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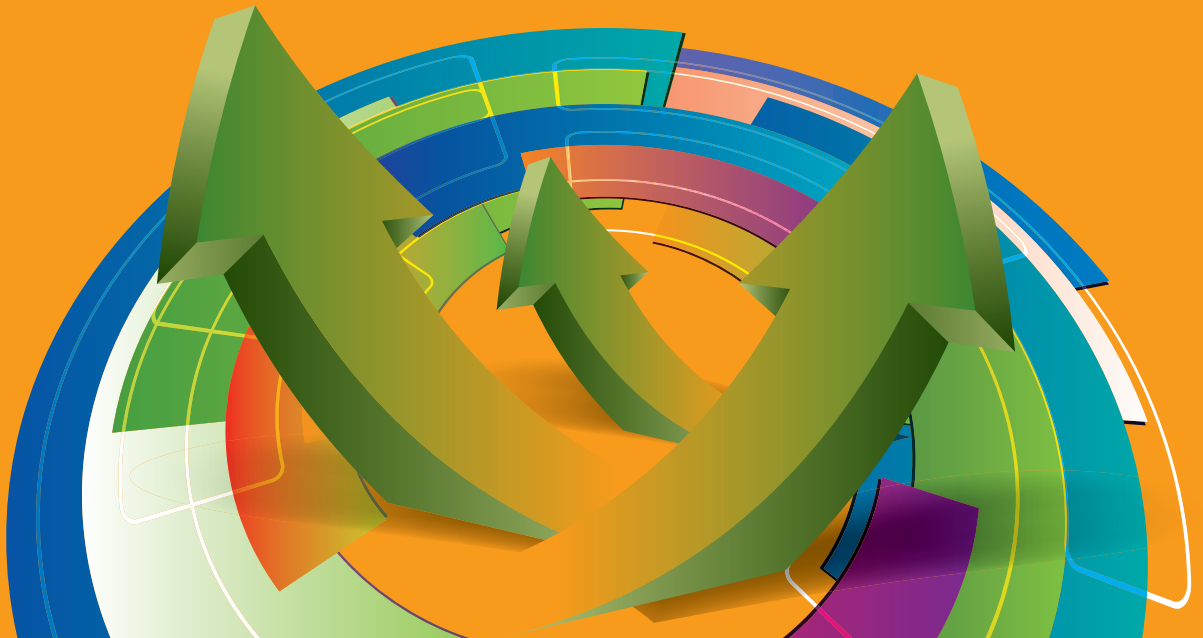


Supporting farmers in making strategic choices

The method and implementation of
Interactive Strategic Management
in Lithuania, Poland and Slovenia



Lifelong
Learning
Program



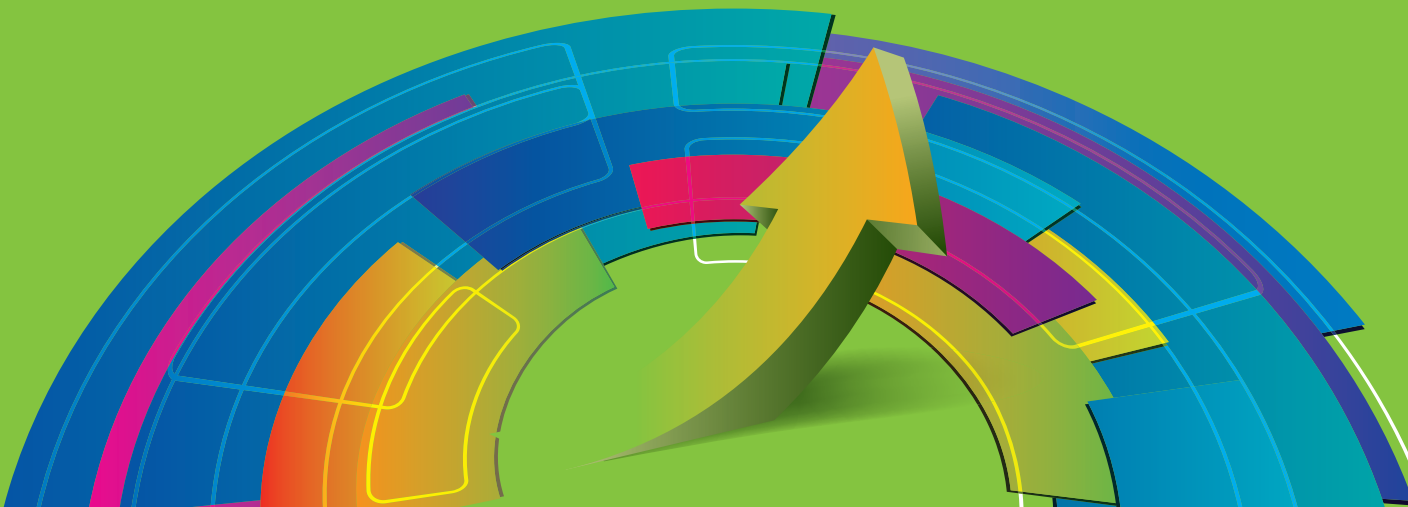
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Preface



The European agricultural sector has experienced many changes in the last decade. These changes are expected to continue in the near future. In such circumstances, the ability to make and apply long-term decisions and entrepreneurial skills are key factors of success. With this in mind, a Leonardo da Vinci Transfer of Innovation project was formulated and finally approved. The project was entitled “*Interactive Strategic Management (ISM) methodology for improvement of agricultural entrepreneurship in Central-Eastern Europe*”. This so-called ISM Project aimed to introduce innovative instruments to help professionals deal with entrepreneurship and strategic management development. This was intended to apply to those working in the advisory/consultancy sector and the vocational teaching environment. In addition, the second target group, the farmers themselves, would be affected because they had been invited to participate in the ISM training sessions, which would be facilitated by the newly trained professionals mentioned above.

The project team members come from organisations, like universities, institutes, extension services and cattle associations in one Western European country (The Netherlands) and three Central and Eastern European countries (Lithuania, Poland and Slovenia). It is a big challenge to work together and learn from each other. The international meetings in each country, including open seminars, were a great experience. The project output was also presented at a session about cattle husbandry in Eastern Europe at the congress of the European Association for Animal Production (EAAP) in August 2012 in Bratislava, Slovakia and at a special seminar devoted to the ISM project as part of the International Farm Management Association (IFMA) Congress in Warsaw, Poland in July 2013. In both seminars, besides presentations from project members, a farmer from the project told about his case.

A main dissemination product of the Leonardo da Vinci ISM project involves producing a book which describes the method of interactive strate-

gic management, the role of the facilitator and the main items of the web application of this web-based tool. At the same time, this book presents the results of the ISM trainings using the ISM method. The book in front of you now is the output of these efforts. The project content and the participating institutions and associations from the four countries are presented in the *first introductory chapter*, as well as the principles behind the Interactive Strategic Management method. The set-up of interactive strategic management trainings is described in the *second chapter*. In the *third chapter*, selected dairy farmer cases from all three countries and also farmer-student cases from two countries are presented, along with some interviews of participating farmers with businesspeople from other sectors so as to learn from each other’s views. The *fourth chapter* deals with the training results, i.e. strategic choices, critical success factors and the learning process. In the *fifth chapter*, an analysis is presented of the effect of the ISM trainings on the participants self perceived competencies and entrepreneurial features. The final *sixth chapter* presents concluding remarks, as drawn by the project team.

The content of this book has been edited and reviewed thoroughly, including by outside experts.

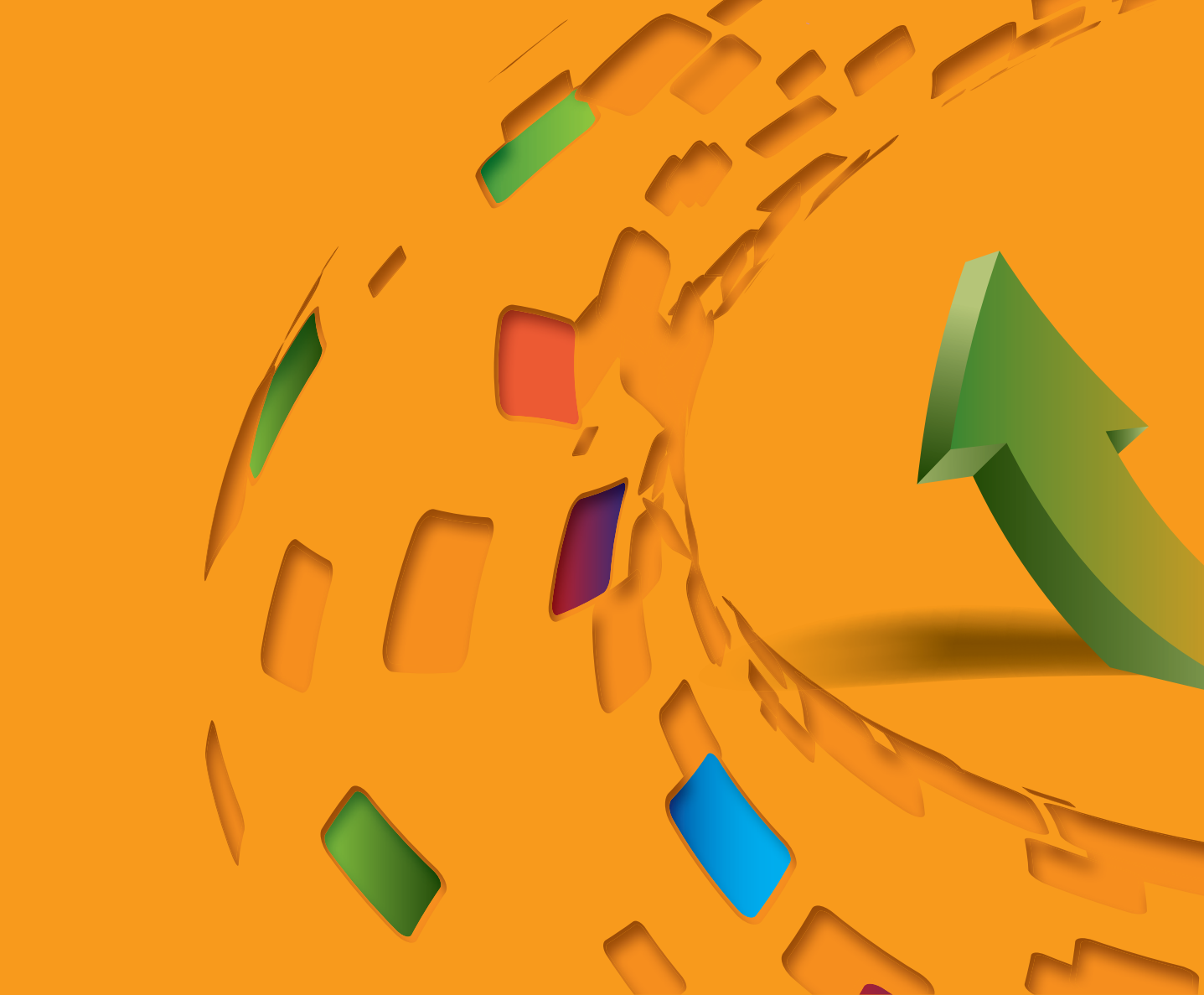
We dedicate this book to those farmers who would like to improve their entrepreneurial skills and observe some positive examples of their business colleagues; vocational teachers and agricultural advisors who deal with teaching and advising farmers in the strategy-building process and entrepreneurship; scientific workers to observe the transfer of the innovative methodology; policy makers who may wish to use this approach to stimulate the process of the strategic development of the farming sector; and to all other interested stakeholders who may benefit from the method, tool and new approach.

On behalf of the entire Project Team we would like to thank all the farmers, teachers and advisors who participated in the ISM trainings, all the supporting people without which this project and publication would not exist and all organisations which supported the project with their work and assistance.

We hope this book provides insights into the learning process of strategy making and entrepreneurship in a structured, interactive and forward-looking way.

On behalf of the Project Team

Agata Malak-Rawlikowska and Abele Kuipers



Chapter 1 and 2

Methodology



1. Introduction and methodology

1.1

Introduction

The agricultural sector as part of society is in a continuous process of change. Developments in the ‘new EU member states’ in the last decade of the 20th century and first decade of the 21st century have been even more significant. First, because of the transition to a market economy after the fall of the communist regime and, second, due to accession to the EU in 2004. In such circumstances, the ability to make and apply long-term decisions and to develop entrepreneurial skills are key factors of success. Strategic thinking is, however, less present in agricultural firms, especially in Central and Eastern Europe. Farmers are mainly focused on day-to-day management, but to improve profitability and to respect the dynamically changing environment long-term goals and strategies are becoming ever more important. Therefore, training in entrepreneurial behaviour and decision making is essential, as are tools to support such training. A theory known to deal with strategy making is “strategic management”. However, this theory is, in general, not incorporated in the consulting and educational efforts towards farming communities.

With this in mind, a Leonardo da Vinci Transfer of Innovation project was formulated and finally approved. With the number 2011-1-PL1-LEO05-19891, the project was named “Interactive Strategic Management (ISM) methodology for improvement of agricultural entrepreneurship in Central-Eastern Europe”. The goal of this so-called ISM project is to introduce innovative tools to support advisors and vocational teachers in dealing with entrepreneurship and strategic management. Thus, the target groups are the advisory and consultancy sector and the vocational teaching centres, while the farmers themselves, who participate in the ISM training sessions, can be seen as

clients as well as the real ambassadors of the project in the field.

Four project objectives were established:

- **The first objective** was to meet the need for support in strategy planning to further develop farm businesses and to become or remain competitive in the agricultural sector. In the long term, this approach is believed to contribute to a stronger agricultural sector and economic development.
- **The second objective** was to improve the competencies, skills and knowledge of advisors and teachers, who would in turn transfer the competencies to agricultural entrepreneurs and vocational students. Moreover, the project intended to increase the awareness of those currently working in agriculture advisory services and vocational education about the importance of lifelong learning activities and the on-going improvement of their competencies for entrepreneurship and strategic management.
- **The third objective** was to improve the strategic management and entrepreneurship of the participating dairy farmers so that they would become more aware of their own situation, which may help them keep their farms viable in an increasingly complex environment.
- **The fourth objective** put an emphasis on ensuring the sustainability of the transferred training with a constant monitoring and evaluation process. This allowed the introduction of the tools that were used and the accompanying guidelines into consultancy and education in the participating countries in a sustainable way.

LEI Wageningen UR, the Netherlands, developed the Interactive Strategic Management method. This method includes the use of a web-based ISM tool. This innovative tool is based on the theory of strategic management and deals in practice with strategy making. It was tailored to suit farmers. Some organisations are applying the tool in the Netherlands where its use by the largest agricultural bank, Rabobank, is certainly worth mentioning. Some experience with the interactive strategic management method outside the Netherlands was also obtained in Slovenia. This experience formed part of two Twinning projects with Slovenia. Those experiences were described by Klopčič *et al.* (2009). This may be considered as a pre-study for the current Leonardo da Vinci project that also deals with the method of Interactive Strategic Management.

Table 1.1: Partners and supporting partners of the ISM Leonardo da Vinci project

PARTNERS	
Poland:	The Netherlands:
<i>Szkoła Główna Gospodarstwa Wiejskiego w Warszawie – SGGW</i> Warsaw University of Life Sciences - SGGW Project coordinator	<i>LEI Wageningen UR, sociaal-economisch onderzoeksinstituut</i> LEI Wageningen UR, social-economic research institute
<i>Mazowiecki Ośrodek Doradztwa Rolniczego o/Poświętne</i> Mazovian Agricultural Extension Service	
Lithuania:	Slovenia:
<i>Lietuvos agrarinės ekonomikos institutas</i> The Lithuanian Institute of Agrarian Economics	<i>Univerza v Ljubljani</i> University of Ljubljana, Biotechnical Faculty
<i>VšĮ Lietuvos žemės ūkio Konsultavimo Tarnyba</i> Lithuanian Agricultural Advisory Service	<i>Kmetijsko gozdarska zbornica Slovenije</i> Slovenian Chamber of Agriculture and Forestry

SUPPORTING PARTNERS, delivering external experts:

Expertise Centre for Farm Management and Knowledge Transfer, Wageningen UR, The Netherlands

Institute of Food and Agricultural Economics (IERiGŻ) in Poland

Lithuanian Cattle Breeders Association

Joniškis Agricultural Vocational School in Lithuania

Slovenian Holstein Cattle Breeders Association

The present project attempts to transfer this innovative method and the web-based ISM tool to three Central and Eastern European countries, i.e. Poland, Lithuania and Slovenia.

