a larger cooperation between campsite(s) and farmers can start. But at this moment cooperation is difficult, because of all the negative thoughts of the communistic time that come up in the Polish peoples' minds when they hear about cooperation. Still, slowly they will get used to working with Nemo and other farmers, since cooperation can be a solution for their economical critical situation. Above all, there is a real threat for mining in the area, which binds all efforts of the local people to fight against it.

## 2.2 Description of Nemo

NEMO is an organization for Dutch tourists who like to hike. They came to Stara Kamienica for the beautiful surroundings, the small-scale farms and unique cultural historical value of the landscape. Some years ago they bought a house with some land and established a campsite for NEMO-members. Nowadays, about 500 people visit Nemoland every year, with the highest peak in July and August.

The characteristics of NEMO-members are that they are willing to help to rebuild the local landscape and feel connected to it, which means they come to the same place for some years and are quite idealistic, to make the world a better place. They wish to have contact with the local people to see how they live and have dinner in their house. In this way they stimulate the local economy very directly. Also, they like to have a holiday 'back-to-basic'; not too much comfort and live in balance with nature around them. Therefore, they buy preferably biological or regional products, sleep in tents or wooden group accommodations and have only few sanitary accommodations (3 eco-toilets and 2 showers).

In the future, NEMO wishes to broaden their activities for Nemoland with groups of people visiting the place and some quite permanent visitors. In this way, the spreading of the number of tourists in the area over the months will be better and the local economy can be stimulated in a structured way. The groups can be schoolchildren who come with their school or with an association to learn and do things about nature and history. The history of the area is very interesting because of the inhabitants are originated from the Ukraine and forced to live here after the Second World War. The nature is beautiful, the area is very calm and there are a lot of old creepy stories about the places there.

The more permanent visitors can be students who have their internship there. But also people who have been on the wrong track and want to improve their life. They can do basic activities, close to nature work and this can help them recover. Former tourists helped building a shed and made a bridge over the river. Being in a small community for some time can make it easier to get in good contact with people again, and makes it harder to start going on the wrong track again, since everybody knows a lot about everybody in a small community.

Because Nemo wants to cooperate with the farmer Josef Zaprucki in the model farm we now give an overview of his role in this cooperation model.

### 2.3 Description of Josef Zaprucki (farmer)

At this moment Nemo has cooperation with Josef Zaprucki. Because of his enthusiasm, high education and good location he was aware that his contribution would be valuable in the model farm.

Josef Zaprucki is a teacher of German at the High school (Kolegium Karknosze) and near his house he keeps about 8 sheep and 10 goats. He is a hobby farmer. In the future his flock of sheep will be expanded to the number of twenty to thirty. He thinks about buying blackhead sheep, since he can get some from Germany and they are suitable for meat production. Meat production is more profitable than milking the sheep. Josef knows how to slaughter the sheep and there is a butcher at some km distance where he can bring his sheep.

At this moment most of the sheep of Josef Zaprucki are from a Belgian breed, which is a breed with little meat production, but they produce some milk. From the milk of these sheep and his goats Josef produces cheese. Also, his sister in law bakes breads sometimes, which are sold for quite a high price. All these products are only made when people of his school, his only group of consumers till now, ask for it. The products are sold unofficially biological, since he tries to produce all of it ecologically, but doesn't have the certification. Everything is done in a traditional way, which can be interesting for tourists, but also for local farmers, who can learn something from it. Josef learned all these skills from his father. But many farmers miss the tools and money for producing in a traditional way.

He owns 30 ha of land, some ha with grains and potatoes but mostly grassland. Then he rented 20 ha of grassland which belongs to NEMO for a period of time. Together with another farmer he buys machines to work on the land, e.g. to cut the grass. Buying some more machines is his first priority now, but later on he wants to build some rooms in his house for renting them to tourists.

Considering the farm of Josef as a typical Polish farm isn't possible, since he is highly educated and most of the other farmers aren't. He is a hobby farmer and most farmers don't have a job next to farming. But his farm and his cooperation with Nemo can be an example for other farmers to see and use the opportunities for agro-tourism. Since it is practical and the farmers will have enough knowledge to start farming.

Here follows the model of the cooperation between the farmer Josef and Nemo.  
(Only stakeholders important for the cooperation are mentioned in the future model.)

#### 2.4 Model farm of the present and future situation

## Chapter 3 Certification

When a farm wants to produce in an ecological or organic way it's important the farmer is aware of all the certification and control organisations. Because the German ecological/organic market is very big, it would be a nice opportunity for Polish farmers to explore the opportunities for producing ecological products for the Germans. In the seasons that few tourists visit the area of Stara Kamienica, the farmers can have a market in Germany. The whole year their products will be sold. Certification and control is necessary for this otherwise it will be too difficult to compete with other farmers. In this chapter an overview of all organisations and possible ways to deal with the organizations is given. The organisation of controlling and certifying for organic agriculture is not very structured in Poland. Ekoland and PTRE are the most important certifying organisations.

### 3.1 Ekoland

The organic agriculture movement started in the 1980's due to growing ecological public awareness. Early seminars given by the "revolutionary" scientists and German experts led to the establishment of the first organic farmer's association, called Ekoland, in 1989.

Ekoland is founded in 1989 and since 1990 connected with IFOAM (International foundation of organic agriculture movement). In 1989, 27 companies became certified by Ekoland. The number of farms increased until 200 in the middle of the nineties. Then it stagnated because of two reasons. Firstly Ekoland only wanted to certify companies who were willing to take a period of change in consideration for two years, in which they aren't able to sell their organic products on the market because the land has to adapt to the ecological way of agriculture. Secondly, another organisation was created: the Polish Society of Ecological Farming (PTRE) which became a competitor to Ekoland.

This second organisation also works on the basis of IFOAM but has other guidelines and labels than Ekoland. In 2001 more than 1.100 agricultural companies with more than 20.000 hectares of land were connected with the PTRE, while Ekoland almost had 700 companies with about 15.000 hectares of land. Nowadays, Ekoland and the PTRE are active as controlling instances with 400 and respectively 200 controlling companies. These instances control a few food processing companies, but they also give certificates.

The supervision of the certification of agriculture in Poland is done by the head of the inspection for sale and processing of agricultural products. This is a part of the Polish Ministry of Agriculture. The Polish centre of accreditation has to control the certifying organisations. Companies, who are exporting to other EU countries from May 2004, are now also controlled by European inspection organisations like SKAL, BCS, Lacon, INAC and Ecocert. Some of the biologically agricultural and processing companies are checked by different organisations.

After the 1st of May 2004, when Poland joined the European Union, the Polish certification system changed. Only six of the above mentioned certification bodies, accredited and nominated by the Minister of Agriculture and Rural Development and accepted by the European Commission have the right to control the farms against EU regulation 2092/91. Foreign certification bodies are operating in Poland, controlling the farms against other, private standards as for example Bio Suisse, National Organic Program (USA) or Demeter. The total number of controlled organic farms in Poland in 2003 was 2.304 (0.11 percent of the total number of farms). When the Common Agricultural Policy and especially the agro-environmental programs (a measure of the Rural Development Program) came into force, the interest for conversion to organic farming increased. According to the first results regarding the implementation of the agro-environmental programs in the autumn of 2004 about 3.500 farmers applied for the control of their farms and for subsidy.

Table 3.1: Number and acreage of organic farms certified by EKOLAND

Year	Number of farms	Hectares
1990	27	300
1991	49	550
1992	94	1 240
1993	174	2 170
1994	225	3 540
1996	236	6 855
1997	207	6 010
1998	181	5 546
1999	254	5 050
2000	183	6 380
2001	669	14 967

Source: EKOLAND archive

### 3.2 Advantages and disadvantages of agriculture in Poland

The certification and control has to deal with a lot of problems but there are also other opportunities, that's why we give an overview of advantages and disadvantages of agriculture in Poland. So farmers become aware of the possibilities in their occupation.

Poland knows different areas and different ways of farming. Still, some general remarks have been made about agriculture in Poland. In this chapter the advantages and disadvantages are mentioned in the next table.

Table 3.2: Score op de concurrentiefactoren Products and Foodstuffs, 2003

Competition factor	Judgment	Explanation
Primary production factors	+	- Labour and land are very cheap;
- Capital is very expensive		
Secondary factors	-	- Weak structure of Agricultural companies

Government policy +/- - Priority of social economical rural problems and problems with integration in the EU;  
- Government has attention for biological farming: there are fees for supporting the change from traditional to ecological farming.

Cooperation between links in the chain and the institutes - - No Retailing and processing industry  
- Strong division of organisations  
- little market orientation  
- No link between control and certification

Home market - - No Motivation, no buying power, unknowns with biological products

Totally +/- Potentially, Poland can produce a lot biological products, but there a lot of problems they can encounter on the long term.

### 3.3 ECEAT Poland

One of the options to get subsidies for changing farms to ecological farming is to apply for help by Eceat. In the next chapter the goal of Eceat and the way they work will be explained. It's one example for farmers to start ecological farming in combination to agro tourism.