The consortium carrying out this project, i.e. universities, a vocational school, extension services, economic research institutes and farmers' associations (see Table 1.1 plus the supporting partners) provided an excellent link to the farmers, consultants, teachers and students. The project has benefitted from working with such a variety of partners.

The ISM project was intended to strengthen the capacity of teachers and extension workers and (in this case) dairy farmers to help articulate strategies and foster development paths. This also helps to more easily communicate certain strategic choices with the external environment. The ISM tool and materials were made applicable to the local situation in the three countries, and have the potential to become part of the extension package

and educational curriculum in these countries.

During the two-year project, 130 farmers, 50 agricultural students and 15 teachers / facilitators were trained in all three countries in the first year and, in total, 106 farmers joined the ISM return meetings after one year.

The ISM project forms part of a wider network of entrepreneurial research and education activities. It is linked to the Central and Eastern European research project of Wageningen UR entitled "*Farm development paths and the role of a facilitated interactive learning methodology on innovation and entrepreneurship of dairy farmers in Eastern Europe*". This project chiefly focuses on a research study of the development paths of the dairy sector in Lithuania, Poland and Slovenia. A questionnaire was used with 49 main questions and 225 sub-questions to gather impressions about the future orientation of dairy farmers in the three countries and their self assessed competencies. For that purpose, 1,038 questionnaires were collected, about equally divided over the countries under study. These questionnaires were also used for the farmers participating in the ISM trainings of the Leonardo da Vinci project, filled in before the first round of trainings as a baseline measurement and after the return meetings with a

1-year interval. Other farmers not participating to the ISM trainings, but who filled in the questionnaire also at start of the project and during the return meetings, were used as a control group. This arrangement allowed the measurement of effects of the ISM trainings on the farmers' strategy formulation capacity and self-expressed competencies.

1.2

Growing importance of entrepreneurship and strategic management in agriculture

In earlier times, farmers only needed to be healthy strong people who could work hard for many hours. Labour and craftsmanship were important for being a successful farmer. On large farms, the ability to manage large groups of labourers was also required. In recent decades, entrepreneurship has become an (or is probably the most) important aspect of farming and will increasingly be so in the near future. Developments in the market (globalisation, certification, food safety requirements etc.), in agricultural policy (reform of the Common Agricultural Policy of the EU, WTO negotiations etc.) and in society in general (e.g. growing concern for the environment, nature, biodiversity, landscape, animal welfare, natural resources but also the financial crisis that influences market and policy) call for higher levels of entrepreneurship. Entrepreneurship means undertaking an enterprise, e.g. a farm. It comprises activities such as gathering information, communicating with supply chain partners, market orientation and strategic decision making. Entrepreneurship deals

more with strategic issues than management, which focuses more on operational and tactical decisions. Craftsmanship and management can be learned more easily than entrepreneurship; the first two aspects have a more technical or procedural character, whereas entrepreneurship involves a lot of 'special' skills of the farmer like communication and risk management, and competencies like leadership, taking initiatives, openness to signals from society, vision, creativity, self-reflection, and so on (De Lauwere *et al.*, 2004). The entrepreneur is the one who makes decisions and his attitude and behaviour are therefore crucial to the success or failure of his business.

1.3

Developing strategies

It is not easy to make good strategic decisions. And it is perhaps even more difficult for farmers. In bigger companies a director or board is responsible for strategic decision making, it is one of the main tasks of their job. Farmers spend by far most of their time on operational issues, taking care of the cows and crops. And most farmers are not trained to make strategic plans.

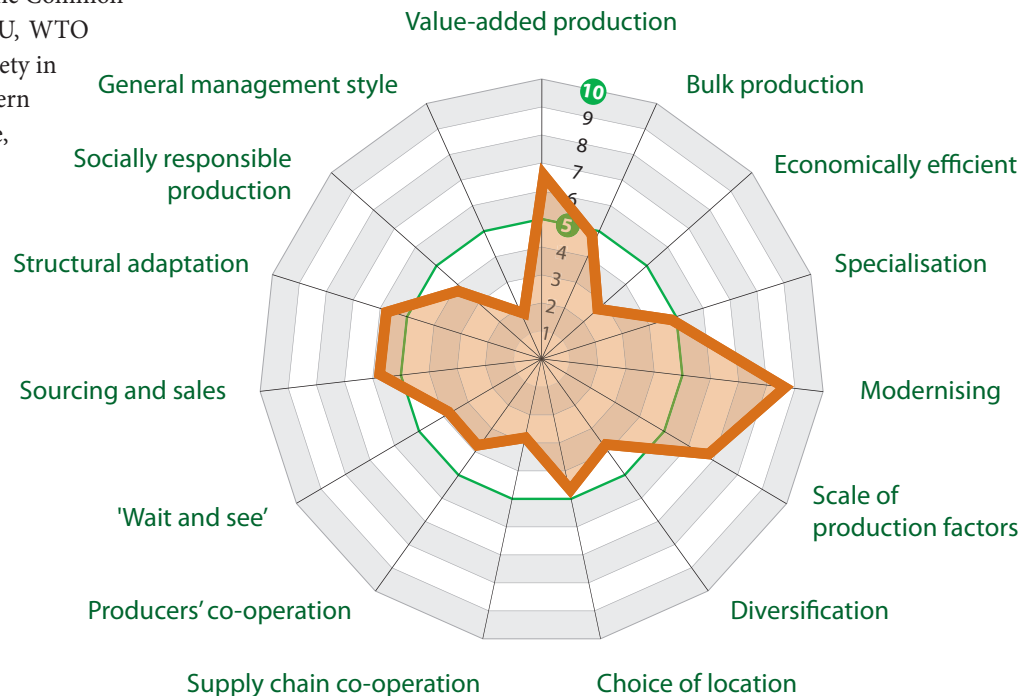


Figure 1.1: Examples of possible strategies

Strategic decisions are important decisions. They often include (large) investments. This usually means one cannot afford to make mistakes. Strategic decisions are also complicated decisions. Many things have to be taken into account. What are the developments in the market? What is happening in national and EU policy? What are the local developments? Is it possible to obtain a permit to expand a farm? How is the farm performing? Is it performing better than those of colleagues or competitors? Is there room to invest? What are the farmer's personal ambitions? Is he striving for a high performance (e.g. high milk yields per cow) or for developing a large-scale farm? Which strategies are possible (Figure 1.1)?

An entrepreneur (thus including a farmer) must be aware that the situation keeps changing. Once a strategy and a plan have been developed, the situation will change again. This means that a new plan has to be developed or at least the current plan should be adapted.

In short, farmers are not used to developing a strategy for their own farm, taking all of the mentioned aspects into account. It is also possible for a farmer to hire an expert to prepare a strategic plan. This has certain major disadvantages. The main one is that there is no ownership. It is not the farmer's own strategy. It is not his personal analysis of the environment or of his farm's performance. And does it take account of the farmer's personal skills and ambitions? The key question concerning a strategy developed by an expert is whether it truly fits with the individual situation of the farm and the farmer and whether it will actually lead to steps and actions being taken by the farmer. One of the key elements of Interactive Strategic Management is that the farmer develops the strategy himself. This also raises questions: If a farmer develops a strategy himself, can he make a good analysis of his own situation? And can he open up to new opportunities or new developments?

1.4

Interactive Strategic Management (the ISM method)

All of the mentioned changes are providing farmers with new challenges. Based on experience in several projects, LEI Wageningen UR has developed a method to support farmers with strategy development: Interactive Strategic Management (ISM). ISM has three main principles:

- (1) the emphasis on the entrepreneur;
- (2) interaction with the environment; and
- (3) focus on actual progress or actions of the entrepreneur.

Emphasis on the entrepreneur

Placing the entrepreneur at the centre means that, instead of an advisor, the farmer himself is responsible for the content of the strategic plan. The entrepreneur must therefore write the strategic plan himself; an advisor is only there to guide and stimulate the process. In an ISM track, entrepreneurs are challenged to thoroughly examine their business, the environment and themselves; for example, by analysing the current business performance. Because the ISM track almost always takes place in group situations, the entrepreneur can also make use of the expertise and feedback of his colleagues.

The intention is that the entrepreneur intensely experiences the entire process and simultaneously develops the competencies needed for the future of his business (Figure 1.2). You could say that the approach focuses on empowering the entrepreneur. The literature also discusses the internal locus of control (Fishbein and Ajzen, 1975); the greater this internal locus of control, the more control an entrepreneur has over his own future. A small

internal locus of control means that his future is largely in the hands of developments in his environment; things that happen to him.

Research shows that working on strategic choices in groups leads to a larger internal locus of control and therefore greater control over one's own future (Bergevoet, 2005).

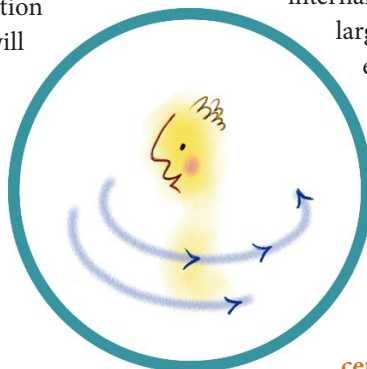


Figure 1.2: The entrepreneur is at the centre of the ISM process

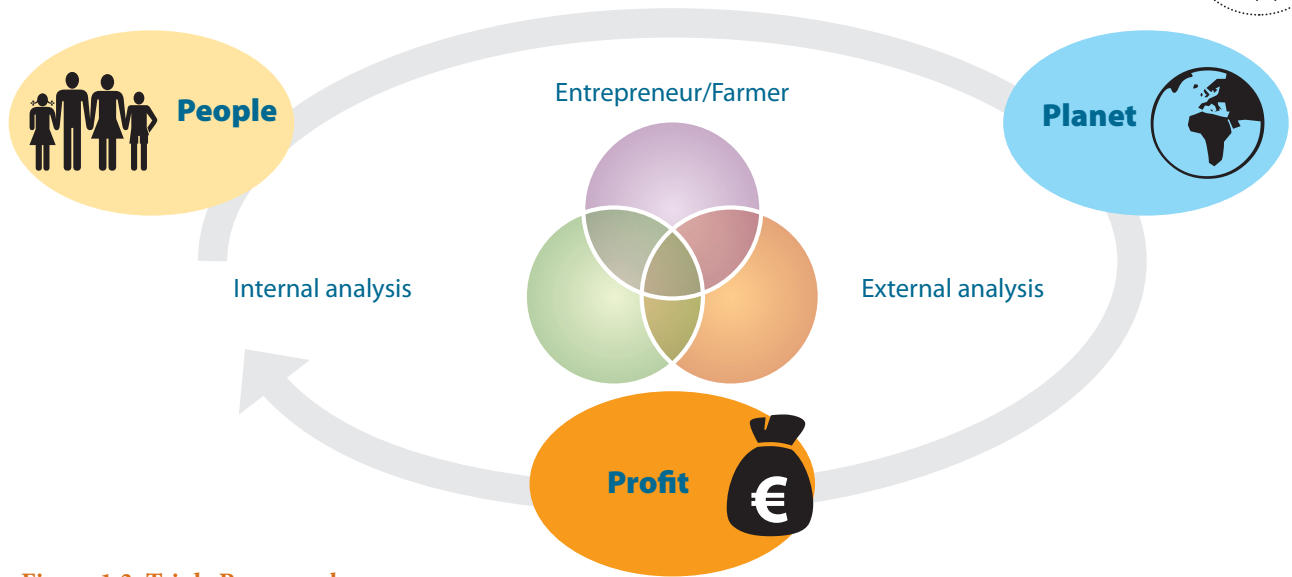


Figure 1.3: Triple P approach

Interaction with the environment

While the entrepreneur may be central in Interactive Strategic Management, he is by no means isolated. In modern society, agrarian businesses cannot be seen as an isolated link in the food chain. Depending on the proposed strategy of the entrepreneur, he must enter into a dialogue with his environment: with his neighbours concerning plans for expansion, for example, or with (new) supply chain partners, colleagues or nature and environmental organisations.

The roll of an advisor or coach is to challenge the entrepreneur to include developments in his direct environment or in broader society into his strategy and to involve them in his plans. This prevents the tendency some entrepreneurs have of setting themselves apart from the community or from new developments in the market or society in general. Because the entrepreneur is part of the community he must gain more insights and learn how to deal with situations pro-actively. Strategic decision making is, after all, about more than simply choosing the best technical/economic long-term direction for the business. It is also about legitimising the business (Schans, van der, 2008).

The focus on the process is not so much on technical issues, but more on the person(s) and neighbourhood involved and the society (People), the environment (Planet) and economics (Profit). We say the focus is on a triple P (3xP). This is illustrated in Figure 1.3.

Focus on actions of the entrepreneur

Interactive Strategic Management is intended more to set entrepreneurs in motion than to transfer (theoretical) knowledge. The core of the ISM approach is therefore not so much to arrive at a total objective image of the entrepreneur, his business and environment but to generate so much energy and confidence that the entrepreneur can take (solid and well-founded) steps forward. It is about simultaneously thinking and doing. Apart from that, it is necessary that the entrepreneur forms the most realistic image of his possibilities as he can in order to make good plans. The interactive approach of ISM is pre-eminently suited to bringing ideas into focus (Schans, van der, 2008). Each ISM track ends with a **SMART** action plan.



The project team members visiting the farm of Albertas Jusas in the village of Punios in the Alytaus district in Lithuania.

2. The set-up of Interactive Strategic Management training

2.1

General set-up of the training using the ISM method

The main principles of ISM were mentioned in Chapter 1. Different trainings, workshops and tools incorporating these principles have been developed. For the “Interactive Strategic Management (ISM) methodology for improvement of agricultural entrepreneurship in Central-Eastern Europe” project a generic strategic three-day training for groups of 8–10 farmers was implemented that led to a personal strategy and action plan for each participant.

The focus in such training is on strategic choices (2–10 years ahead; Figure 2.1). This means that tactical choices (choices for the next 1–2 years) and operational issues do not receive much attention. In general, a good strategy is based on a good fit between means and opportunities (Porter, 1980; 1998). Within the ISM method this is specified in the following way. A good strategy is based on a good match between **3 E's**:

- The **entrepreneur**: the ambitions and skills of the farmer, his family and/or employees
- The **enterprise**: the structure and performance of the farm
- The **environment**: market and society.

In the first part of the training (1.5 days), the farmer analyses these aspects while in the second part of the training the farmer translates this analysis into a suitable strategy and an action plan (1.5 days). After about a year, there is a fourth meeting – the so-called return meeting – to see what has happened with implementation of the strategy (see Figure 2.2).

About 8–10 farmers participate in each group. The group is facilitated by a qualified trainer. The role of the trainer is crucial in the training, a factor that



Figure 2.1: Management levels

will be elaborated on below. Interaction is an important aspect. The farmers are asked to discuss with and challenge each other. The trainer also has this role. Homework assignments are used to create interaction with the outside world and to organise reflection on the process of developing a strategy.