The mission of the European Centre for Ecological Agriculture and Tourism-Poland (ECEAT-Poland) is to use ecological tourism to organic farms as a tool to help small farmers make a sometimes difficult transition from conventional agriculture to ecological agriculture. In this way the farmers benefit financially while environmentally sound practices are spread, and the natural landscape, biodiversity and local culture and traditions are protected and shared with visitors. By working in a cooperative and ecological way, small Polish farmers will be able to protect their livelihoods and their traditional way of life in a coming period of difficult economic and social transformation.

Since the farmers in the District of Stara Kamienica can use some support by transforming their farm or even starting a farm in combination with agro-tourism, the regulations and options ECEAT Poland should be considered carefully. The regulations of ECEAT will be explained. Then the advantages and disadvantages of joining ECEAT from the viewpoint of farmers of Stara Kamienica can be analyzed by the farmers themselves, because many farms are in different situations.

ECEAT-Poland was co-founded by Jadwiga Lopata, who is an Ashoka Fellow. Ashoka: Innovators for the Public is a non-profit international organization supporting social entrepreneurs from developing countries who have innovative plans for positive social change.

How ECEAT projects operate:

a. First small farms are identified whose farmers are interested in the idea of ecological farming and ecological tourism

b. The farms are visited and the farmers are advised about participating in the project and its advantages.

c. Formal training sessions are held for small groups of interested farmers with two to three training sessions over a period of one year. The goal of these training sessions is to persuade the farmers to become ecological and to participate in the ecotourism project as a means to help this transition. Two to three trainers work in one-day training sessions to provide practical information on ecological agriculture, ecological tourism to farms, the growing market for ecological products, general ecological awareness, and the necessity of cooperation among farmers to achieve a successful transition to ecological farming. Once a farm meets Ekoland (an internationally recognized certification process for organic goods) standards for at least half of its products, it may participate in the tourism program. Ekoland alerts ECEAT-Poland immediately if one of their participating farmers falls below the threshold.

d. Descriptions of participating farms and their surroundings and local tourist attractions are prepared and published annually in an ecological tourism brochure in the local language as well as other languages with the cooperation of the international ECEAT network. The brochure provides information about the project's ideas and goals, directions to the farms, information about the farms and farmers, food and accommodation availability and prices, descriptions of the surroundings, tourist activities and attractions. The brochures are distributed to interested persons. The farms are publicly marked by placards as ECEAT farms so that tourists can identify them easily.

e. A promotional campaign emphasizing the social, ecological and economic goals of the project is conducted using press conferences, radio and television interviews, newspaper and magazine advertisements, and articles. Further promotion is accomplished through tourist fairs and distribution of leaflets and brochures in shops and public places. These dissemination efforts spread awareness of ecological tourism to organic farms and attract visitors to the farms.

f. Visitors register as ECEAT farm guests, and a financial record of ECEAT tourists is kept by the farmers. Farmers donate 10% of their ECEAT tourist earnings to ECEAT-Poland to help pay for publication and distribution of the brochure for the project. ECEAT brought over its first 400 tourists from Western Europe to fourteen Polish eco-farms in 1993. In 1996, the movement accommodated 1,200 tourists on 59 farms. They didn't do a survey for 1997 visitors, but they know that many visitors came for a return visit, and 75% of the farms have remained in their project. In 1997, due to widespread flooding in July in Poland, they lost about 70% of the expected visitors, and had about 800 visitors. In 1998 there were more than 3000 visitors.

Some of the farmers in the project are running eco-education summer camps.

"A typical holiday involves walking in the mountains and countryside, riding horses and swimming in ponds and lakes, often with farmers' and tourists' children going off together. Tourists often participate in farm life, including taking on farm chores such as harvesting fruit, milking cows and making cheese, butter and jam. Collecting herbs, berries and mushrooms is very popular, as is baking bread."

There is progress in economic cooperation among the farmers, for example, participation in organized walking tours to several ECEAT-Poland farms, in cooperation with a professional tourist office.

g. ECEAT-Poland publications and videos give more information about ecological tourism, ecological awareness and ecological cooperation to the farmers in the project, as well as to the public.

The primary beneficiaries are small farmers in Poland with farms around 7 hectares or less (there are more than a million such farms in Poland). Secondary beneficiaries are the tourists from Poland and abroad (mostly Dutch and German) who visit the farms and benefit from the organic food, the healthy surroundings and the culture of the countryside. Other beneficiaries are the people who buy organic foods from these farms through shops or other outlets. And the country as a whole benefits from the protection of the environment and the cultural values of the countryside.

The recommendations that can be given from this chapter are:

- It's important for the people who run the model farm to be aware of all the rules that are applicable to the activities. Because there are a lot of rules and regulations it's important to create alliances with the organization ECEAT whom can help them with asking for subsidies.
- The model farmer his first focus has to be on home-made products and regional products for tourists, before producing really certified organic products. This will give some time for getting knowledge about production of locally produced organic products and how to implement all regulations (and if it's possible to follow these regulations).
- ECEAT Poland has been active in Stara Kamienica, but their popularity is decreasing. The small farmers started renting rooms to tourists already and aren't encouraged to follow the ECEAT rules.
- Nemo can encourage farmers to apply to ECEAT if they are ready for changing their farm to ecological farming. At this moment most of them are not ready for this, but later on ECEAT can give a good opportunity and for a more certain market, a brand for your products or farm is important.

## **Chapter 4 Financial support for farmers in Poland**

### 4.1 Introduction

Poland, after becoming a member of United Europe in 1st may 2004, received the possibility of using different ways of support. Among them the special pressure is put by the EU on supporting development of agriculture (rural development).

In EU, programs work for a 7-year period of time, because the budget it set for that time. In 2004 new member countries joined the Union in the middle of the programming period, and they have a 3 years shorter period implementation. Next program documents prepared by Ministry of Agriculture and Rural Development will be for the period of time 2007 – 2013.

To compete with the other countries of the EU, Poland needs to develop its' agricultural activities in a special way. Many high producing big farms aren't available, so the focus must be on different types of agricultural businesses. In this chapter financial sources for the small scale farmers in Poland will be analyzed. Special focus will be on the rural development plan. This plan can be applied in Stara Kamienica quite well. Nemo can create awareness among the farmers about these subsidies by organizing workshops for the interested farmers.

### 4.2 Financial sources for agriculture and rural development in Europe

Common Agriculture Politics is done within two pillars. The first one is about supporting the agricultural sector through direct and market liabilities, second is about instrument to support rural development and this includes instruments as the Rural Development Plan (PROW). The main source of financial support in United Europe is from European Orientation Fund and Agricultural Guarantee.

#### 4.3 Basic information about Rural Development Plan

The goals of the activities in this program (the rural development plan) are to support rural development with taking into account specification and different function, not only agricultural, but also environmental protection and biodiversity as well as social and economic function. The Plan will be accomplished all around Poland. There are nine actions in base of the Plan:

1. Structural rent
2. Support for low-commodity farms
3. Support for group of producing farmers
4. Support for areas with unfavourable farming condition
5. Support for farm and environment undertaking and improvement of animal welfare
6. Farm adaptation to EU standards
7. The creation of forests at former farming areas
8. Technical help
9. Supplement for direct payment

Action of PROW (rural development plan) is divided in to two parts. To the first belong instruments good known and described in EU legislation, which are implemented in EU countries from few years like: structural rent, creation of new woods areas and support for areas with unfavourable farming condition. To the second group belong new instruments, proposed by European Commission to new countries. These activities include: support for low-commodity farms, support for group of producing farmers, technical help and farm adaptation to EU standards.

Farmers in Stara Kamienica who are interested in getting subsidy should go to Restructuring and Modernisation Agency of Agriculture in Jelenia Gora. Then will get papers and help how to fill in the papers. Also, they have to write a business plan. For this, help will be given from the agency. The amount of papers (many papers) can be an obstacle for farmers to apply to get these subsidies. But nothing can be done to decrease the number of papers, since it's arranged by the government.

All of the money for PROW is from public sources, 80% is from Guarantee Section from European Orientation Fund and Agricultural Guarantee, next 20% is from national budget. From this nine actions only technical help is directed to institution supporting or implementing PROW. The others actions are directed to farmers. Poland decided also to use part of the money from PROW to support direct payment, what helps to increase level of direct payments for farmers.

#### 4.4 The financial sources of the Plan

Table 4.1: Financial sources for PROW between 2004 – 2006 (in million euro)  
Specification 2004 2005 2006 2004-2006

	Public expenses			From EU			Public expenses			From EU			Public		
expenses	From EU			Public expenses			From EU			Public					
Structural rent	148,5	118,8	213,5	170,8	278,5	222,8	640,5	512,4							
Support for low-commodity farms	91,3	73,0	127,5	102,0	157,5	126,0	376,3	301,0							
Support for group of producing farmers	6,3	5,0	8,8	7,0	10,3	8,2	25,4	20,2							
Support for areas with unfavourable farming condition	244,8	195,8	366,0	292,8	366,0	292,8	976,8	781,4							
Support for farm and environment undertaking and improvement of animal welfare	75,0	60,0	116,2	92,9	157,7	126,1	348,9	279,0							
Farm adaptation to EU standards	72,0	57,6	83,9	67,1	87,5	70,0	243,4	194,7							
Creation of new woods on old farming areas	26,5	21,2	34,0	27,2	41,3	33,0	101,8	81,4							
Technical help	13,0	10,4	11,3	9,0	9,7	7,7	34,0	27,1							
Supplement for direct payment	269,5	215,6	240,3	192,2	195,5	156,4	705,3	564,2							
SAPARD	140,0	105,0					140,0	105,0							
Total	1086,9	862,4	1201,5	961,0	1304,0	1043,0	3592,4	2866,4							

#### SPO “Restructuring and modernization food sector and rural development”

In accordance to strategy of National Development Plan the structure of operating programs, accepted by Poland In period 2004 – 2006, foresee realization of goals connected with agro-social development in frame of 6 one fund projects. One of them is called SPO (Sektorowy Program Operacyjny – Sectoral Operating Program) “Restructuring and modernization food sector and rural development, 2004-2006”. In that project there are 15 actions divided between 3 priorities:

Priority I – Support of changes and adaptation in food and agriculture sector.

It will be done by:

- Investing in farming – the help is by refund part of expenses taken in account in a business plan. Max refund can not be more than 300,000 zł. Maximal level of refund is:
  - o 50% expenses from accepted project,
  - o 55% expenses from accepted project when young farmer,
  - o 60% expenses from accepted project, when the farm is with unfavourable farming condition,
  - o 65% expenses from accepted project , when the farm is with unfavourable farming condition and young farmer
- Simplification of start for young farmers – financial support up to 50,000 zł.
- Education
- Support in agricultural advising
- Improvement of processing and marketing of agricultural products

## Priority II – Balanced rural development.

It will be done by:

- Reintegration of land
- Renovation of village and maintaining and protect culture
- Differentiation of farming activity in case to protect different activities and alternative sources of income – max financial support 50% expenses from accepted project, but no more than 100,000 zł.
- Taking care of agriculture water resources
- Pilot project LEADER+
- Development and improvement technical infrastructure connected with agriculture – max financial support 50% expenses from accepted project, but no more than:

Table 4.2: Financial support for different types of project

Type of project	Max level of financial support
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Building or renovating together with modernization of internal roads	200,000 zł.
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Building or renovating together with modernization of equipment for water supply	80,000 zł.
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Building or renovating together with modernization of equipment for lead off and purification of water waste	80,000 zł.
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Building or renovating together with modernization of equipment for energy supply	120,000 zł.
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## Priority III – Technical help.

It will be done by:

- Support of management system and implementation of Project
- Institutional development
- Information and promotion of Project

For that there is 1.192,69 mln EURO and with necessary national public financial support it will be together 1.784,15 mln EURO.

The farmers can also apply for these funds. So there are two different ways of getting subsidies. With this farmers already can be helped by the government agencies in their first steps to establish a farm.

More information can be found on:

[www.minrol.gov.pl](http://www.minrol.gov.pl)

[www.arimr.gov.pl](http://www.arimr.gov.pl)

# Chapter 5 Sheep farming in Stara Kamienica

## 5.1 Introduction

After giving some practical information about the model farm in chapter 2, certification in chapter 3 and financial support in chapter 4, it is also important to get information about animal production in the region of Stara Kamienica. The farmers nowadays don't have a lot of production on their farms, because of hard circumstances. But some opportunities might not have been analyzed. In this part the forms of agriculture that are most suitable for this area have been analyzed. Information about sheep, the soil and plants has been found. The farmers can choose the options from the following chapter for applying it to their farm, because they know best what is suitable for them.

## 5.2 Mountain sheep production

Small farms in Poland exist of 3 cows, 5 goats or 5 sheep and sometimes 20 chickens. In the area of Stara Kamienica one farm with chicken, geese and ducks can produce enough eggs and meat for the whole surrounding market. And one farmer who owned 11 cows had to reduce his number of cows to 3, since there were not enough customers for his products. The competition with farmers on better soils and thus easier and higher production close to Stara Kamienica is impossible. Different ways of animal production had to be found.

Two students from The Netherlands explored the opportunities for sheep farming in this area and wrote a report on it. (Velstra and Wijma, 2004) Based on this report, new opportunities for research have been found. These will be explained now.

There are different ways to have sheep in the area of Stara Kamienica. At this moment one farmer owns 8 sheep, mainly for meat production and if they are lactating, also for their milk. Options to increase the sheep production in the area are illustrated in the next examples.

An example of a province with many sheep is Nowy Sącz in Poland, which shares a border with Slovakia. Due to its hilly and mountainous terrain, it is the bastion of sheep production in Poland. Sheep raising is an important part of the local culture and tourists who travel to Nowy Sącz may purchase a variety of wool and sheepskin products to take home as souvenirs. Since the promotion of tourism and production of local products are some of the objectives of the local government in Stara Kamienica, sheep raising can be a good option for them.

One difficult aspect is that there are large flocks of sheep grazing open range, all under the watchful eyes of a shepherd, "Baca," and his dogs. The large scale of the flocks doesn't fit in the small-scale landscape of the project area, but these Polish flocks are comprised of animals that come from many different owners. Typically, all the shepherds in a village put their sheep together to send to the mountains, many having fewer than 10 animals to contribute to the flock. Also people in the project area don't have any money to invest in buying a lot of sheep, so all of them can just have some sheep, like in this example. The flock is composed mostly of mature ewes; few lambs run with the flock because most are sold as hothouse lambs around Easter time.

The time that sheep spend in the mountains can vary. It depends on the season and if the sheep will stay in the mountains or go to the farm every night. Since the area has a lot of

pastures around which aren't used for cropping, sheep don't need to be brought very far away from the farms. At this moment the fields grow over with small bushes and trees.

According to the Poles, the Polish Mountain Sheep, "Polska Owca górska," is the only breed that will survive mountain conditions. Polish mountain sheep are primarily a wool and milk breed. They are a poor meat breed - narrow and thin-muscled, lambs dressing only about 40 percent. A cross between Polska owca długowetnisię (Polish long wool sheep) and Black headed Mutton sheep, a breed imported from Western Europe for its meat qualities, can give offspring well adapted to the Polish circumstances and also muscular. The Black headed sheep resembled Hampshires, and in fact, share some common ancestry with our down breeds. The long wool sheep are well-adapted to the mountainous terrain of Southern Poland and are still found in large numbers there. In the appendix an overview of sheep breeds who can be suitable for the area around Jelenia Góra have been given.

The Polish Mountain sheep and long wool breeds predominate in southern Poland, the Polish Merino throughout the rest of the country, and the East Friesian was the mainstay in the Jelenia Góra province. Studies revealed that meat production accounted for 70 percent of the income from sheep and 30 percent wool.

In this example is shown that if pastures of the farmers will be combined, sheep can be held on the pastures and profits of extensive sheep farming can be divided among the owners of the land and animals. Now the pastures aren't used, but for keeping sheep on the land, not a lot of investments are needed. In the summer, the ewes and lambs can be held on the pastures, in autumn they can be sold and only a few ewes will stay at the farms in winter. This means the farmers don't need to spend a lot of money on feed for the sheep. In summer, the sheep herds will be an attraction to the tourists.

### 5.3 Sheep feeding

Organic animals are required to receive a complete, balanced diet composed of organically produced agricultural products, including forage and pasture. Organic livestock production is best integrated into the whole organic farming system and requires a connection of livestock to the land and surrounding vegetation.

A balanced diet requires that all nutrient requirements be met. However, it is often difficult to consistently meet vitamin and mineral requirements. In general, all feed, feed additives, and feed supplements must comply with the regulations. Natural feed additives and supplements are permitted. For example, mined minerals, enzymes, and probiotic organisms may be used in animal feeds. Synthetic vitamins and minerals also appear on the National List as feed additives, provided the regulations of the country's government approve them. Such feed additives must be included in the Farm Plan, and the amounts fed must be for adequate nutrition and health maintenance for the species.

A number of feeding practices are explicitly and categorically prohibited. Organic livestock producers must not use animal drugs, including hormones, to promote growth. Animals provided feed supplements or additives in amounts above those needed for adequate nutrition and health maintenance for the species at its specific stage of life are not eligible for organic certification. Plastic pellets cannot be fed as a source of roughage. Feed formulas that contain urea or manure are also prohibited. Given the concerns about BSE, organic mammals and poultry cannot be fed mammalian or poultry slaughter by-products.

At this moment Josef Zaprucki owns 50 ha, of which 20 ha is rented from Nemoland. 1 ha oats, 0,5 ha wheat, 0,5 ha buckwheat, the other area grassland divided over class 4 ('podzolgronden met lage waterstand hogere zuurtegraad'), class 5 ('droogtegevoelige zandgrond en ongunstige ligging') and class 6 ('slechte grond, verzuurd en droogte gevoelig'). This means that the soil in his area is very hard to use for growing crops, but Jozef experiments with grapes for the production of wine. Part of these products and the grass can be used for feeding the sheep. But other feed should be bought to complete the diet.