A web-based tool is used to structure and support the process. The tool consists of a list of questions a farmer has to answer to ensure that all aspects are taken into account. As part of the tool the farmer must also give a score to the three E-elements: Entrepreneur, Enterprise and Environment. After this analysis, a switch is made to the future strategy. The starting point for this

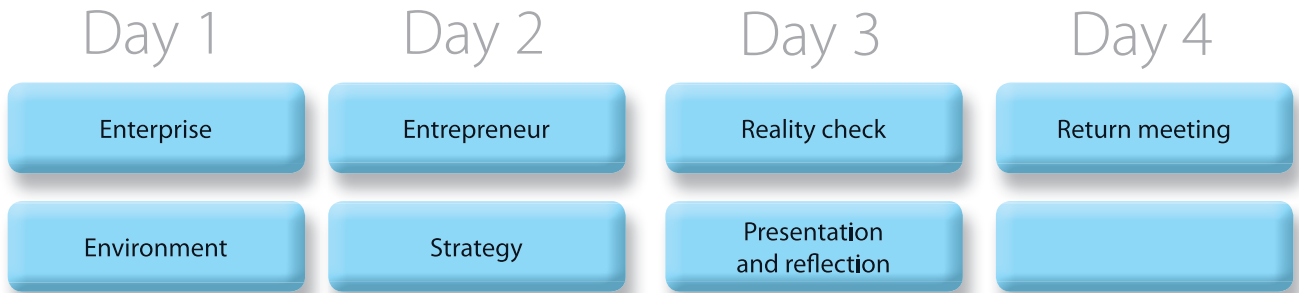


Figure 2.2: Scheme of the course

is the farmer's personal ambition and vision. The farmer himself has to combine all of the gathered information to transform it into a few possible strategies, he then has to evaluate these alternatives and finally come up with his own personal strategy. The tool also calculates a 'fitting score' for 15 strategy categories based on the score the farmers have given to different aspects of the three **E's**. The farmer can use this calculation as inspiration or to reflect on his own choice. In the last step, the farmer prepares an action plan along with a presentation of the background and content of his strategic plan.

The process leads to a strategic plan. Each part of the process includes collecting data, considering and interpreting this information and communicating this with others. The challenge is to find a link between the different elements and use them. Another challenge is to use and increase the innovative potential of the farmer and the farm. Being creative is a key factor in this, which implies that a farmer searches for the 'why' of certain events and benefits from this.

When discussing creativity and the process of learning, the learning cycle of Plsek (1997) will be used (see Figure 2.3).

The *first* phase consists of observing and analysing; accumulating experience and considering the observations. The *second* phase

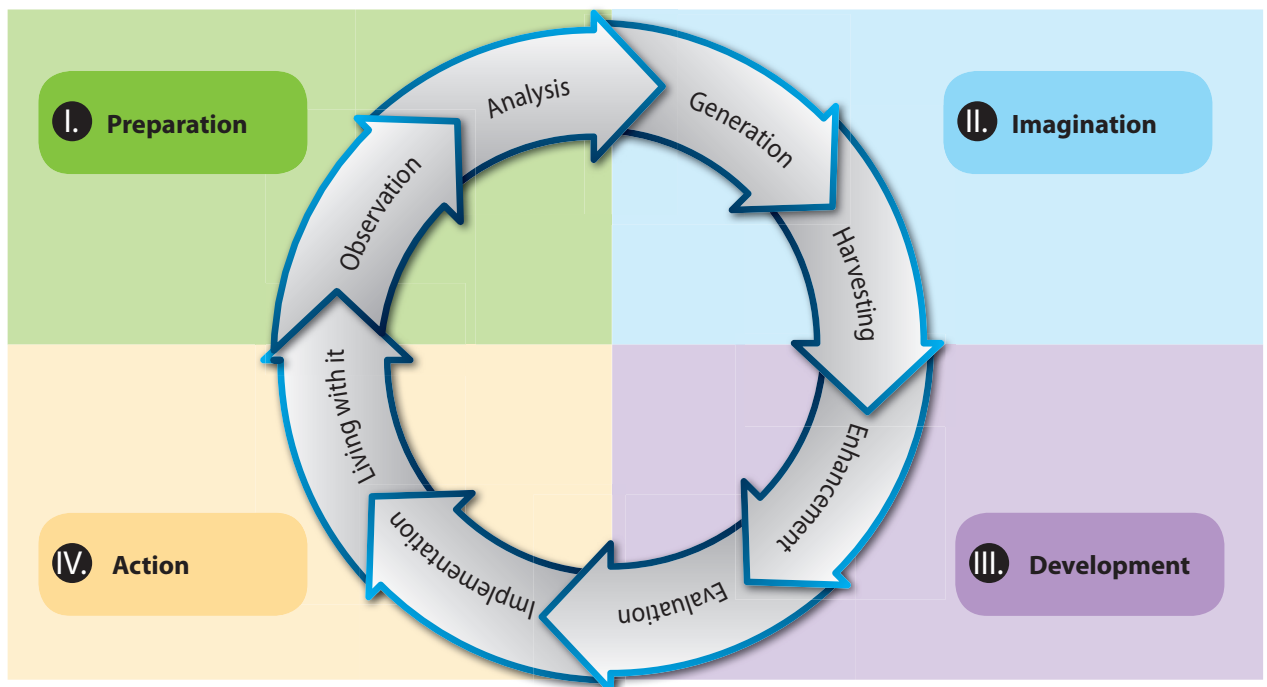


Figure 2.3: Cycle of learning (source: Plsek, 1997)

comprises imagination and generalisation. The observation component is more abstract and general. The *third* phase consists of the development and evaluation of new ideas. The *fourth* phase involves the active implementation of ideas; in other words: abstract concepts are applied by implementing them in new specific situations. This will, in turn, lead to a new specific experience.

The process of strategy development is most efficiently gone through by using this cycle of learning as a background theory. This means trying to

move through as many elements of the cycle as possible instead of sticking to one. Of course, it is not necessary to go through all of the steps in a single afternoon. With the method of strategic management (see Figure 2.4), *first* a strategy supported by analyses is formulated. *Second*, an action plan is developed and, *third*, the implementation of the action plan is described in order to realise the strategy. *Fourth*, the monitoring, review and evaluation of the strategic plan and attached analyses are carried out. In summary, in the process of Interactive Strategic Management, i.e. “strategic planning”, the following steps should be taken to ensure the greatest success:

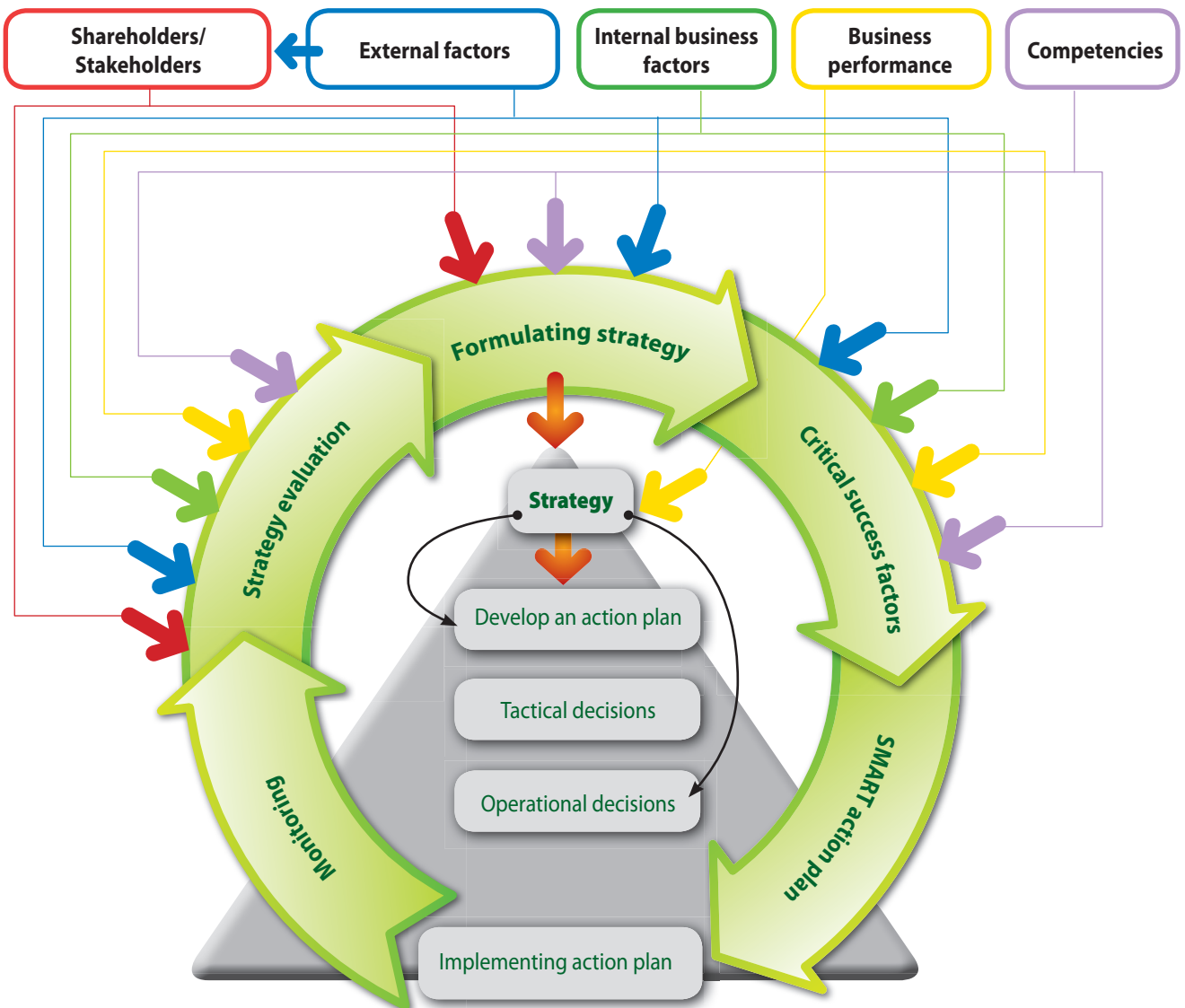


Figure 2.4: Strategic Management Cycle

- Formulate the mission
- External analysis
- Internal analysis
- Formulate strategic alternatives
- Choose one alternative
- Define specific objectives
- Develop an action plan
- Implementation action plan
- Monitor the results
- Evaluate the strategic plan

2.2

The training, step by step

The step before the training actually starts is already one of the most important. To ensure good training, it is important to have the right people involved and to manage expectations. A good intake can be very helpful. As part of this intake, the motivation of a farmer can be identified: why does the farmer want to participate? It is also important to explain the method of the training: the farmer himself must do most of the work, for an effective training he should participate on all days of the course and also spend time on the homework assignments. An open mind and willingness to share information and interact with colleagues are also preconditions for successful training. Farm size and farm type are, in principle, not selection criteria. In fact, it can be difficult if farms look too much alike. If everybody has the same farm and strategy then it is difficult to inspire each other. Also, if farmers are almost neighbours it can be difficult to create a sense of openness.

Step 1

Starting up

First the farmers in the group have to become acquainted with each other. This is not done by way of a general introduction where a farmer describes what type of farm he has and how many cows he owns. The opening question is: “What would be your job if you were not a farmer.” For some farmers, this is a difficult question because this is what they always wanted to be or there was no other option. A farmer’s answer gives an insight into his

preferences or skills. Some farmers say they would have worked with a breeding organisation. This shows their interest in animals. Others might say they would have been a mechanic. Some say they do not know exactly what other job they would like, but they are sure they want to be independent and want to be an entrepreneur. After this introduction, the trainer explains the principles of strategic management in general and also explains the structure and method of the training sessions.

In the last step of the starting session, the farmer shares information with one of his colleagues about the history of his farm and himself. From this information the facilitator can usually extract information about the farmer’s preferences and skills and, of course, also about the farm’s structure.

Step 2

Analysing the Enterprise, Entrepreneur and Environment

The Enterprise

After the introduction the farmer starts working with the ISM tool. The farmer is first guided through a number of open questions about the so called “internal business factors” (applied to agriculture we can call this farm factors or farm structure) and “business performance” (its farm performance). The open questions help the farmer to reflect on his own position. This reflection can be improved if the farmer can compare his own situation and results with a peer group, e.g. with the help of a benchmarking tool. After these open questions, the farmer has to assess scores for his internal business factors and for the busi-

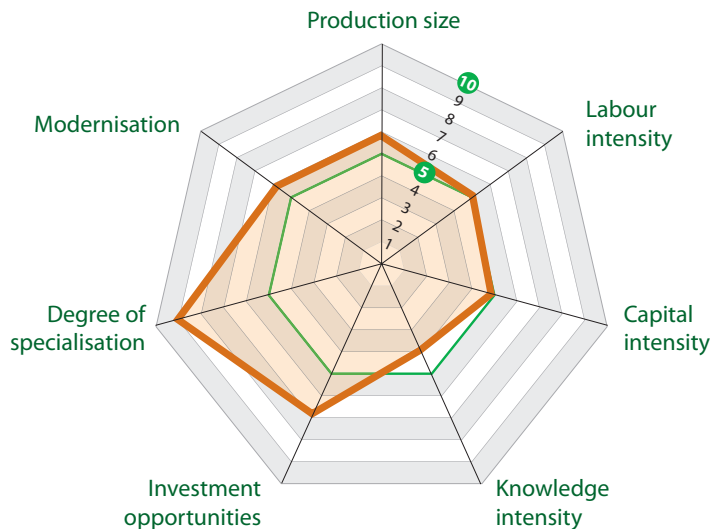


Figure 2.5: Example scores for internal business factors

ness performance on a scale from 1–10. This results in two graphs or profiles as shown in Figure 2.5 and Figure 2.6.

The example graph for the internal business factors shows that this farmer sees his farm as a highly specialised farm, with relatively low knowledge intensity. The score for investment opportunities is quite high which is, of course, very important for the future strategy because if this score was low that would mean there is hardly any room for investments.

An important aspect of the training is that farmers see that the individual graphs are very different. This emphasises that every situation is different and that a farmer should look closely at his own situation and not just copy the strategy of his neighbour.

How do the internal business factors and the business performance influence strategy? Old buildings or many different buildings will influence the possibilities of expanding or saving labour etc. This can also be considered in a positive way because if one has new buildings a farmer will not easily replace them with a better type because they still hold considerable value. The business performance is a crucial factor in strategic choices. If the farm performance is on a high level (in several aspects, including technical and financial ones), then the farmer has more strategic options available. If the performance is at a low level, then fewer strategic options are possible. Such a farmer should possibly focus first on improving their farm's performance before considering new strategies.