To get the certificate 'ecological' for the feed, it needs to be officially ecological produced, which means no artificial fertilizer and no pesticides applied to the crops. Feed additives should be allowed by the ecological regulations of the country and even the EU if sheep are sold as 'ecological'. So farmers should be very careful with putting the label 'ecological' on their product.

#### 5.4 Health Care of animals

Because of strict regulations for ecological farmers on the aspect of health care for their animals, they have to take preventive measures rather than give them medicines afterwards. Some recommendations to keep in mind so the farmer can use as little medicine as possible are:

- (1) The selection of appropriate breeds and types;
- (2) Proper balanced nutrition;
- (3) Appropriate housing, access to the outdoors, and sanitation;
- (4) Stress reduction by the allowance of natural behaviour and exercise; and
- (5) Preventive measures such as vaccines and other inoculants.

Prophylactic treatments, hormones, and antibiotics are categorically incompatible with organic practices. Animals are treated with medications only when they are sick—indeed the standards make it illegal to withhold treatment from an ill animal. However, animals treated with a prohibited substance cannot have their products sold as organic. The animal must be diverted from organic production and the products must be sold through conventional channels.

Holistic veterinarians specialize in alternatives that do not rely on synthetic chemicals for treatment of animal illnesses. Traditional herbal medicine, homeopathy, acupuncture, chiropractic, and probiotics all offer alternative modes to veterinary treatments administered in conventional livestock production to counter the effects of illness, also referred to as allopathic medicine.

These modes of animal health care need not be mutually exclusive. Each deserves consideration, criticism, and further exploration. However, organic animal husbandry has far more questions than answers. Organic standards go beyond food safety concerns. They also include issues of consumer acceptance, animal welfare, and resource management. In general, organic consumers expect organic animals to be both treated humanely and not treated with drugs. Organic producers may need to resort to allopathic methods in order to save the life of an animal. However, an animal treated with a prohibited substance loses its organic status.

Again, 'ecological' conditions of rearing animals are very strict and therefore the name 'ecological' should be used carefully. For real ecological products, the animals used for

production should be very robust and resistant to diseases. Drugs can only be applied for one or two times in the life of an animal.

### 5.5 Living Conditions of animals

Organic livestock producers are required to provide living conditions to accommodate the health and natural behaviour of the animals that they raise. All animals should have access to outdoor area and ruminants are also required to have access to pasture. Then, animals are required to have access to shade and shelter, as well as exercise areas, fresh air, and direct sunlight. The shelter must be designed to accommodate the natural maintenance, comfort behaviours, and opportunities to exercise. In general, animals are expected to have adequate space to be able to stand up, lie down, turn around, groom and engage in other behaviour that is natural. Shelters are required to maintain a temperature level, ventilation, and air circulation suitable to the species. Equipment and facilities must reduce the potential for livestock to be injured. These must be suitable to the species, its' stage of production, the climate, and the environment. Animals must have clean, dry bedding, and if the bedding can be eaten, then it is required to be organically produced.

Animals may be confined only on a temporary basis and then only for the following reasons:

- (1) Bad weather;
- (2) The animal's stage of production;
- (3) Conditions under which the health, safety, or well being of the animal could be jeopardized; or
- (4) Risk to soil or water quality.

### Manure Management

Organic farms maintain stocking densities, rotate grazing lands, and manage manure to sustain the resource, nourish the animals, and maintain soil and water quality. Organic livestock operations should manage manure to prevent contamination of crops, soil, and water and optimize the recycling of nutrients from manure.

### Cleaning Compounds

The materials used to disinfect livestock facilities must either be non-synthetic or appear on the National List and used consistently with any restrictions.

The regulations for living conditions of animals in an ecological farming system are quite strict again. Taking all factors (feed, drugs and living conditions) into account, regional products that tend to ecological products will be easier to produce for farmers in the beginning. Later the farmers can try to apply for the ecological certificate.

### 5.6 Training for farmers

Recommendations about feed, drugs and living conditions of sheep in organic farming systems have been given. Not only from this businessplan farmers can get ideas about producing in an organic way, there are many places where farmers can get training on organic farming. This doesn't mean they have to become full-time farmers, but training can give them more information on different aspects of animal health, restrictions of applying fertilizers and pesticides to the land and other organic information they'd like to learn.

Training and education of the farmers is organised by numerous institutions and organisations, such as:

- Centres for Extension Service in Agriculture, working in all voivodships (administrative regions),
- Organisations of organic producers,
- Trade companies,
- Foundations and other ecological non-governmental organisations,
- Private consulting companies.

A few agriculture secondary schools and universities include organic agriculture in their curricula:

- University of Warmia and Mazury (Uniwersytet Warmii i Mazur) in Olsztyn,
- Agricultural University (Akademia Rolnicza) in Kraków,
- Agricultural University (Akademia Rolnicza) in Lublin,
- Agricultural University (Akademia Rolnicza) in Poznań,
- Agricultural University (Akademia Rolnicza) in Wrocław,
- Agricultural and Technical University in Bydgoszcz
- Warsaw Agricultural University (SGGW) in Warsaw.

At the Unit of Organic Agriculture at Warsaw Agricultural University the following subjects are taught: ecology and environment protection, ecological methods of food production, ecological aspects of food and nutrition, landscape and human ecology. These subjects are connected with organic food and farming and the relation between agriculture and environment.

So if farmers are really interested in producing ecologically, they can go to many institutes (mentioned above) to get information about it. Also, websites with information are available. They can be found in the references (last chapter).

## **Chapter 6 Soil and plants status**

### **6.1 Introduction**

The area where NEMO is situated is suited in a hilly transitional zone. Agricultural status in Nemoland region is not appreciable. Insufficient social facilities are available and the unsuitable geographical condition creates higher rates of unemployed in this sector. In the mountain region, soil is barren and eroded which is not suitable for agricultural farming. And abundance of mineral and stones in the soil makes that region, more demandable for mining. Soil is very rich in granite, gneiss and mica along with other minerals, which are major attraction for business point of view.

Since this area is close to a Natural Park, it is economically isolated from government and in most of the fields; farmers stop their agricultural activities due to incapability to cope with the social and environmental problems such as unavailability of economical support, unproductive soil and water scarcity.

But still there is a big complex of protected soil which is conducive to the development of agriculture and provide a ray of hope to the local people to struggle with social and natural hindrances in crop farming and inspire them to involve in cultivation of traditional crops such as buckwheat which suit to their landscape and also for attention toward extension of orchard farming and fruit production.

Soil acidity and water scarcity is the major problem in the Nemoland region. Acid soil toxicity comes from the leaching of aluminium, manganese, and other mineral which are toxins into the soil through acid rain and acid forming fertilizers, as well as the decay of organic matter caused by the drive to gain higher and higher yield from the soil.

Scientists were working for development of abiotic stress tolerant variety of cereals and crops for better performance in adverse abiotic situation in Poland. And developed three main cereal varieties which can perform well in water scare and acidic soil condition and gives 6% more yield than similar crops, such as; GK Mero, a new wheat; GK Wibro, a new rye; and GK Bogo, a new wheat-rye cross. All forage crop such as sorghum, pearl millet, crabgrass would be best performer for this region as they are tolerant to acidic soil and drought condition. A sorghum variety developed by scientist which can grow well in absence of water and in acidic soil condition as well and could be proving boon for this area. Other crops which would be suitable to grow in acidic soil are given below in table 6.1.

Table 6.1: The list of different pasture and horticultural species, performing well in acidic PH condition

Field crop	Vegetable crop	Fruit crop	Cut flower
Cowpeas	Turnip	Macadamia	Protea
Cotton	Blackberry	Apple	Azalea
Lupins	Tomato	Nectarine	Hydrangea
Linseed	Squash		
Peanuts	Raspberry		
Millet	Sweet potato		
Oats	Sweetcorn		
Pyrethrum	Strawberry		
Triticale	Shallot		
Soybean	Pumpkin		
Sugarcane	Potato		
Sunflower	Blueberry		
Vetch	Rhubarb		
Wheat	Pineapple		
	Fennel		
	Endive		

We recommend to farmers to try to improve soil quality by introducing earthworm in the soil which improve soil by improving water movement in soil, improve nutrient availability and enhance soil structure and stability. Minimum tillage is a specific practice to enhance the soil organic matter and soil tilth. This would help the farmer for saving the money, conservation of water and soil erosion. Soil quality can also be improved by using leguminous crop in crop rotation and using it as a cover crop. This helps to increase nitrogen content in soil, to reduce weed infestation and for better production of crops. Cover crops can be grown in barren land to conserve the soil nutrient in weeds growing regions. Also animal manures are commonly used as a soil amendment. The value of manure in terms of the nutrients it contains varies. Fresh horse, sheep, rabbit, and poultry manures are quite high in nitrogen and may even burn plants if applied directly. They are best applied in the fall and tilled under. Manure usually has fewer total nutrients than synthetic fertilizers in terms of N, P, and K, but is a valuable soil builder. Unfortunately, manures may be a source of weed seeds; if this is a problem, composting in a hot pile may help.

It would be also profitable for the local farmers if time to time, they will do soil testing for knowing the status of plant available nutrient and according lying they will decide fertilizer recommendation for achieving optimum crop production.

#### Chapter 7 Examples from Dutch farmers

Dutch farmers are not the ideal examples for farmers in Poland but there are some really nice ideas which can be learned from and implemented into the model farm.

Because of lack of time and a small change in project goals, it wasn't possible to interview some Dutch farmers. Therefore, we collected information on the internet and from literature about the different ways of broadening farms in The Netherlands. The following recommendations can be considered for farmers in the area of Stara Kamienica. Farmers can read the ideas given below and apply it in a way suitable to their own ideas and farms.

#### Use of soil:

- Grow different kinds of fruit and vegetables. In the area some apple trees, planted before World War 2, already grow and give fruits. These trees are unique. The apples or the juice of the apples can be sold. But also other kinds of fruits or vegetables can be grown; blackberries, strawberries, pears, cherries, potatoes, lettuce, cabbage etc.  
[www.fruittuinverbeek.nl](http://www.fruittuinverbeek.nl)
- Grow different herbs in a garden, so tourists can pick some herbs for cooking or just can walk around the garden and enjoy the nice scents. The people can use the herbs for cooking or making local products. Especially recommended is to find out what the local herbs are and promote them.  
<http://www.slowfood.nl/convivia/veluwe.html>
- Workshops gardening and knowledge on species of herbs, flowers and trees can be shared with tourists and people from the city who want to have a relaxed weekend in the rural area.  
<http://www.dutch-farmholidays.com/uk/hvframesetuk.htm?9-gelder.htm>

#### Use of animals:

- Sheep, goats and cows can be used for different purposes as explained before. Next to the production of their skin (and wool) and meat, they can produce milk. That can be used for making cheese, butter and ice-cream!  
<http://www.slowfood.nl/convivia/veluwe.html>
- A (biological) chicken, duck and goose farm is situated close to Nemoland. From that farm eggs and meat can be sold to tourists and the local market.
- Fishponds are available, but only on small scale. Some more ponds can be created with fishes that can be smoked, so they can be preserved for a longer time. Options for different kinds of fishes can be a subject of further research.  
<http://www.slowfood.nl/convivia/veluwe.html>
- Horse stables can be made in farms, so people can take their horses to this region. It's a beautiful region for riding horses, since it's very calm and small paths and grasslands are

available. Trips of some days can be made, with riders and horses staying over at farms at night and moving on the next day.

<http://www.camping-stal-geralja.nl>

- Bees can be kept for the production of honey. It doesn't take a lot of work to keep them and some special species are available that aren't aggressive. Especially in combination to having a herbal or flower garden, bee keeping can be a good option.  
<http://www.slowfood.nl/convivia/veluwe.html>

Other options:

- Baking bread for and with consumers on a small scale. This can be interesting for groups of young people as a workshop / day out. Grains can be grown on the land of the farmers.
- Tasting vodka (and wine) at the farm. At the farm different kinds of vodka (or wine) can be produced. Then people can come and drink vodka, eat some small things and enjoy the relaxed life of holidays.
- Have a mini camping next to the farm. Tourists don't need a lot of comfort, that's why they go to the rural area. So only mowing a grassland and have some toilets and showers, can make a mini camping complete. The tourists will take their tents and caravans themselves. Only for more comfort electricity can be supplied, but that isn't necessary.  
<http://www.dutch-farmholidays.com/uk/hvframesetuk.htm?9-gelder.htm>
- Supplying dinners at farms. Already hiking and biking paths are made and routes to farms have been established. The hikers and bikers will be tired after being active the whole day and like to get a meal from the local people. This is done on small scale already, but has the potential to grow more.
- Create a small museum about the history of the area. Since it's very interesting what happened here and people can learn from it. It's easier to remember for children if they can see in real life how things were in the old days.
- Workshops drawing or other artistic creativity. A group of artists live in that area and tourists can go there and learn from them or just let their creativity out.

To make a clear structure for the tourists at which farm they can have dinners or do some activities, some flags can be made with a special sign and hung out, so it's easily recognizable to which farm they can go. <http://www.vallei-boerderij.nl/vallei/content02.html>

The activities presented above can be implemented successfully in to the situation of the farmers, cooperating with Nemo in Stara Kamienica. All farms can specialize in a different aspect, so a variety of activities can be done in this area for tourist. The function for Nemo in that case can be organizing meetings for both Dutch and Polish farmers to exchange they knowledge, workshops and excursion for Polish farmers to show them real Dutch agro-tourism farm.

# Chapter 8 Marketing Plan

## 8.1 Introduction

This marketing plan is an expansion and quality improvement of a combination of agro/ecotourism services of NEMO and production of regional products by a local farmer. Because just having a model farm and producing nice products is not good enough, also a marketing plan has to be developed. It is important to know on which target group you have to focus and which promotion strategies are best applicable to the situation.

The goals of the NEMO as relevant to this plan are to:

- 1) Improve the quality of life and personal incomes of numerous farmers, craftsmen, suppliers, and employees supporting the NEMO
- 2) Provide an enjoyable and educational experience to tourists by promoting Polish natural resources, history, and culture in a setting of Jelenia Gora natural landscape and agricultural activities.

How the marketing plan can help Nemo to reach their goal:

1. Describing the characteristics of the current market
2. Giving marketing advices and strategy how to improve and combine agro tourism and production of regional products.

## 8.2 Characteristics of the current market

### Agro tourism and tourists

Tourism; adventure-, eco-, agro-, historical, and cultural/heritage tourism and experiential tourism (health and therapeutically) are the fastest growing segments of the tourism industry for European countries (mainly in the Netherlands and in Germany because they have significant 1) disposable income, 2) leisure/ vacation time, 3) a desire to experience new and exciting kinds of recreation, and 4) a desire to temporarily escape from their urban life and find their 'roots'.

Tourism has many facets, but all relate to recreation, leisure time, and the opportunity to experience something away from the job and home. Some depend on an artificial environment (e.g., gambling casinos; large, modern cities with every amenity); some facets of tourism depend on natural resources (e.g., scenic wonders, nature, wildlife); and others depend on the imagination of the tourist (e.g., historical and cultural sites, ranch recreation).

### Regional products and farmers

Agriculture is not developed in this region there is some crop and livestock production. From the possible farmer suppliers tourist foods include many regional products for example breads, kippered sheep meat, goat meat, lamb, beef, special cheeses, cream and cream cheese, cow milk.

The main problems with agriculture are the undereducated and under motivated farmers who are not willing to communicate with Nemo, because of the language differences and the mistrust. That farmers that are willing to produce, focus only on the local market and that is

not enough to earn a living from. On the other hand the small scale farms cannot provide enough quantity to European market.

### Competition

There are not much similar places in this area where NEMO is situated. In Jelenia Góra there is a more developed accommodation, but those are more expensive and far from the real nature as what NEMO can serve, so the target group is different.

The real regional products may compete with other areas regional products, but people who go to that area cannot meet other products.

### Current distribution methods

The NEMO house is located in Miedzylesie on the mountain in the middle of the "real nature. Next to the Nemo house there is small bar, what is opened during the summer and serve products to the tourists. It would a good opportunity when it can function as a main distribution point and display place of all the regional products.

### Current price

At this moment the general prices (food, accommodation) are very low and it is suitable for people with lower income, but not relevant the tourist with higher income because they could pay more.

### Current promotion methods of NEMO

Nemo has a website where you can find some description about the area, one picture about the Nemo house and the contact address.

Unfortunately at this moment there is no promotion of the regional products, focus of the different target markets, no price differentiation. This can be improved in the following ways.

## 8.3 Marketing Strategy

### Target market

The target market at this time must continue to be those tourists who want a back to basic holiday in a very traditional landscape. All the customers should be made interested in nature and/or rambling and/or natural heritage and/or arts. Target groups are located in Holland, Germany, Czech Republic and Poland. The possible segmentation of the market in the interested group (Dutch, German) may be the next:

1. Families: who want to bring their children to the nature, and they also want to enjoy it. They require special workshop activities for their children and organised trips and parties for the adults.
2. Middle aged class: who likes quiet, fresh air and need more relax. They may require special historical stories about the area because they like to live through the same story for example and they also can enjoy the organised walking trips and parties with local people.

3. Scholars: who learn about rural development, traditional arts and culture. This kind of tourism would be educational tourism with volunteer activities, school exchange programs and course. It should be separated for two parts: agrarian part and art part.

- Agrarian part would focus on rural development, and agrarian activities with contribution of farmers;
- activities of the art scholars would be organised by the artist and the women who prepare regional products.

4. health and care tourism: the Nemo area can be used as an area for health tourism. By using the help of professionals back to basic programs can help people with mental deceases. They require reintegration and therapeutic activities.