The Environment

Again with the help of the ISM tool the farmer answers open questions about the environment. These questions are more future-oriented: what do you expect in the (near) future? The environment includes many different aspects. Of course, the market is very important; for instance, what will be the trend of the price(s) of your product(s)? Moreover, what will be the trend of the prices of the inputs needed for the farm? The local environment is also important; for example, is it possible to expand your farm? What is your relationship like with the neighbours? Which main develop-

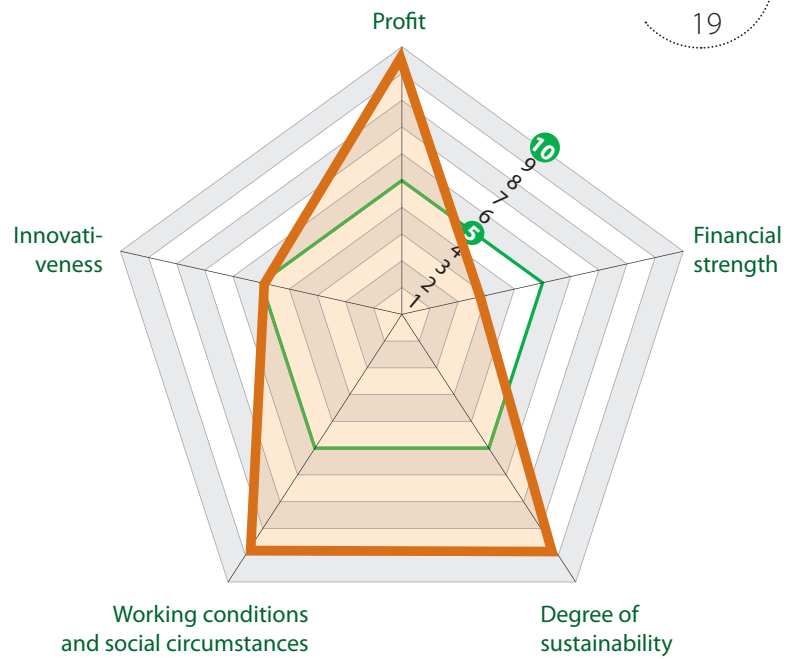


Figure 2.6: Example scores for business performance

ments in society could possibly influence the future of your farm? Which technological possibilities are available? It is important to try to stimulate farmers to assess developments with an open mind. A farmer should be prevented from judging too soon that developments are positive or negative because this is related to the (future) strategy. If a farm is very close to a city then this can be assessed as negative if the farmer intends to

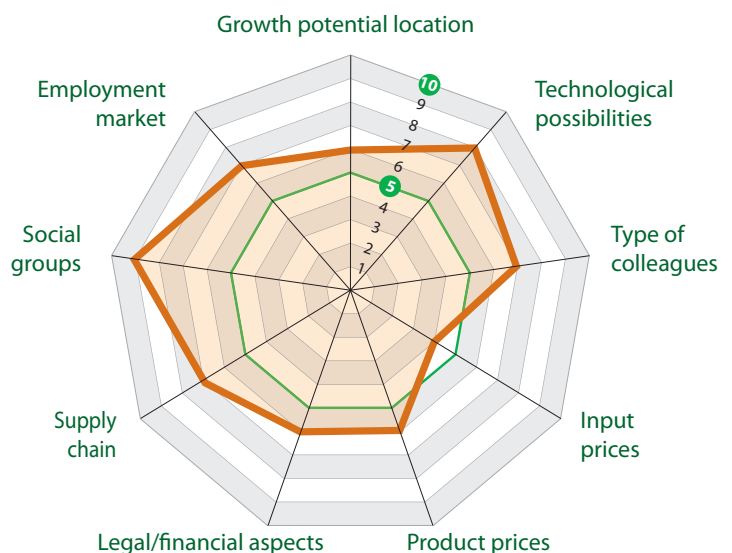


Figure 2.7: Example scores for external factors

focus on large-scale farming. However, being in close proximity to a city is very positive for a strategy of direct sales.

Figure 2.7 shows the results of a farmer's analyses of the external factors, i.e. the environment. This farmer is quite positive about technological possibilities and about social groups. He is somewhat negative about input prices (e.g. land or feed). The relationship between these aspects and the strategy is often quite clear: if there is no growth potential at your current location, then a strategy focussing on growth obviously does not fit.

The Entrepreneur

Different skills are required for different strategies. If you want to sell your own products on your farm, you must have the skills to communicate with customers. If you want to develop a large-scale farm you must be a good organiser and manager. Especially with family farms the farmer and his family have an essential role in implementing the strategy – it is them who have to do the work! This usually means you have to work with the available skills. It is not so easy to hire extra persons with specific skills.

Figure 2.8 shows a graph presenting a farmer's results for the competencies. This graph reveals that this farmer believes he is market-oriented and also has a preference for technology and production. He thinks he is a good organiser.

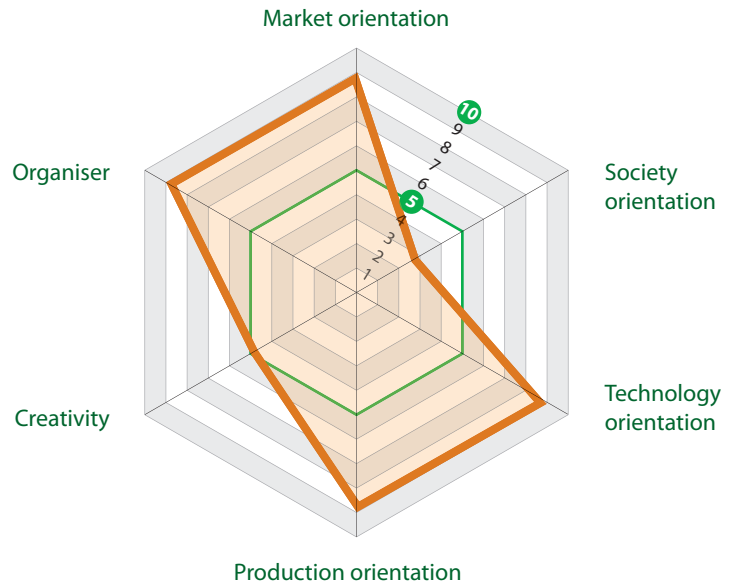


Figure 2.8: Example scores for competencies of the entrepreneur

presentation to share the results with the rest of the group. This presentation provides the starting point for day 2. Some examples of these homework assignments can be found in Chapter 3.

Step 3

From analysing to strategy choice

The crucial part of the training is to make the step from analysing to strategy development. This starts with the farmer's personal ambitions, what drives him and what his dreams are. A farmer has to come up with at least two options for his future strategy that fit with the analysis he has made. The farmer is challenged to come up with more than one strategy to stimulate him to think 'outside of the box'. They also use the tool to assign scores to 15 possible strategies (Figure 2.9). While these are generic strategies and not farm-specific strategies, they can help inspire new ideas. The tool also calculates scores for these 15 strategies based on the score the farmer gave earlier in the training on the three E's (Entrepreneur, Enterprise, Environment). This results in a graph of strategies with the score the farmer has assigned and the score calculated by the tool.

If there are (big) differences between the scores given by the farmer and the calculated scores then it is important to go back one step and see what the main reason for this could be. This step is finalised with a definite choice of a future strategy.

Homework assignments: after each training session the participants have to work on assignments. First of all, they can work with the ISM tool at home, they can discuss the answers with their family or with others. The main assignment after day 1 is that they have to talk to an entrepreneur outside of agriculture. A farmer is later asked to talk about how this entrepreneur makes strategic choices, how he runs his business, what his goals are and how he reacts to changes. The goal is for the farmer to recognise similarities in the process of running a business and making strategic choices. The farmer has to prepare a short

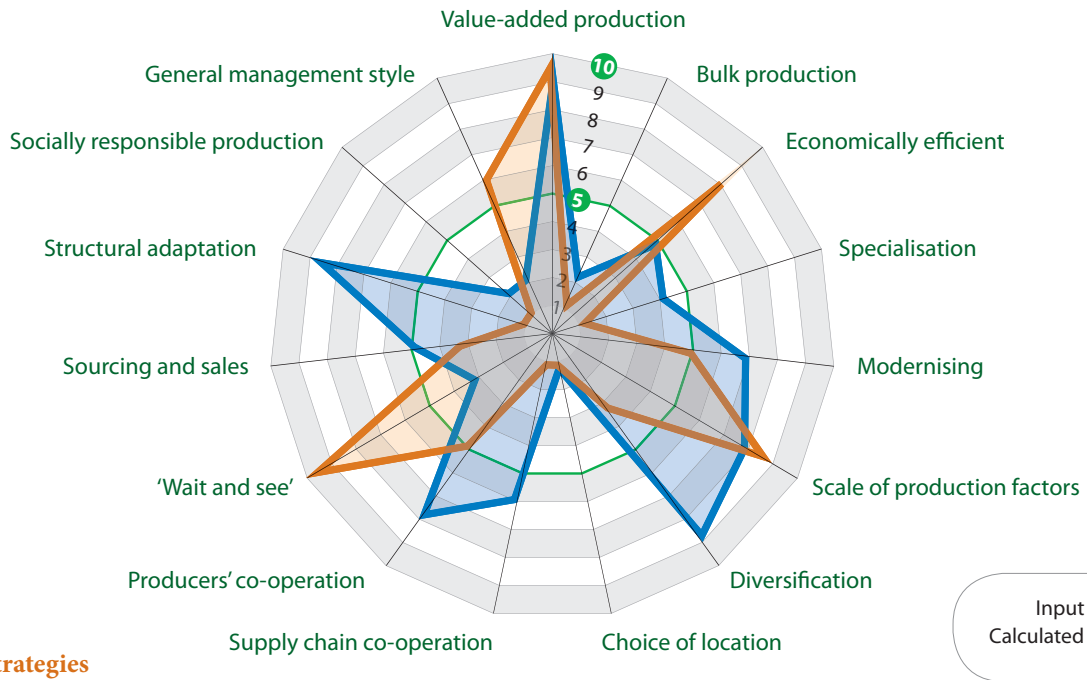


Figure 2.9: Strategies

Throughout this publication, the *input scores* in the spiderweb diagrams are self-reported scores by the entrepreneurs participating in the ISM training programme. Also, throughout the publication the *calculated scores* in the spiderweb diagrams are calculated by the tool. The calculation is based on expert knowledge on relations between business and personal factors and strategies.

Step 4

Action plan

The strategy has been developed, but now the real work starts. A good action plan is important for implementation of the strategy. The action plan should be **SMART**: **S**pecific – **M**easurable – **A**ttainable – **R**ealistic and **T**imely. Each action should have the following elements at a minimum: what will I do, who is involved, and when will it be finished. The goal is to already make a start with the action plan during the training. After the second day of training, when the farmer has made his choice of future strategy, the farmer is given a personal assignment for the last meeting. This assignment depends on the strategy the farmer has selected. If his strategy includes a major investment, then the assignment might involve doing a ‘reality

check’ of this investment: what are the costs and what are the anticipated returns? If the new strategy is focussing on developing new markets, then the assignment could be to make contact with possible buyers and discuss the possibilities. After the training, the farmer has both a strategy and an action plan. It is important to monitor the progress of the action plan. If it becomes clear that certain goals cannot be achieved, for example due to changes in rules or legislation, then it may be necessary to go back and repeat earlier steps in the process and adjust the strategy. Preferably, the facilitator of the training also supports the farmer with the monitoring and implementation of the action plan.

For the last meeting of the training, the farmers prepare a (Power Point) presentation of their strategy. This presentation includes the analyses, an explanation of why this strategy was chosen, and the action plan. Depending on the chosen strategy, each presentation should also include an individual part. If his strategy includes a major investment, then the ‘reality check’ of this investment could be included in the presentation: what are the costs and what are the anticipated returns. At this meeting, each farmer presents his strategy to the group and a discussion of it follows. This presentation can also be used later by the farmer to share his strategy with people working on his farm or with other stakeholders (e.g. a bank or a supply chain partner).

Chapter 3

Practice

In this chapter farmers and students describe their family enterprise and own skills and the outside environment they experience. In chapter 2 this was expressed by the so called competencies of the entrepreneur, the internal business factors, the business performance and external factors. To make it applicable to farmers, these concepts are in this chapter 3 translated as follows:

- Competencies of the entrepreneur are called **“Farmer competencies”**
- Internal business factors are called **“Internal farm factors”** or **“Farm structure”**
- Business performance is called **“Farm performance”**
- External factors are called **“External farm factors”**

How do farmers and students plan the future

Using method of Interactive Strategic Management
Farmers of who the farm business has been described and analyzed

Farmer cases:

- ❶ **Arūnas Dirgėla farm** • Lithuania
- ❷ **Ričardas Barzdenis farm** • Lithuania
- ❸ **Zita Juzokienė farm** • Lithuania
- ❹ **Krzysztof Różalski farm** • Poland
- ❺ **Leszek Sychocki farm** • Poland
- ❻ **Kownaczy farm** • Poland
- ❼ **Organic farm Meden** • Slovenia
- ❽ **Family farm Kukenberger** • Slovenia
- ❾ **Family farm Alojz Vernik** • Slovenia

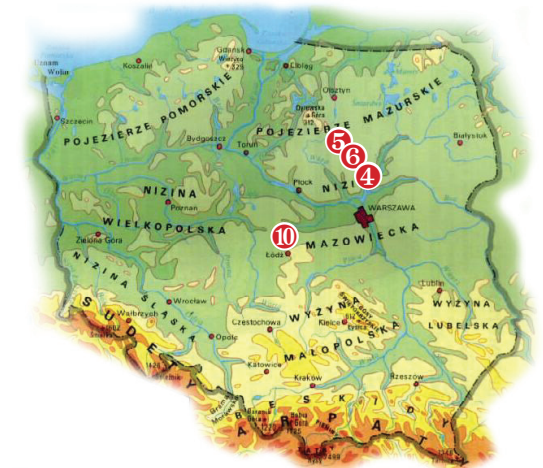
Student cases:

- ❿ **Family Stanisławscy farm** • Poland
- ⓫ **Family farm Černivec** • Slovenia

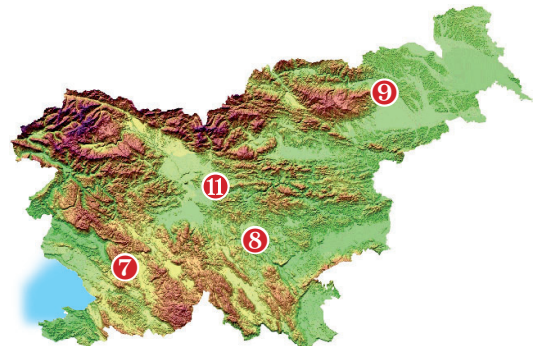
Lithuania



Poland



Slovenia



Case 1: Arūnas Dirgėla farm, Lithuania

Family members: wife Violeta and husband Arūnas, sons: Kęstutis, Vytautas, Mindaugas;

Supervised by: Ignas Jankauskas, Lithuanian Agricultural Advisory Service

The farmer

- I love living in the countryside.
- I consider myself to be a little stubborn.
- My strong qualities are that I am persistent, honest and diligent.
- I used to dream about being a sailor; I think I am looking for new adventurous things.