#### Development of NEMO` promotion method

1. Improving the website with for example

- take more pictures about the area and the activities
- put an efficient map on the website (for example what our group created)
- provide stories about the previous experiences from visitors that tourists can find information about activities
- provide a list of regional products with pictures

2. Make connections with schools (agricultural and art) and organise meetings about his area and invite them to travel to Poland. NEMO can provide accommodation and it can be the perfect environment for education and recapitulation.

3. Create a brochure that is similar to the website and spread it in the target countries, in travel agencies in schools and wellness centres,

4. Making contact with tourist agencies; and offer opportunity to tour to Poland.

5. Looking for foreign investors for regional product development and agro tourism in Poland. Dutch or German farmers or foreign companies can invest in Polish agriculture. For now this will be very hard because foreigners are not allowed to buy land in Poland. But in the future this would be a good way for increasing the opportunities for small scale agriculture.

#### Development of Nemo accommodation facilities

Nemo should increase the place of the accommodation with for example open the other side of the tourist house. Nemo should create more toilets, maybe in the house or next to the house.

And Nemo should seek more local people who are willing to serve accommodation to tourists.

#### Regional products development

Farmers first have to focus on regional products for tourism and local markets and later focus on exporting products for abroad. The first bases of the regional product development are the farmers who are willing to produce and make contact with Nemo.

Nemo should also try to communicate and seek other farmers on the area, and persuade them to produce. For example in the beginning Nemo itself should buy the products from the farmers and sell them itself for example in the small bar near the Nemo house.

With applying our model farm they can allow the farmers to watch the method how they can produce.

Invite some experts who try to communicate with the farmers. Important key figures in Stara Kamienica can function as leaders, to whom farmers will listen.

Now a good model farm has been created, farmers can learn from these experiences. It's important to form some kind of association between all stakeholders. Because of the difficult social relations in this area a communication expert has to intervene, or Nemo has to learn more about efficient communication. To overcome these communication problems it is necessary to find a solution otherwise good cooperation or the development of an economically viable area will never develop.

#### Combination of Nemo tourism and farming

Tourist should have tours through the farms; almost always guarantee a sale of some souvenirs and local natural home made products to tourists - a memento of a unique experience. Therefore, increasing the volume of tourists increases the sales volume of local products.

#### Development of the distribution method

What we have already mentioned in the characteristics part, the bar, near Nemo house would be the first distribution point of regional products and also alliances should be created with local markets, where the regional products can be sold. A list with local products can be made on which the tourist can write down what they want to order for the next day. Then the farmers will provide the food.

#### Pricing method

The low prices are a good aspect for competition with other countries. Because people like to buy things for a lower price, every day or every week one article can be 'in offer', so it will be sold more. This can be specific products for that time of the year. Price differentiations between tourists and local people can be made, but this might cause a distance between the groups, which should be avoided.

#### Supply chain development

The present supply chain is too separated. There are many local input shops, where the farmers can get plant and animal raw materials, but they do not have any affect to the prices. When the local shops buy there products on a larger scale they can negotiate on the prices. The other possibility is to produce them, but they cannot do everything. The farmers are disorganised and they don't communicate with each other very well and with Nemo, because of language difficulties and mistrust. In order to develop this situation it is necessary to support cooperation among framers, and between farmers and Nemo. It would be a good idea to form cooperation between stakeholders in Stara Kamienica as a start for communication and trust. The tourists and consumers need to be aware of the fact that farmers produce the local products and Nemo is distributing them, on local markets and on the Nemo land.

We think it is not necessary to sell the products in a shop. But Nemo should spread order lists among their customers of products they can buy at the farmers. So Nemo functions as a facilitator and not as a supplier. This to avoid all EU and hygienic regulations.

## Conclusion

This report is exclusively meant for NEMO organization for the purpose of creating a concept of model farm to attract tourists as well as investors. The plan of model farm is combination of agro-tourism and promotion of regional products. It compiled all the assuming aspects for making a successful business or marketing plan. This business plan reflects the practical implementation of proposed plan. Therefore, in this report we discussed all the current scenarios of Nemoland region and focused on various challenging facts and their possible solution in current circumstances in Izer region of Poland.

In this report, we mentioned different marketing strategies for making good business deal of NEMO with cooperation of local people, and also to attract more tourists through better implementation of available facilities. Since organic agricultural is most fascinating occupation from business point of view. It is conventional and ecological way of farming for sustainable agricultural development; carry out by local people in Nemoland region. However, unavailability of structured certification agency makes insufficient business of organic agricultural in Poland. Therefore, we discussed present status of certification agencies and their operational activities in Poland for testing and evaluation of organic farms.

In the businessplan, we provide a concept of model sheep farm with collaboration of Josef Zaprucki (farmer) who is already involved in sheep farming. We had proposed all the possible concepts for making a successful business deal in collaboration. We also discussed present and future situation of this business deal between NEMO and Joseph. We described and fully understand all the pros and cons of sheep farming for fruitful implementation of our project in Nemoland region.

Soil and plants are also supportive body for development of Nemoland region for tourism. But agricultural status is really not appreciable in this region. Therefore, various possible solutions are mentioned for improving soil nutrient status for better performance of agricultural.

In a conclusion, the concept of model farm would be successfully accomplished through supportive cooperation of local farmers and NEMO. And successful cooperation is only possible once both meet their basic needs of good business. There are certain suggestion has been given for NEMO as well as for Local farmers for achieving their objectives.

## Suggestion for NEMO:

- NEMO should be rich in marketing strategies, in the sense of distribution and promotion of products. It is necessary that NEMO learns to communicate efficiently with all stakeholders because of all the social problems
- Collaboration of NEMO with farmers for a sheep farming business should be certified by authorized agency for a proved quality business. In the beginning they can focus on regional and home made products, where no strict certificates are needed for.
- NEMO should have to take the initiative for building relations with local farmers for promotion of regional products

Suggestion for farmers:

In the proposed businessplan, we mentioned various aspects for development of local region through various ways, such as:

- There should be some training program for farmers to making them aware with conservation and development of valuable assets of land escape, through profitable way of tourism
- Training programs on problems as lack of management, knowledge/information and marketing/promotion can be given too.
- Provide information for getting some financial assistance to local farmer for creating their interest in local production.

Appendices

Appendix A: Interviews

Date	Who we interviewed	Place	Members	Major topic
31st-May-2005				
Tuesday afternoon	Peter Spruijt	NEMO House	Jaap; Dorieke; Aparna; Petra	Yelei
Analysis				Welcome to NEMO land in Poland Arrive in NEMO land and move into house.

31st-May				
Tuesday evening	Artists	In the village		
Kopaniec	All of us	-Activities		
-Tourism				
-Farming				
-Mining				
Analysis				
(Voice record)				

- Creating chances for children, by means of theatre, education workshops. They think tourism is the best chance for development of the region as alternative to Mining.
- Their activity consists of Tourism, renting rooms, organize Festival for Local people and organize parties where people can eat traditional Polish food.
- Problem is that there is a lack of money to establish good regional products.
- Other problem is the marketing, Polish people are not aware of the demands of Dutch customers who like to have a primitive back to nature holiday. So this marketing has to be improved. Also the Polish people have to be convinced about the strength of rural development.

1st-June				
Wednesday				
Morning	Peter Spruijt	NEMO land and around	All of us	Practical
introduction of NEMO land				
Analysis				Peter show us place around NEMO, after look around we think about NEMO land have a lot of place to fun for tourisms.

1st-June  
Wednesday

Afternoon Tourism information officer in city City:  
Jelenia Góra Jaap;  
Piotr; Petra; Yelei General tourism information about visit this city

Analysis

(Voice Record)  General information about tourism in Jelenia Góra and surroundings. There a lot of activities, skiing langlaufing, cycling and trips to the mountains. She also thinks these are the best opportunities for development of the region.

There is also agro tourism; but it only consists of renting a room in the village it is not really connected with agriculture.

The general tourism has another market than NEMO aims at, it is more aimed at people who want to have a luxurious holiday.

She thinks it is very good to develop more regional/ local products which the tourist can buy, so they learn more of the culture

1st-June

Wednesday

Evening Josef Zaprucki-High education level (PHD) local farmer In the village Mala  
Kamienica All of us Operation

Analysis

(Voice Record)  Josef Zaprucki is a professor in Jelenia Góra on German literature. As a hobby he is farming he learned the traditional ways from his parents and he wants to sustain this tradition by setting up farming with the combination of tourism with NEMO.

His Farm is ecological, his crops are harvested for his animals (sheep and goat), and he thinks it is very important to set up some kind of cooperation between farmers who are willing to work. So a market and customers for the products can be created.

He has clients in Germany, but he only sells his product when there is a demand.

Products: Bread, sheep meat, Goat meat, sheep cheese, cake and Polish gastronomic.

He is ready to establish cooperation with NEMO, but the problem is that NEMO has no investors. When there is money the cooperation can get started.

He also participates in the protest against mining; he has contacts with important local and national people.

2nd-June

Thursday

Afternoon Government officer Agency of agricultural Development City-Jelenia Góra  
Piotr; Petra; Yelei Policy of region

Analysis

(Voice Record)  A lot of subsidies from the Polish and European government are available for the farmers, but the problem is that they don't know how to apply for them. That's why this organization is trying to help the farmers by making the proposal for the money and finding the subsidies which are the most suitable for them.

2nd-June

Thursday

Evening Mrs. Kasia-Local people  
On the hill-Smolnik All of us Against with mining

Analysis

(Voice Record)  She is in an organization which organizes the lobby against mining. They try to send letters to the government but they do not listen. This organization for

maintaining the nature In Stara Kamienica can not participate in the discussions about the mining with the government. They are not recognized as stakeholders. So all the letters are sent to another organization that is recognized. They also are building up relations with lawyers, Big NGO's like Greenpeace and try to go to the European and National court to fight the mining.

3rd-June

Friday Morning Interview with Peter about NEMO NEMO house Dorieke Jaap  
NEMO Project

Analysis The Aim of NEMO is Hiking in natural places; they bought a house and land in Stara Kamienica, which is a very unique and historical place. A lot of problems occur here: it is threatened by Mining, a lot of social problems.

There is a big demand from Dutch people who want to go on Holiday in rural places which is not recognized by Poland but it is by NEMO. Every year about 500 people (families) and person between the ages of 40 till 60 visit this place. There are primarily facilities and a lot of space to go camping.

NEMO wants to expand there activities during the whole year:

- The want to set up a cooperation with a near farmer which they share land with. As alternative to mining and to sustain the traditional cultural heritage. NEMO needs a lot of extra knowledge for setting up a farm. Local knowledge needs to be implemented but also knowledge from for instance Holland (Wageningen University) can be helpful for setting up a good business which can function as an example for the regional development

- NEMO is experimenting with other forms of tourism like health and care tourism. Groups of ex-delinquents, groups of young people can come to work here as a form of therapy. The therapists have to be provided by other instances. But NEMO can provide the accommodation and work.

- Educational tourism is another aspect NEMO wants to focus on. Groups of children can come to Nemoland for education on nature and history of the area. Students can do their thesis about the local circumstances, nature or tourism and marketing when staying at Nemoland.

- NEMO is also lobbying against the mining, by making local people aware and bring in their knowledge they try to do whatever they can.

3rd-June

Friday Morning Officer of local government of Stara Kamienica Municipality of  
Stara Kamienica Dorieke; Piotr; Aparna Local govt. plans for region

Analysis The local government of Stara Kamienica has made a plan for the development of Gmina Stara Kamienica for the next few years. Also, they made a space plan, where these developments come to practical plans of the planning of the area. In the autumn the space plan will be considered.

At this moment the plans for the region are mainly developing the tourism. Therefore they made several tourist routes through 10 villages with interesting places, by cooperation of these villages. They put them in an information map. In the future they want these villages to develop different kind of activities which the tourists can visit (eg. baking bread, making handicrafts). Some people are already investing in the area for making a golf field and a stable with horses. Also a small airport will be established.

Some hunters made a path for hikers with information (Polish and English) about the nature and they will reactivate the viewpoints.

Promotion flyers have been made in the Polish language. One flyer for cycling and one general flyer.

A big problem is that the local people don't want to participate in an organization for promoting places to stay for tourists by giving information about their situation. They want to work individually. Even they are afraid to register themselves at the municipality as a place to stay for tourists, when it's for free and in their own profit. But they are afraid that the regulations will change and they might have to pay tax later on. If they are registered, then it's easy for the government to trace them.

Agriculture is very difficult in this area, since the soil is of bad quality, the old people are dying and the young people are not willing to be a farmer. The watering system has to and will be improved.

To keep animals is a problem, since sometimes there is not enough water for them and soil isn't good for cropping food for them.

3rd-June

Friday

Afternoon      Lepinski-Local farmer (Rich man in the local region)      In the village-  
Kopaniec      All of us

Analysis      □      General about Lipinski's farm

Lipinski has three cows at this moment, those cows give 4000 liter/year/cow. Lipinski have traditional polish, red-white cows. Lipinski said these kinds of cows are very suitable and resistant in this area. They have one bull, he is two using bull (milk and meat). In his region there is only one person who qualified enough to do insemination (artificial fucking). Before the transformation of the system in Poland he had 11 cows. After changing of this system he started to have economic problems (market problem) and it forced them to reduce the amount of cows. The main problem was more production what the local market can accept. His family has 50 ha land all together.

□      Product and market

At this moment he produces eggs, milk, crops, cheese, potatoes, chicken, duck and geoses. All the products he sells to private local people and he has not have any competition because no other farmers who produce.

He focuses on ecological agriculture, he sad the EU market is already full of agricultural products and the EU is interested in paying money to polish farmers not to produce.

Ecological-agricultural production is a big opportunity for Polish farmers.

After transformation the national dairy companies collapsed, so the farmers started to have problems to sell milk that is why they started to add more value to the milk products and make cheese because there are most interest to cheese products, what we mentioned before this was the reason to full of the market with cheese products.

At this moment the village produced 200 000 liter of milk/ day. This is too much in this local market. That is why he had to reduce the amount of cows.

He is able to produce butte from a cream but there is no market yet.

□      Sell product

He has one shop where he sells his products but the shoppers find everything in the shop. It is not good to employ people to work because of the expensive national insurance that he has to pay for each employee.

□      Cooperation

The farmers produce /do something but they don't cooperate with each other in every village

□      Tourism

He is not interested in tourism, he did not have any contact with NEMO, but he is interested in to sell their products to tourist and maybe it is possible to cooperate with NEMO in this way. There are more communities in Kopaniec (Dutch, German, Polish farmers, artists) but they are very closed and there is a lack of communication among them. He likes individual

German people but he doesn't like the nation and he sad the German and Dutch people don't like each other as well. And he hasn't accommodation to the tourist as well.

Family

He has 5 children, 2 sons and 3 daughters. One of them is interested in environmental sciences, others are driver, working, shopping, studding in high schools.

3rd-June

Friday afternoon and evening Peter Spruijt NEMO House All of us Final evaluation of week in Poland and general idea about project

Analysis  There has to be made a good different division between education and health tourism, the delinquents are not the same as students.

Also there has to be made a difference between the space plan and the other plan??

NEMO can give important contribution to cultural heritage of the region; they can try to involve the people from the region about this.

We can make a plan or a draft for a map of KOPANIEC which are all the important stakeholders of the region.

The businessplan of tourism can function as a definition of the Dutch tourism wants and needs because the Polish people do not understand exactly what is nice in Rural holidays.

In our businessplan it might be nice to make a marketing plan, that NEMO pays the farmers in advance and that they can bring the products to NEMO. So good relationships have to be built up with the farmers also trust is important. In that communication is very important.

Maybe it is also a good idea to make some form of institution in which all farmers, NEMO and stakeholders can participate.

We also have to focus on certificates maybe the one of Ekoland. Or not really focus on biologically or ecologically products but on homemade and regional products because it is easier with legislation.

A list of all products for the tourists can be made at NEMO, people can order in the evening and the farmers can supply the products the next morning. Also a good beginning of selling the products might be making some sort of packages for Christmas or Easter.

Also a virtual/ interactive website is nice; our report can have some examples which can be put on it. Our first part of the report will consist of general information about the region and NEMO.

First chapter: general concepts/ possibilities of region

Second Chapter: Lack of knowledge on agricultural possibilities. NEMO can make the tourist part of the businessplan and the artists can make a chapter of art etc.

We decided to make 20% of our effort in General information and 80% especially on agricultural knowledge from Holland and Wageningen University.

## **Appendix B: Breeds of sheep**

There are different breeds of sheep with different characteristics, which makes it possible to choose a sheep race that is adapted to the local circumstances in Stara Kamienica. By choosing the right sheep race, the amount of money the farmer needs to spend on medication, feed and housing will be minimal and the production will be optimal. In the next pages some sheep breeds will be mentioned with their characteristics, so farmers can make a choice from them or use them for cross-breeding.

### **1 Bavarian Forest**

Also Known As: Waldschaf

Type: Milk sheep.

Weight: rams 60 to 70 kg, dams 40 - 55 kg.

Characteristics:

The animals can be held under unfavourable climatic conditions. Conspicuous feature is the large fertility. Most animals get lambs two times a year. The dams have a good milk production with according to that a high raising rate of the lambs. The highest performance of the lambs is with 180 to 200 g daily increase. This is achieved however without extra fodder addition. Feeding the dams takes place preferably extensively.

The forest sheep is still to be classified with the current population size as very endangered. A further enlargement of the stock is urgently necessary. Its strength is situated in the robustness on the one hand and in the high fertility and non-seasonality on the other hand. Thus it is suitable not only for extensive landscape conservation, but also for continuous lamb production.

Options:

The good nut/mother characteristics and the high fertility of the forest sheep can be combined with the growth rate of a meat race, so quite an economic success can be achieved.