The farm

The main activities on the farm:

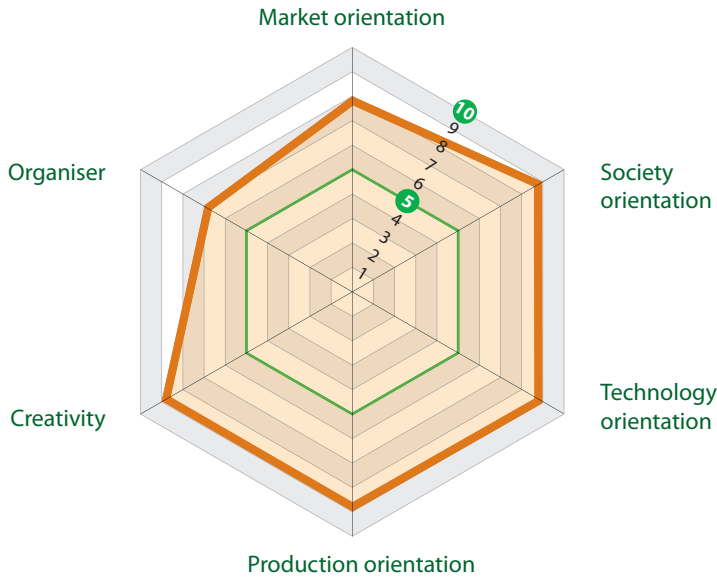
- Milk production
- Livestock sales for meat

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	9/5
No. of cattle (total)	62
No. of dairy cows	40
No. of heifers (+ young stock)	22
Agricultural land (ha, own + rented)	67
Milk production in 2011 – total (kg)	279,000
Milk quota in year 2011/2012 (kg)	279,297
Milk production per cow in 2011 (kg)	6,982
Breed of cows	Lithuanian black and white



Spider web of the farmer competencies



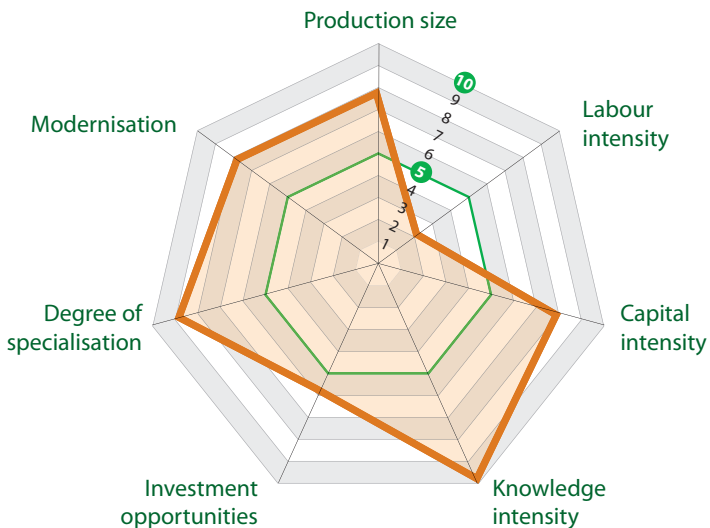
Strong points

- Land plots are located around the farm
- Good roads to reach the farm and all plots
- Balanced machinery basis
- Healthy herd

Weak points

- A lack of industrial buildings, the barn is full, so to increase the number of cows a new one should be built
- A lack of farm land, for a bigger herd you need more land for preparing feed (Lithuanian farmers usually prepare feed by themselves), or better quality land (for bigger yields)
- These problems do not allow an increase in the number of cows and an increase in milk production on the farm level

Spider web of the Internal farm factors



External factors

Location

- The farm is situated in a plain area, 22 km from the nearest city
- A small town is nearby
- It is hard to buy or rent land in the neighbourhood
- Unfortunately, all five plots are in unfavourable areas

Other

- I take part in the "Pienas LT" cooperative, which is one of the biggest in Lithuania. All milk is sold to this cooperative.
- I believe strong relations with the cooperative are beneficial for two reasons: in the future investments will give farmers returns, and it guarantees the buying up of the production.

Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- Reach the optimal herd size
- Applied modern machinery
- Reduced sensitivity of the impact of negative price volatility on the farm's financial stability

Strategy

I am considering two possible strategies

Strategy 1

- Modernising

Strategy 2

- Chain cooperation

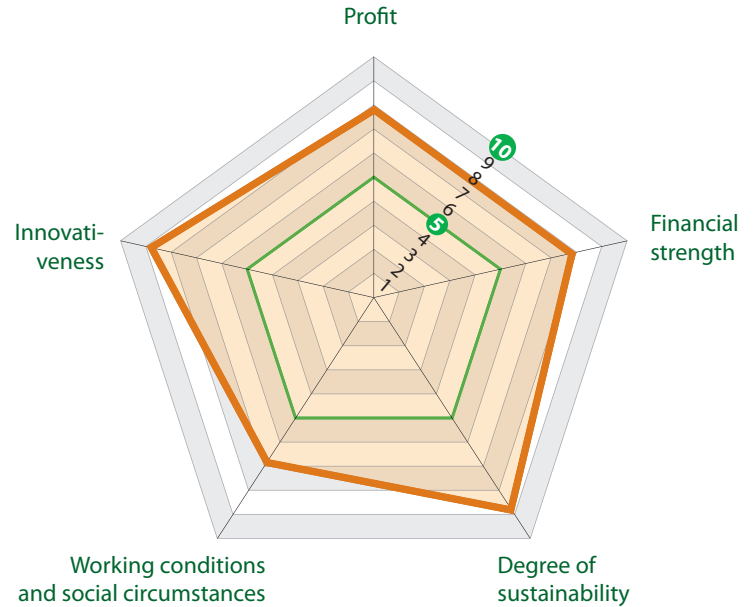
My chosen strategy:

- Chain cooperation because it is much easier to overcome difficulties with a group of farmers than separately.

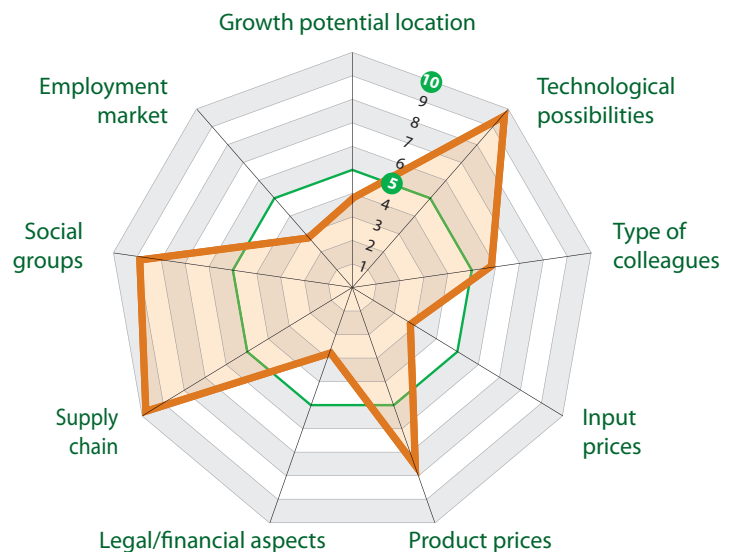
Critical success factors – in relation to my chosen strategy

The key success factor is milk production on the farm level. While being a cooperative member, the farm needs to increase it up to an appropriate level.

Spider web of the farm performance



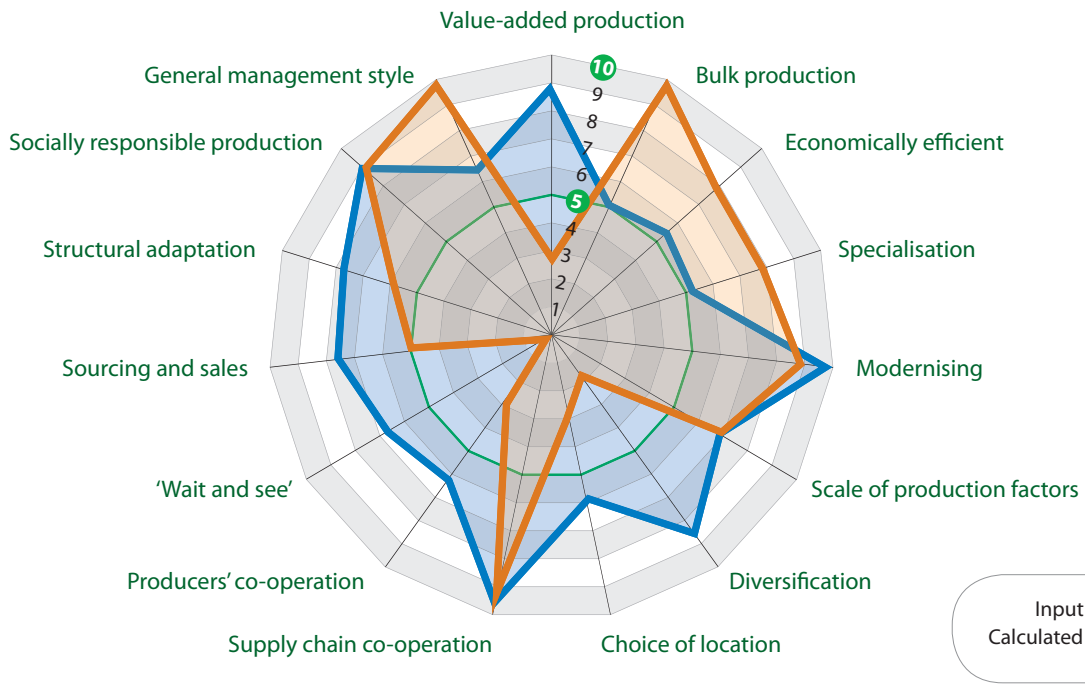
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1: Modernising		Strategy 2: Chain cooperation	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> Investments will help to reduce the impact of price volatility on the farm's financial stability 	<ul style="list-style-type: none"> A huge amount of cash is necessary 	<ul style="list-style-type: none"> More stable milk price The ability to get dividends 	<ul style="list-style-type: none"> Big investments are necessary when joining the cooperative

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Increase herd by 20%	In next half a year	Purchasing heifers in calf	Veterinarian	Sufficient farm income
Increase production per cow	Constantly	Producing better quality feeds	Veterinarian for breeding a better herd, for higher cow productivity	Sufficient milk production

Case 2: Ričardas Barzdenis farm, Lithuania

Family members: wife Lidija and husband Ričardas, daughters: Donata, Gustė and Vaiva

Supervised by: Ignas Jankauskas, Lithuanian Agricultural Advisory Service

The farmer

I am a little stubborn, but this helps me to be diligent and also honest. Communicability and patience help me work with partners. Sometimes I am generous to my employees and partners.

I would have been a manager of a company if I wasn't an agricultural entrepreneur.

The farm

The main activities on the farm:

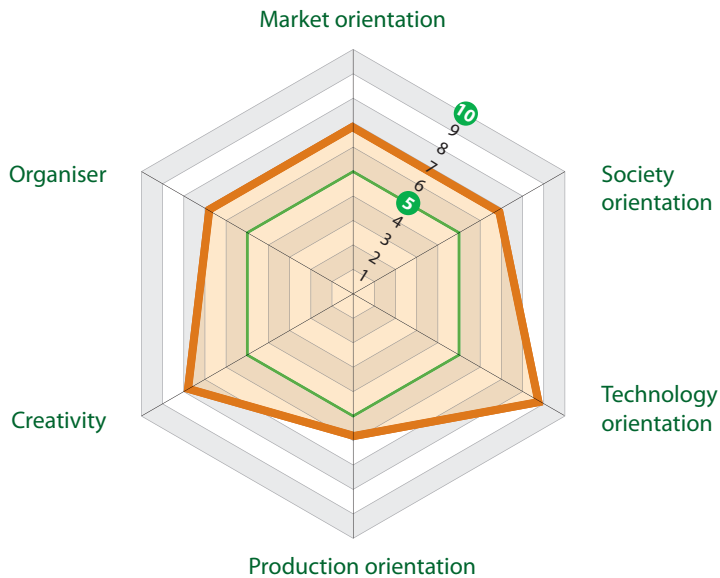
- Milk production
- Cereals production
- Reindeer husbandry

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	4/2
No. of cattle (total)	110
No. of dairy cows	55
No. of heifers (+ young stock)	55
Agricultural land (ha, own + rented)	213
Milk production in 2011 – total (kg)	330,000
Milk quota in year 2011/2012 (kg)	250,000
Milk production per cow in 2011 (kg)	6,000
Breed of cows	Lithuanian red



Spider web of the farmer competencies



Strong points

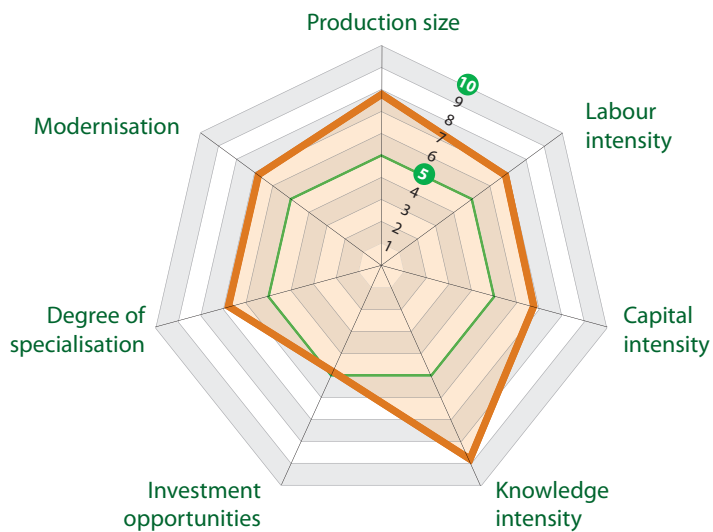
- All farm land is in one solid piece around the farm
- The farm produces its own feed
- The farmer has a lot of contacts with processors, suppliers and government representatives

Weak points

- High dependency on production price
- The farm has a big loan to repay
- The employees have very low competencies



Spider web of the Internal farm factors



External factors

Location

- The farm is situated in a remote location, approximately 18 km from the nearest city. The farm land is in a plain area, but is unfavourable for farming.

Other

- We sell milk through a cooperative and I take my place in the cooperative only as a producer. Other forms of cooperation are not in my plans.

Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- A stable farm as a guaranteed livelihood for the family
- A well-developed farm for future generations
- A socially responsible farm, producing ecological milk

Strategy

I am considering two possible strategies

Strategy 1

- Modernising

Strategy 2

- Emphasis on sourcing and sales

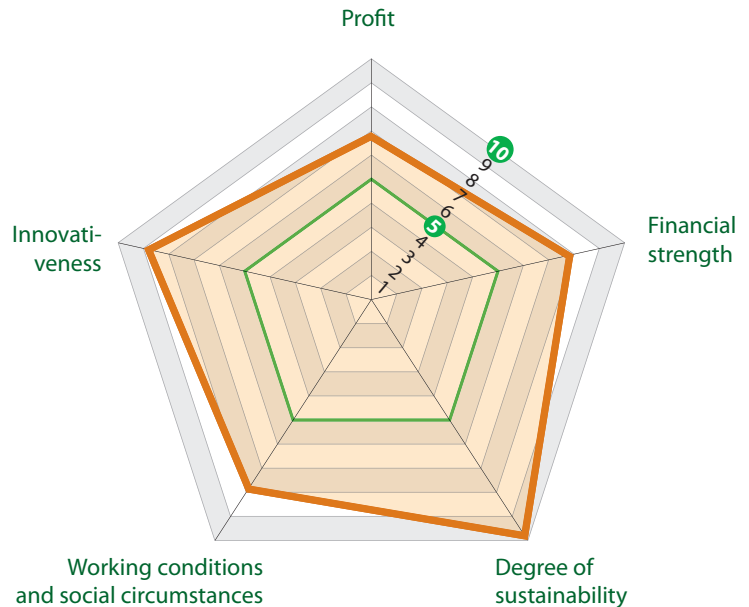
My chosen strategy:

- Modernising: Despite the huge investments and risk about the milk price, modernising is a way which can help to save costs and bring the farm's efficiency a level up.

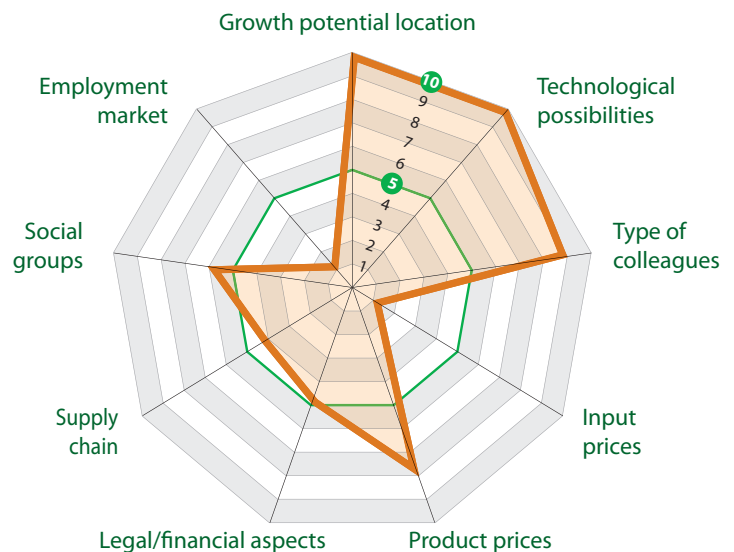
Critical success factors – in relation to my chosen strategy

If the milk price were to drop by more than 20 percent, the modernising should be stopped for a while.

Spider web of the farm performance



Spider web of the external farm factors

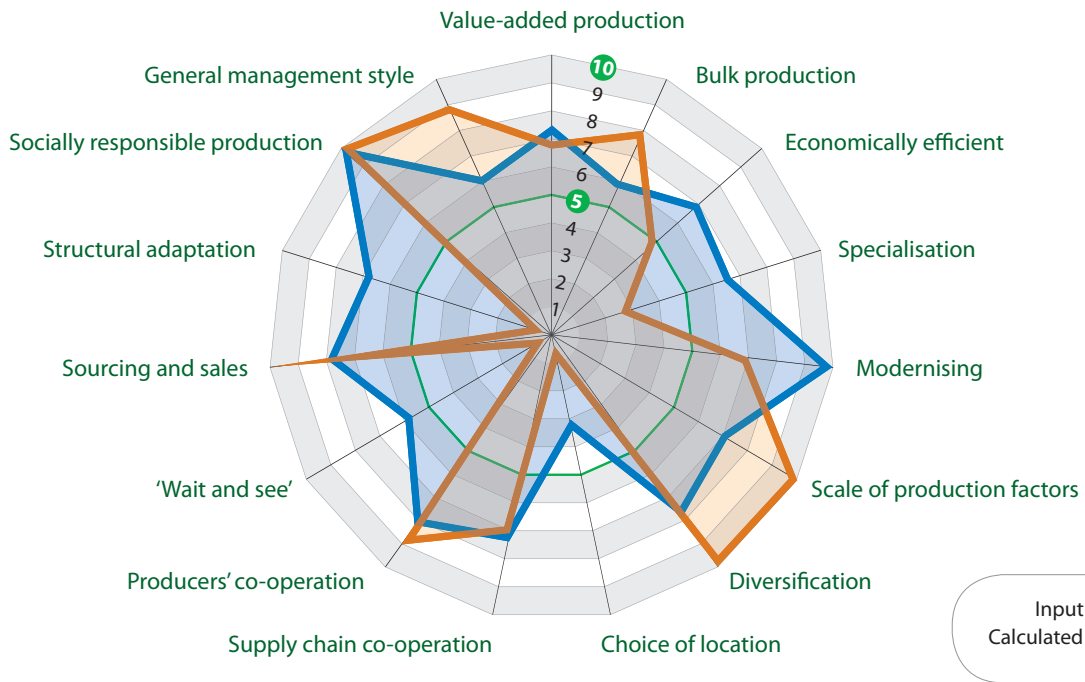


The advantages and disadvantages

Strategy 1: Modernising	
Advantages:	Disadvantages:
<ul style="list-style-type: none"> Less labour and time will be necessary for farm operations Modern technologies help to save inventories 	<ul style="list-style-type: none"> Huge investments

Strategy 2: Emphasis on sourcing and sales	
Advantages:	Disadvantages:
<ul style="list-style-type: none"> Possibilities to find a better connection to the market 	<ul style="list-style-type: none"> Threat of remaining in worse conditions: if you change your buyer or supplier often, there is a risk of finding even worse ones

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Purchase a tractor with a mounted forklift	After one week	Exploring the market, testing machinery	No one's	Enough cash flow
Build up grain storage	After one month	Searching for a constructing company	No one's	Enough cash flow

Case 3: Zita Juzokienė farm, Lithuania

Family members: wife Zita and husband Antanas, sons: Virginijus, Vaidas and his wife Renata, Tomas and his wife Ieva with son Lukas

Supervised by: Ignas Jankauskas, Lithuanian Agricultural Advisory Service

The farmer

- I am a very diligent person and also nimble, which helps me to deal with suppliers and meet all the farm regulations.
- I love sewing, so I dream about being a tailor if I wasn't an agricultural entrepreneur.

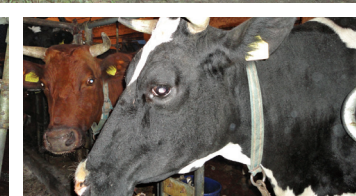
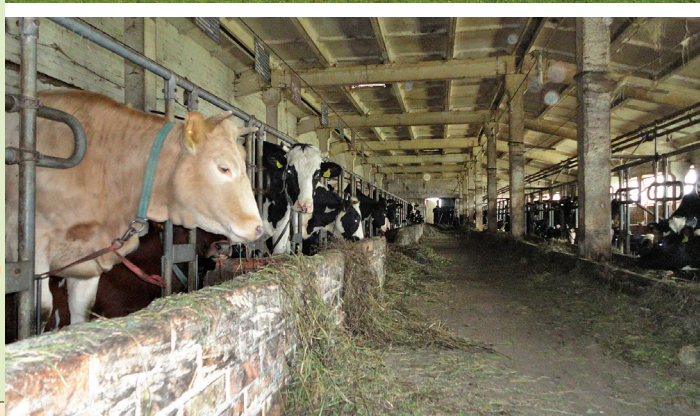
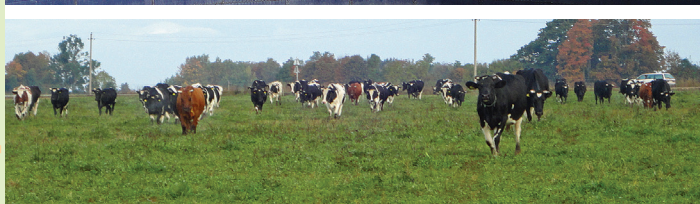
The farm

The main activities on the farm:

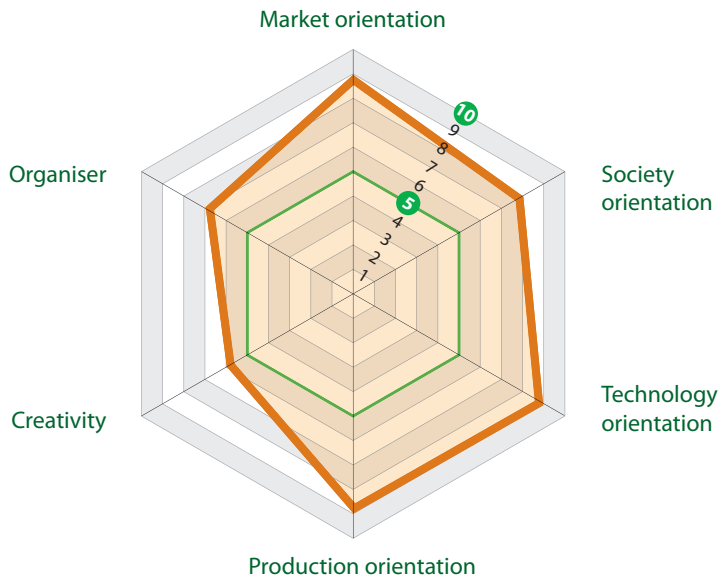
- Milk production
- Cattle for meat
- Calves for meat
- Cereals production

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	5
No. of cattle (total)	128
No. of dairy cows	74
No. of heifers (+ young stock)	54
Agricultural land (ha, own + rented)	176
Milk production in 2011 – total (kg)	440,000
Milk quota in year 2011/2012 (kg)	424,000
Milk production per cow in 2011 (kg)	6,500
Breed of cows	Black and White, Red and White



Spider web of the farmer competencies



Strong points

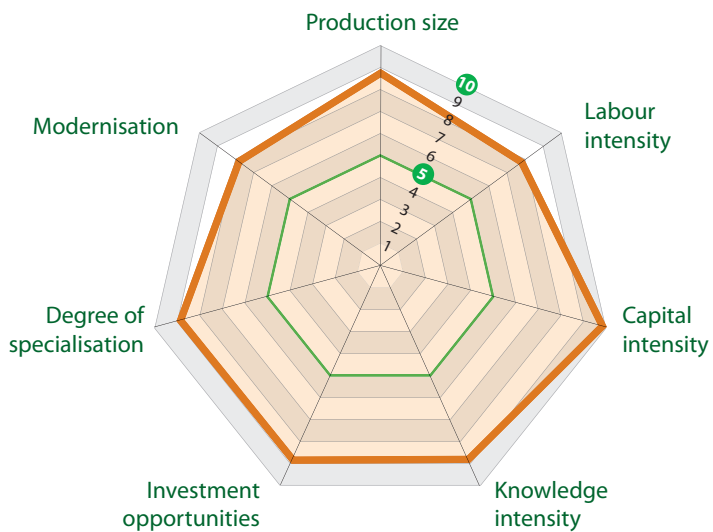
- Good staff
- Possible successor
- The farm meets the requirements of manure handling

Weak points

- Animal health
- Lack of machinery
- Lack of financial resources



Spider web of the Internal farm factors



External factors

Location

- The farm is situated in a plain area, 14 km from the nearest city. My farm land is divided into 52 different pieces and is not very favourable to crop farming, but for my dairy farm it fits well.

Other

- We sell the milk directly to a processor, no future integrations are planned.

Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- A farm with traditions
- The farm will be a good livelihood for the whole family
- A modern animal feeding system
- Increased amount of own land
- Stable and competitive

Strategy

I am considering two possible strategies

Strategy 1

- Modernising

Strategy 2

- Horizontal cooperation

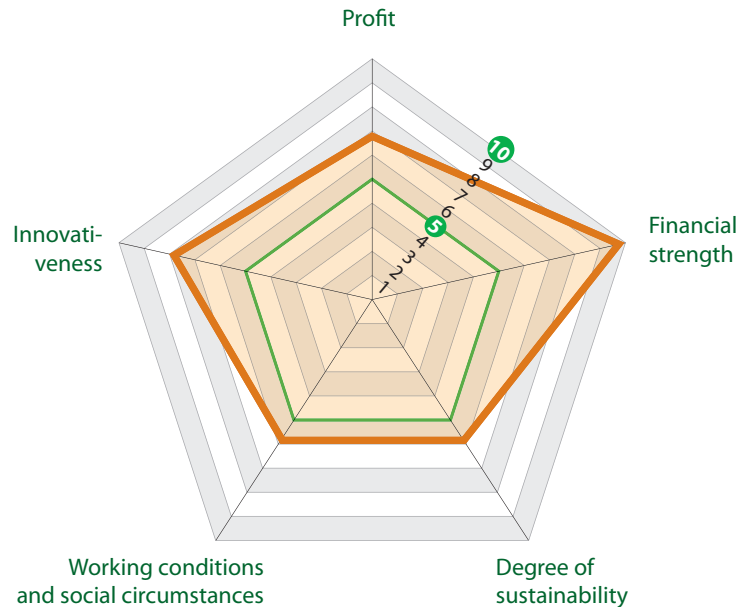
My chosen strategy:

- Modernising – because this strategy will help me to achieve better feed quality and higher milk production per cow. The farm will remain as a competitive, fully developed unit.

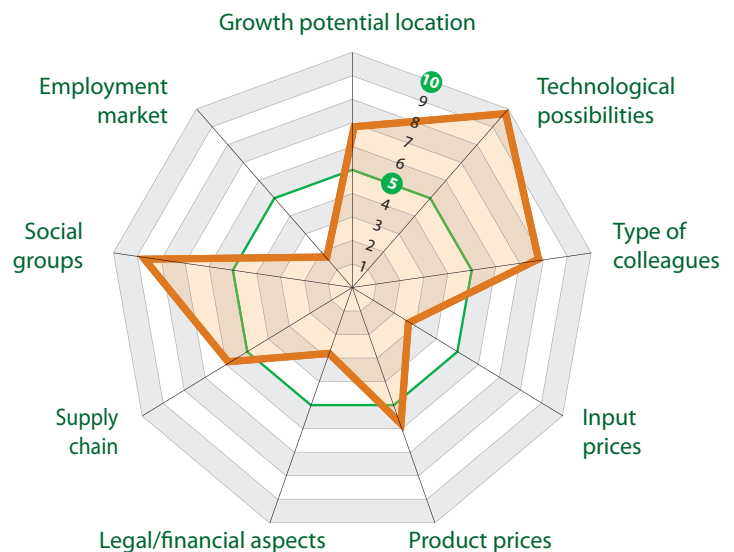
Critical success factors – in relation to my chosen strategy

The farm should be profitable enough if we want to set aside a certain amount of cash flow for investments.

Spider web of the farm performance



Spider web of the external farm factors

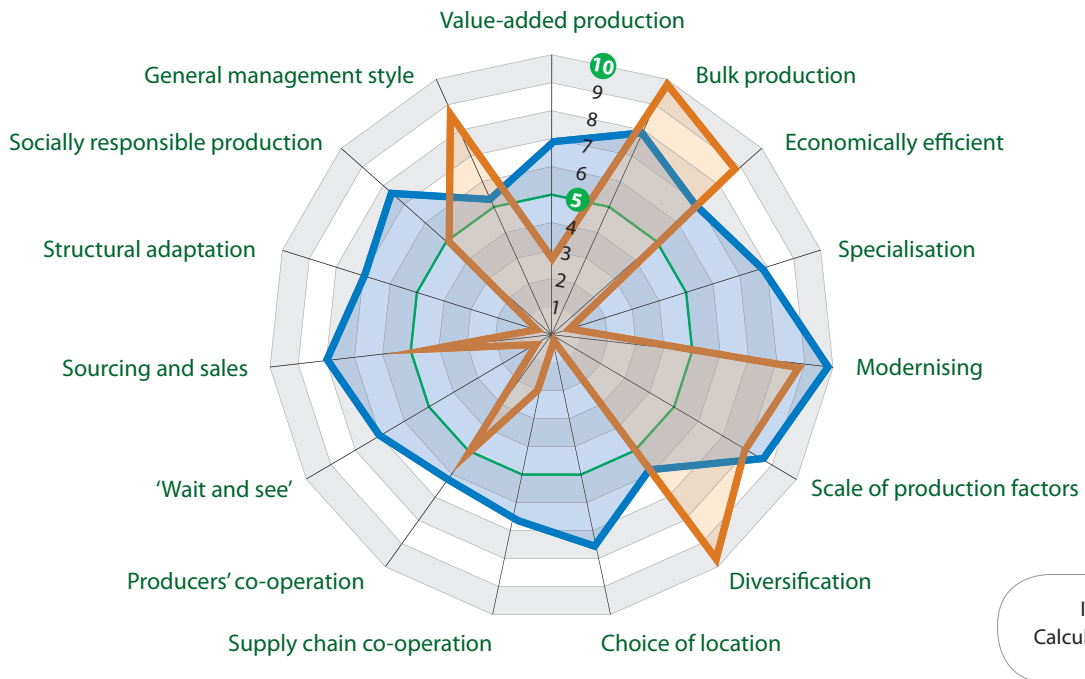


The advantages and disadvantages

Strategy 1: Modernising	
Advantages:	Disadvantages:
<ul style="list-style-type: none"> Modern technologies help to save time and costs 	<ul style="list-style-type: none"> Big investments are necessary

Strategy 2: Horizontal cooperation	
Advantages:	Disadvantages:
<ul style="list-style-type: none"> Possibility to reach a sufficient machinery level with fewer investments 	<ul style="list-style-type: none"> Dependence on machinery use schedule, especially in peak seasons

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Start saving money for feeding machinery	Machinery must be purchased before the autumn season	Looking for the best machinery offer	No one's	Sufficient level of profitability
Organise operational tasks perfectly	As soon as possible	Strengthening weak points	Family members'	At least 3 family members
Purchase corn-seed-ing machine	By next spring	By saving money	No one's	Enough savings in bank account

Case 4: Krzysztof Różalski farm, Poland

Family members: Bożena (mother) and Zdzisław (father), Krzysztof (the farmer), Magdalena (farmer's fiancée) and Krystyna (sister)

Supervised by: Agricultural Advisory Centre in Płońsk

The farmer

- I am very optimistic and always looking for a solution to a problem. I think that I am open-minded and ingenious. Probably, that is why I have a tendency to be a leader in a group. I think I have good relations with other people and I am easy to communicate with. Unfortunately, I am not very resistant to stressful situations. My attitude is relatively explosive but quite often this helps and drives me into action. My personal maxim is that anything is possible.
- If I were not an entrepreneur in an agricultural business I would like to create my own business in information technology (IT), and probably in logistics. Because I always try to lead more than one activity at the same time and not waste time.