### **2 Bentheimer Landschaf**

Also Known As: Landrace of Bentheim

Type: landscape preservation, meat production.

Weight: rams 75- 80 kg, dams 50- 60 kg.

Characteristics:

It is the largest of the German heath- and- moor sheep with long legs and hard hoofs. Ewes lamb easily and are good mothers. This landrace sheep is easily satisfied, but needs to live in a flock. It produces delicious meat.

Options: The sheep can be used for landscape preservation and deforestation, since they are easily satisfied. If used extensively, few costs will be made and the meat of the lambs can be sold.

### **3 Bleu du Maine**

Also Known As: Blauköpfiges Fleischschaf (German), Bazougers, Bluefaced Maine, Blue-headed Maine, Maine-Anjou, Maine à tête bleue, Mayne Blue

Type: Meat sheep

Weight: rams 120 kg, dams 87 kg.

Characteristics:

In comparing the Bleu du Maine with the Texel breed (one of the fastest growing meat type breeds of sheep), they show a higher litter size and age of sexual maturity. The average daily gain, carcass leanness, milk yield, lambing interval are comparable with the Texel and the Bleu du Maine are lighter muscled.

Options:

For improving sheep with milk qualities on the aspect of meat production, these sheep can be used. The Bleu du Maine has a heavy fine fleece, so a lot of wool can be sold of good quality.

#### 4 German Blackheaded Mutton

Also Known As: Deutsches Schwarzköpfiges Fleischschaf, Schwarzköpfiges Fleischschaf, Czarnoglowka, German Hampshire, Improved Blackfaced Mutton, Teutoburg

Type: Meat sheep

Weight: Ewes weigh about 75 kg

Characteristics:

It is a medium-sized, white sheep that is wide and long with dark- brown to black head, ears, and legs. It grows cross-bred wool with a tight and firm staple, to protect it in the wet climate. Ewes have about 2 lambs a year.

Options:

This meat type of sheep can be used for improving qualities on the aspect of meat production in local sheep. Another quality is the wool, which can protect the animal in the wet climate of Stara Kamienica.

#### 5 Luzein

Type: robust sheep

Weight: unknown

Characteristics:

The Luzein Sheep is widely known and much favoured for breeding. The better fattening ability of other breeds of animals can be accompanied by higher susceptibilities (eg. against foot rot) and above all reduced fertility, “mistakes” that are very significant for the breeder. It’s a typical mountain sheep that is very fertile, milk producing, robust and especially mountain-going. They occur in various colours (white, black, checked, slightly red), whereby white dominates. Of importance is their strong mother drive (mothering quality).

Options:

Since the area around Stara Kamienica is very humid, sheep can easily get problems with their feet. Crossbreeding with this robust animal will transfer characteristics to the offspring, which make them more resistant against those infections and thus will decrease the costs for veterinary services. One negative point is that the production (in milk or meat) will decrease also. So this breed should only be used if economic aspects of the infections in the flock are very serious.

#### 6 Merinolandschaf

Also Known As: Merino Land Sheep

Type: landscape preservation and meat sheep

Weight: rams 127 kg, dams 77 kg.

Characteristics:

These white sheep are used in landscape preservation, like stabilizing and protecting highlands such as the Swabian Alb in southern Germany, from overgrowing. This landscape

with its solitary juniper trees, thistles and pasque-flowers would disappear, if left without the help of sheep. The Merinolandschaf also forage on leftovers of harvested fields, since they are non-selective grazers and their dung enriches the ground with natural nitrogen. These robust sheep have to be able to march hundreds of kilometres and to withstand the rigors of being outside year- round.

The ewes have a very good mothering ability and milk production.

Options:

The breed characteristics involve an outstanding growth rate and feed conversion ratio, combined with exceptional carcasses with good conformation and evenly spread fat and very tender meat of a fine quality. Also, they can be crossbred very well and thus can improve local sheep breeds on different aspects as meat production, robustness and number of litters.

## 7 Racka

Also Know As: Ratca (Romanian), Hortobágy Racka, Hungarian Zackel

Type: milk, wool and meat breed.

Weight: minimum rams 60 kg, dams 40 kg.

Characteristics:

The Racka is a unique breed with both ewes and rams possessing long spiral shaped horns. Mature males may have horns as long as two feet or more. The breed originated in Hungary.

The breed is found in two major colour patterns. The most common shows brown hair covering the heads and legs with the fleece varying in colour from dark brown to light brown and white. The softness and crimp of the wool would increase its' interest by hand spinners.

Options:

The Racka is a hardy animal and is often used in crossbreeding due to its ability to pass this survivability to its offspring. The breeds unique appearance and different production characteristics would make it a desirable animal for hobby situations. Tourists might like to see these animals, since they're a unique breed.

## 8 Red Engadine

Also Known As: fuchsfarbene Engadiner (German)

Type: landscape preservation Weight: unknown

Characteristics: The Red Engadine Sheep is an easily satisfied, robust, land-going, but less fattening animal which for extensive care is especially well suited. They are able to compete with their low fattening ability because of their higher fertility, non-seasonality and their very lean meat. Noticeable is also their good resistance to foot rot.

There is an association who takes care of the breeding of the sheep. Its breeding goal is the maintenance and improvement of the good characteristics of the breed like its' low care requirements, robustness, sure footedness, high fertility, good breeding characteristics, longevity and lean meat. The goal is supposed to be reached through selection from within the breed, without the input of any outside blood. The production goals are supposed to be attainable without the use of concentrated feed.

Options:

The sheep can be used for their resistance against foot rot and the fact that they can be kept in an extensive way.

## 9 Rhoenschaf

Also Known As: Rhoen Sheep

Type: landscape preservation

Weight: rams and dams 60 to 95 kg.

Characteristics:

The Rhoenschaf is a medium-sized sheep. Hard hoofs support long, sturdy, white legs, which march easily and help it safely across rough and rocky terrain. It has a long breeding season and lambs easily. The meat is delicious and has a slight taste of the meat of a deer.

This extremely hardy and frugal landrace is well suited for the wet climates of rough highlands, where it is useful in landscape preservation. In the higher regions, the sheep feed on rough grasses and tree sprouts; in lower areas they groom the meadows that are dotted with fruit trees.

Options:

Since the sheep are hardy and can feed on rough grasses and tree sprouts, this breed can be used for grazing the pastures that aren't used at this moment.

## 10 Spiegel

Type: tourist attraction, easy use

Weight: rams 70 to 90 kg, dams 55 to 72 kg.

Characteristics:

The Spiegel sheep is a mid-sized sheep that stands high on its feet. It reflects entirely the old type of country sheep. The Spiegel sheep is a peaceful, disease resistant, undemanding sheep. The hooves normally give no problems. They lamb three times in two years and mostly have multiple births. The fattening ability of the lambs is average. The head is long and narrow, with half-hanging, medium long ears. The name comes from the fleece less smooth forehead which like a mirror is supposed to glisten. Very distinguished is the dark eye spot and the corresponding dark point of the ear.

Options:

Because of the appearance and undemandingness of the sheep breed, this sheep can be kept near the houses of some people for tourist attraction (lambs in summer) and grazing some fields. The disease resistance can be used for improving local breeds.

## 11 Tsurcana

Type: milk, meat and wool breed

Weight: rams 60-80 kg, dams 40-55 kg.

Characteristics:

There are three varieties: white, grey and black. The white Tsurcana is the most numerous and highly selected, presenting specific ecotypes for special breeding areas. There are two types: Precocious Tsurcana and Belated Tsurcana. The Tsurcana breed has increased from 40% to 60% of the total sheep population in Romania during the 1990's.

Tsurcana is highly adapted to mountainous conditions but it also spreading well received in hill and plains areas. It's a hardy breed, remarkably well adapted to bad weather due to its highly water resistant fleece and ability to cover long distances in search of forage. The breed is also very disease resistant. In autumn it develops 5-10 kg of internal fatty deposits, which is used as energy supplies during the winter and dry-lot period. During mild winters it can be feed on the pasture only, which makes winter feeding costs typically 2-3 times less in comparison with other wool breeds.

Milk: medium production of about  $100 \pm 40$  kg is obtained in 220 lactation days. The fat percentage is 7-8% and 6% in protein in milk. The milk is very good for feta, yoghurt, Swiss cheese, cheese for pizza.

Meat: if best conditions are provided, weaned lambs at 2.5 to 3 months and fattened intensively reach 40-47 kg at the age of 7 months.

Fur of young lambs: the black and grey varieties are good for cross-breeding, with Karakul breed, having as a result 70-80% good quality Karakul fur.

Options:

The Tsurcana hybrids with varieties specialized for milk or mutton are more productive, but less resistant at the environment and consequently most breeders prefer purebred animals.

Generally speaking, Tsurcana sheep are beautiful, harmonious, resistant, and good for moving to/from (Alpine-like) pastures, less expensive, good for milk, mutton, wool and fur of young lambs. As a result, this breed is more and more preferred by breeders.

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