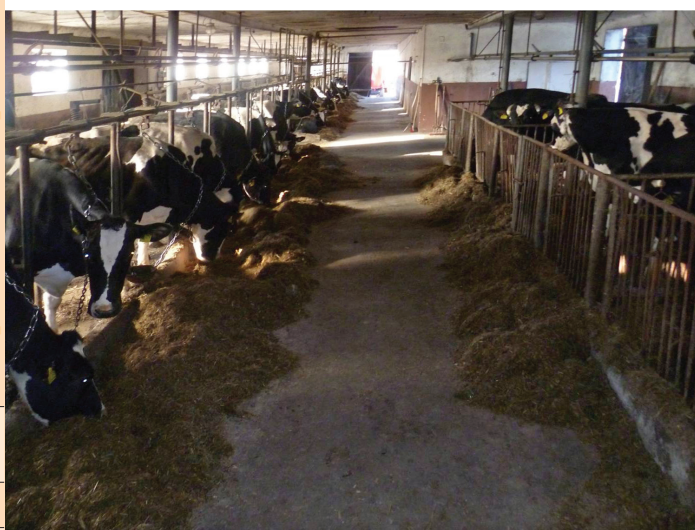
The farm

The main activities on the farm:

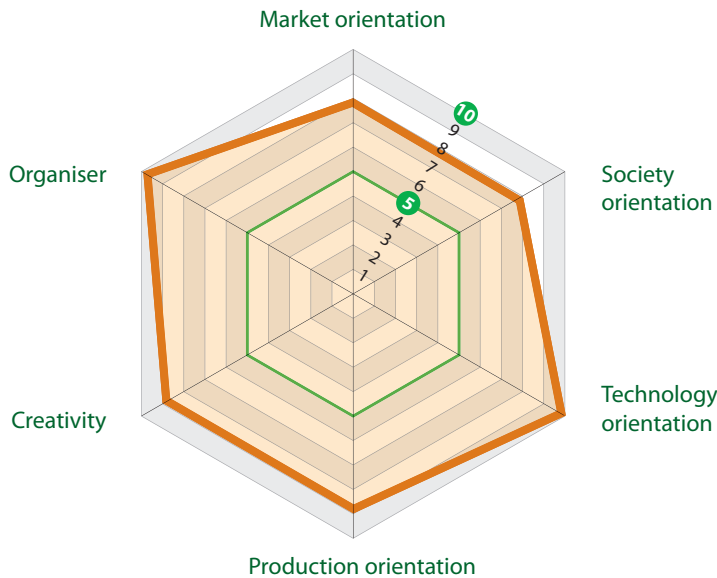
- Milk production
- Beef cattle keeping
- Pigs for fattening

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	4/3
No. of cattle (total)	85
No. of dairy cows	40
No. of heifers (+ young stock)	45
Agricultural land (ha, own + rented)	50 ha total (30 own + 20 rented)
Milk production in 2011 – total (kg)	180,000
Milk quota in year 2011/2012 (kg)	145,000
Milk production per cow in 2011 (kg)	6,000
Breed of cows	HF



Spider web of the farmer competencies



Strong points

- Our farm is located not so far from the city (a distance of 10 km)
- The plots are located far from main big roads – it is easy to get there from the farm and to get around our plots
- Work on our farm is very well organised – we are able to manage all the work based on our own labour

Weak points

- We have some problems with the structure of the farm (the location of the buildings) and an enlargement of the existing buildings is not so easy
- We still trying to increase the milk yield
- We are not satisfied with the actual system for keeping dairy cows – a new modern barn is needed

External factors

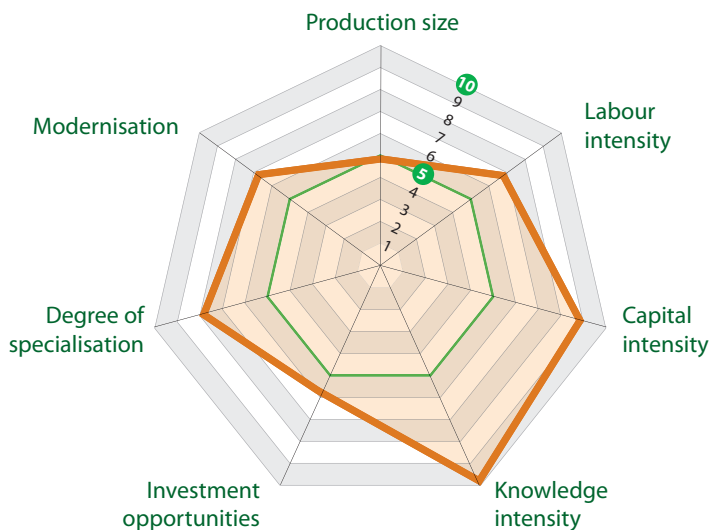
Location

- Our farm is 10 km away from a city and is located to the side of a village. We are far away from the main roads. In the close surroundings there is a lack of forests – it is a typical agricultural environment in a lowland terrain. The plots are not so fragmented – so it is quite easy to operate on them.

Other

- We do not have a good situation in the chain of means of production suppliers. The weak relations are more with the owner of milk collection enterprise and his workers (drivers of the tank). We are taking part in a long chain so I do not come closer to the final customer. Maybe that is why public opinion is not so important for the direction of my business. We are more worried about enlargement of the barn and the storage room and integration with the existing structure of the buildings.

Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- Our main goal is to achieve financial independence to ensure a stable economic situation for the family.
- In the production aspect, we need to increase the scale of milk production, especially milk yields over 8,500 kg per cow.
- Also we need to improve the animal welfare by building a new free-stall barn for 150 to 200 dairy cows.

Strategy

I am considering two possible strategies

Strategy 1

- Specialisation with an increase in milk production

Strategy 2

- Transport and storage service, crane operating, wind power station and biogas energy

My chosen strategy:

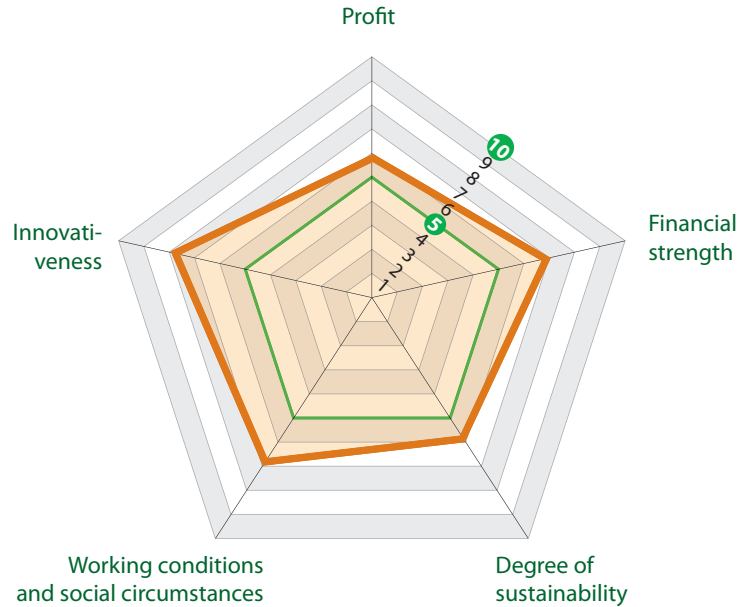
- Specialisation with an increase in milk production

The reason for this: Enlargement of the milk production may provide a more stable income. Moreover, the chosen strategy is already (partly) implemented and I have knowledge and experience in this production sector. Maybe only a transportation service will be implemented as an additional business.

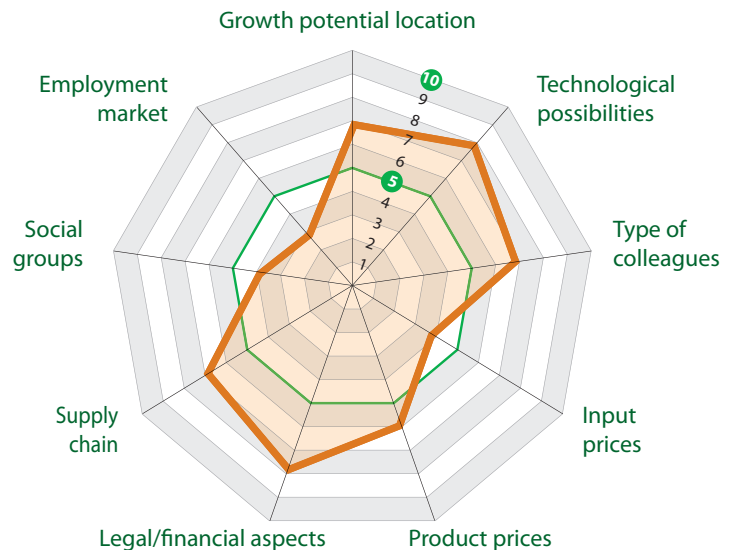
Critical success factors – in relation to my chosen strategy

In my opinion, the most limiting factor is the availability of financial funds from various sources (EU funds, commercial credits). The other problem is the limited space for the enlargement and integration of new constructions with the existing buildings.

Spider web of the farm performance



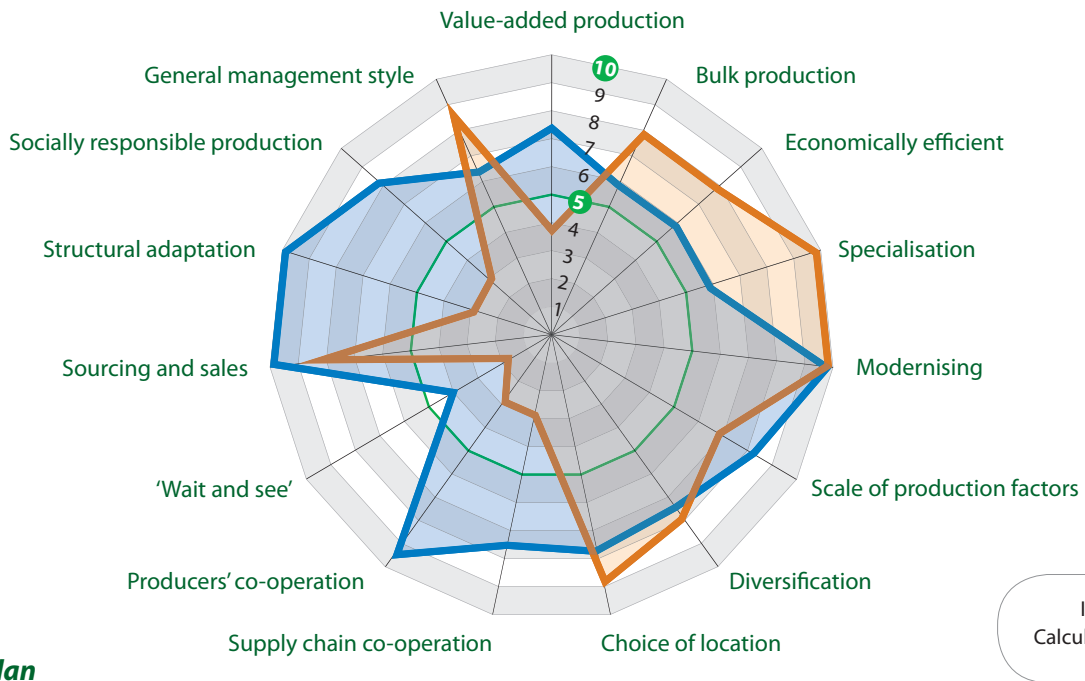
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1:		Strategy 2:	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> • Continuous development • Working with people • Stability of high income 	<ul style="list-style-type: none"> • A large amount of financial funds is needed • Higher workload and time-consuming 	<ul style="list-style-type: none"> • Possibility to reach a sufficient machinery level with fewer investments 	<ul style="list-style-type: none"> • Dependence on machinery use schedule, especially in peak seasons

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Preparation of a business plan	In progress now – started in 2012	Working on the documentation	Agricultural Adviser	Personal motivation and determination
Applying for EU funds	In progress now – started in 2012	Working on the documentation	Agricultural Adviser	Limitation of funds
New loan	If EU funds not received	Preparation of documentation due to bank requirements	Bank consultant	Bank's acceptance of the business plan
Purchasing new equipment (bigger cooler and milking machine)	When financial funds are available	Looking for the best option for buying (price)	A consultant on machines and equipment	Available funds
Purchasing land	When financial funds are available	Looking for the best option (price)	Other farmers/neighbours	The lack of land or formal problems with buying the land

Case 5: Leszek Sychocki farm, Poland

Family members: Anna (mother) and Antoni (father), Leszek (farmer) and Agnieszka (wife)

Supervised by: Agricultural Advisory Centre in Płońsk

The farmer

- I am relatively easy when it comes to contacting other people and I feel that I have good management abilities. Usually, in a group of people I play the role of a leader. Besides, I tend to be a workaholic and always have to take part in everything on the farm. I am punctual and precise in my work. Also I am resistant to stressful situations. I try to be an open-minded person to incoming trends and am always looking for new possibilities and solutions.
- If I were not an entrepreneur in agriculture I would stay with my own business and create a service company for designing. Even now, if I have more spare time I think that it may be my second occupation.

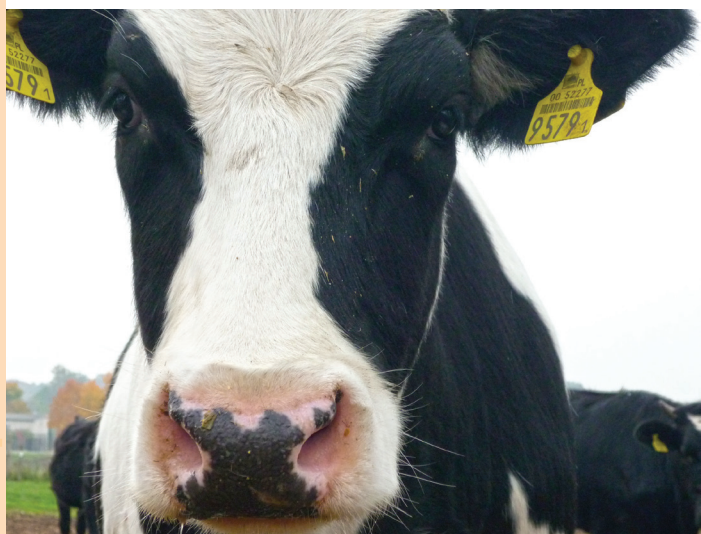
The farm

The main activities on the farm:

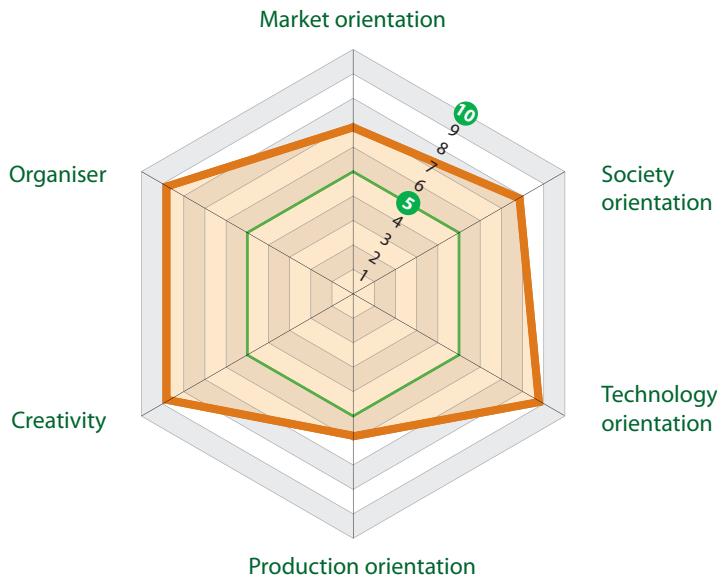
- Milk production
- Beef cattle keeping
- Cultivation of cereals, sugar beet, oilseed rape, onion and edible potatoes

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	4/3
No. of cattle (total)	87
No. of dairy cows	45
No. of heifers (+ young stock)	42
Agricultural land (ha, own + rented)	87 ha total (32 own + 55 rented)
Milk production in 2011 – total (kg)	288,000
Milk quota in year 2011/2012 (kg)	240,000
Milk production per cow in 2011 (kg)	7,000
Breed of cows	HF



Spider web of the farmer competencies



Strong points

- In my opinion, our farm has the optimal size and is very well located
- I am convinced that the organisation of work on the farm is ergonomic and effective
- The main strong point is the lack of debt which gives me financial stability

Weak points

- A problem with the fragmentation of plots and the too small area for plant production
- Besides the good organisation of work, the level of mechanisation on the farm is still too low
- We are still dependent on seasonal external labour

External factors

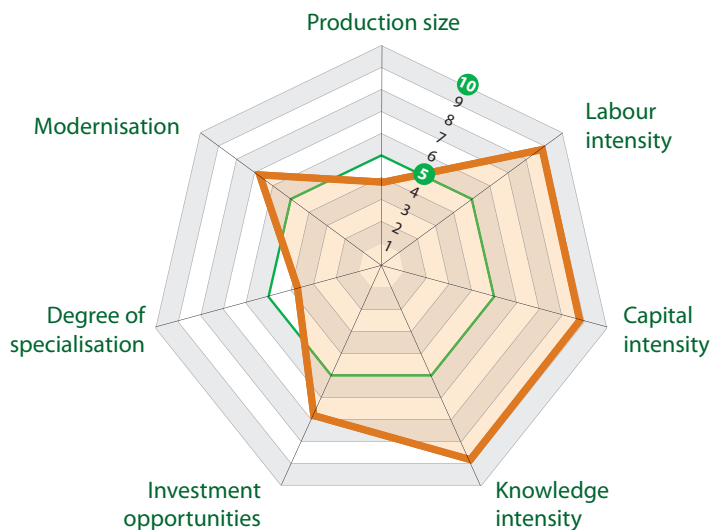
Location

- The farm is located at a distance of 8 km from a city. We are close to communication routes and the access to plots is relatively easy. The problem is that our plant production area (87 ha) is fragmented into 40 plots. The farm is located on low land and the class of a soil is very differentiated. By the way, we operate in a less favoured area (LFA). The good thing is that we have a large and useful property.

Other

- The main problem is the situation with external labour and we still have a lack of partners for the business in the close surroundings. My business activities are related to the local market of products so I can come into direct contact with the customer. Also I may take part in a long supply chain and sell my products through resellers. It all depends on the product and I always have a choice. In some branches of agriculture, it is difficult to exist and that is why I prefer the diversification of income.

Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- The goal is to increase the scale of livestock and crop production by introducing new technologies and mechanisation.
- The important thing is to improve the animal welfare – new buildings for livestock and a storehouse.
- Personally, I need more spare time for other activities just 'outside' of agriculture.

Strategy

I am considering two possible strategies

Strategy 1

- Diversification of production (crop and livestock)

Strategy 2

- Specialisation with increasing production (crop and livestock)

My chosen strategy:

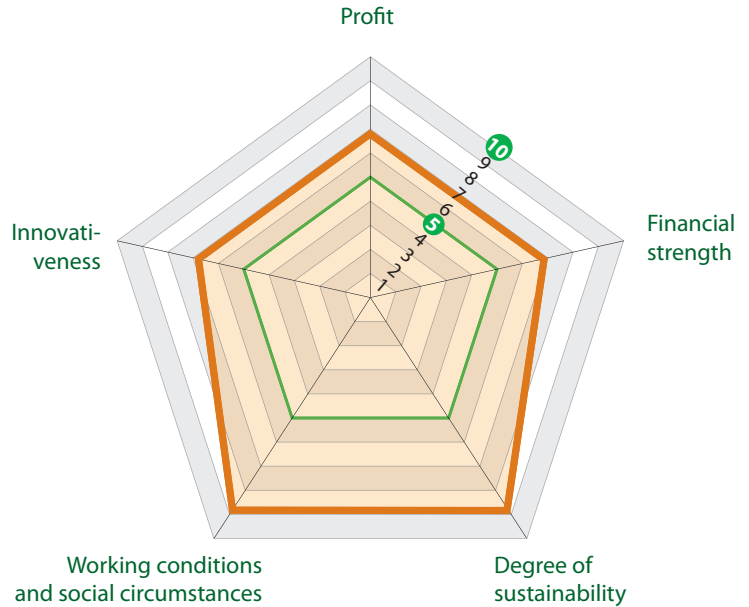
- Diversification of production (crop and livestock)

The reason for this: The chosen strategy is already implemented and the knowledge and experience is already being used. The diversification makes my business more flexible concerning changes in the changing market. For now, that is the way of my activity.

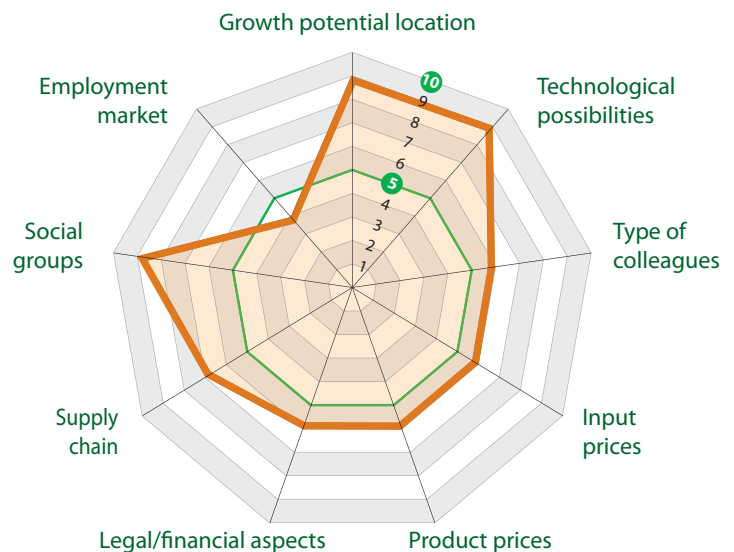
Critical success factors – in relation to my chosen strategy

From my point of view, the problem may lie with the availability of capital and financial funds. I still have a problem with taking over the entire farm from my parents. Also my concern is the condition of the agricultural product market. One more factor which may be limit success is only my personal determination and motivation.

Spider web of the farm performance



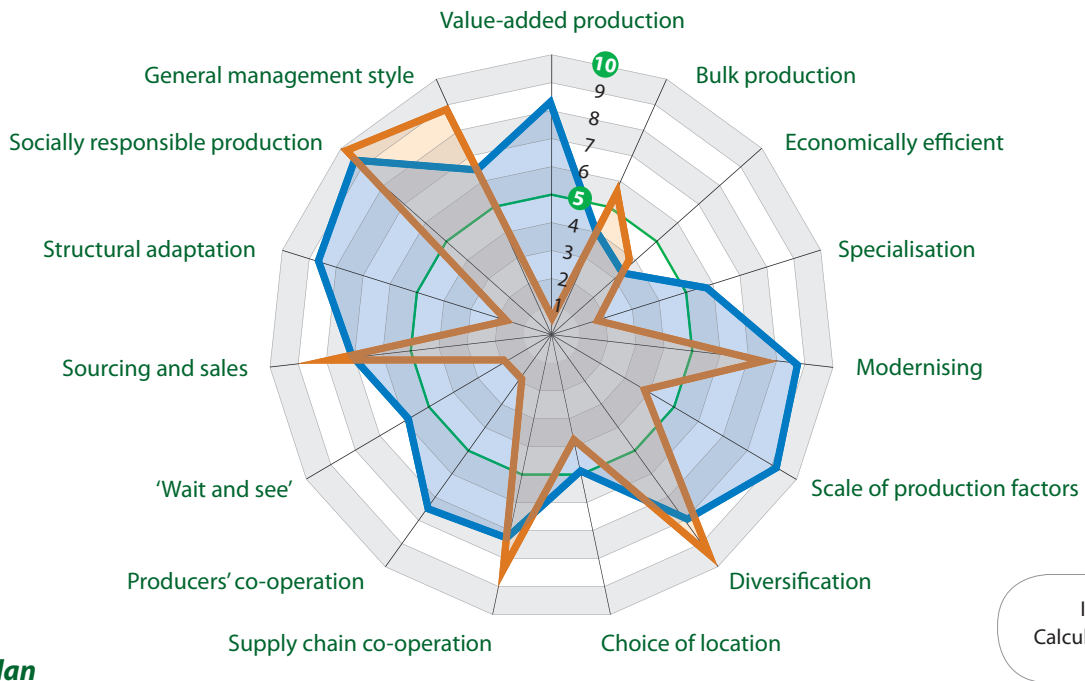
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1:		Strategy 2:	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> • Continuous development • Flexibility in production • Stability of income 	<ul style="list-style-type: none"> • Taking out a loan is needed • A higher workload and time-consuming 	<ul style="list-style-type: none"> • Specialisation of knowledge and equipment • A higher level of productivity 	<ul style="list-style-type: none"> • Lack of flexibility in production

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Preparation of a business plan	In progress now	Working on the documentation	Agricultural Adviser	Personal motivation and determination
Applying for EU funds	In progress now	Working on the documentation	Agricultural Adviser	Limitation of funds
Purchasing land	When financial funds are available	Looking for the best option	Other farmers	A lack of land
New loan	If do not receive EU funds	Preparation of documentation due to bank requirements	Bank consultant	Bank acceptance of business plan
Purchasing new equipment	When financial funds are available	Looking for the best option	Consultant on machines and equipment	Available financial resources

Case 6: Kownaccy farm, Poland

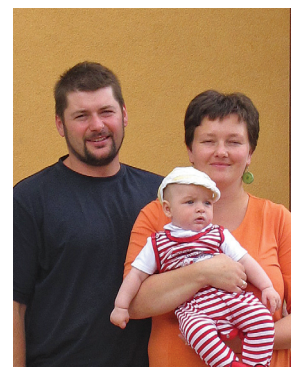
Family members: Radosław (farmer) and Jolanta (wife), Children: Jakub, Maciej and Bartłomiej, Maria (grandmother) and Wiesław (grandfather)

Supervised by: Agricultural Advisory Centre in Płońsk



The farmer

- My profession as a farmer was in my mind from childhood. I took over the farm from my father in 2005. I have an agricultural higher education and my work is what I really want to do. My additional interest in and knowledge of mechanics is very helpful on the farm. In my work I am conscientious and ingenious. There is always a way out of a problem. Especially in a difficult situation because I think I am quite resistant to stressful circumstances.
- If I were not an entrepreneur in agriculture I would work with my father-in-law in the building industry. It is possible to work as a mechanical engineer because I always interested in the construction of machines.



The farm

The main activities on the farm:

- Milk production (80% of income) and participation in the producers' groups "Łaciata" and "Krasula"
- Beef cattle keeping
- Cultivation of cereals (wheat, rye, barley)

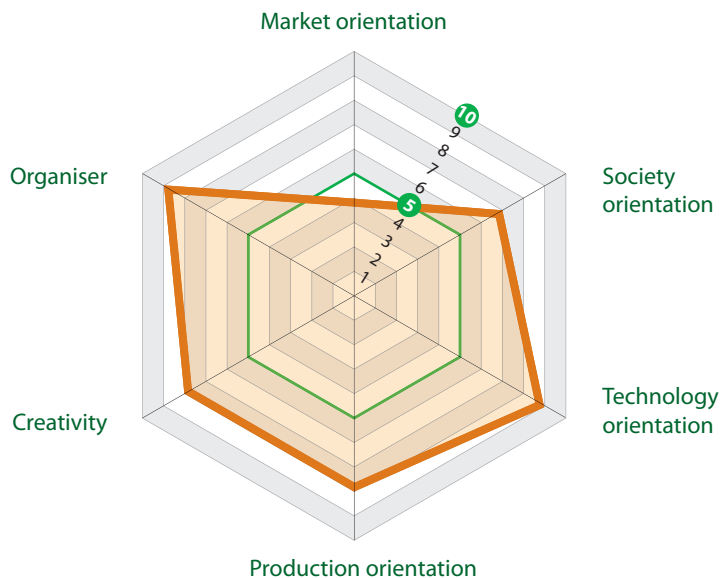


Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	6/2
No. of cattle (total)	125
No. of dairy cows	60
No. of heifers (+ young stock)	65
Agricultural land (ha, own + rented)	54 ha total (42 own + 12 rented)
Milk production in 2011 – total (kg)	490,000
Milk quota in year 2011/2012 (kg)	482,000
Milk production per cow in 2011 (kg)	9,600
Breed of cows	HF



Spider web of the farmer competencies



Strong points

- My farm is very well located, close to a main road – it allows easy access to my farm for the milk cistern.
- The organisation of plant production is optimal – the plots are close to each other and it is easy to operate on them.
- The productivity of cultivating plants is on a high level. There is an average 6 t/ha of cereals yield.

Weak points

- The problem is with the external workers and I have to do some work myself.
- We have problems with a small amount of straw and it is difficult to find a stable and sufficient source of straw.
- I don't have enough time for my family and for my hobbies.

External factors

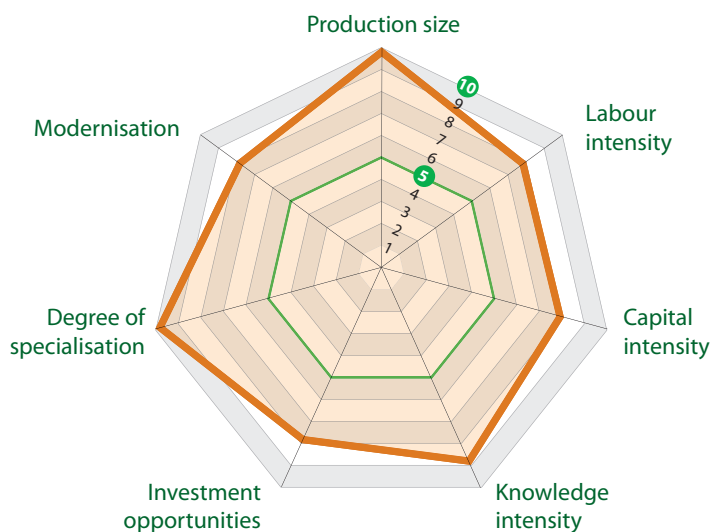
Location

- The farm is situated 6 km from the city of Ciechanów. The farm is close to a main road and access to my farm is easy. The farm is located on low land and we are operating in a less favoured area (LFA). In the close neighbourhood we only have one farmer so cooperation is quite difficult. That is why we cooperate in two producer groups "Łaciata" and "Krasula", which my father is managing.

Other

- The main problem is the situation with external labour. I have to do most of the work on the farm by myself, but I have 1–2 seasonal workers.
- The producer group is a great support for selling our milk. There are 32 members in the Łaciata group and we sell about 700,000 kg per month. We may obtain a better price and we also purchase farm

Spider web of the Internal farm factors



inputs through the group. The price for raw milk will increase as the chain of resellers is shortened. We are close to the direct customer and we see increasing demand for milk products on the market

Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- I have developed and modern farm with very good efficiency.
- Farm buildings are renovated with new roofs and painted in white colour.
- For all my machines I have a shelter. My all tractors are new.
- I have responsible worker.
- I have time for my passions and family.

Strategy

I am considering two possible strategies

Strategy 1

- Specialisation in milk with increasing production

Strategy 2

- Diversification of animal production (fattening bulls) and agricultural services (machines)

My chosen strategy:

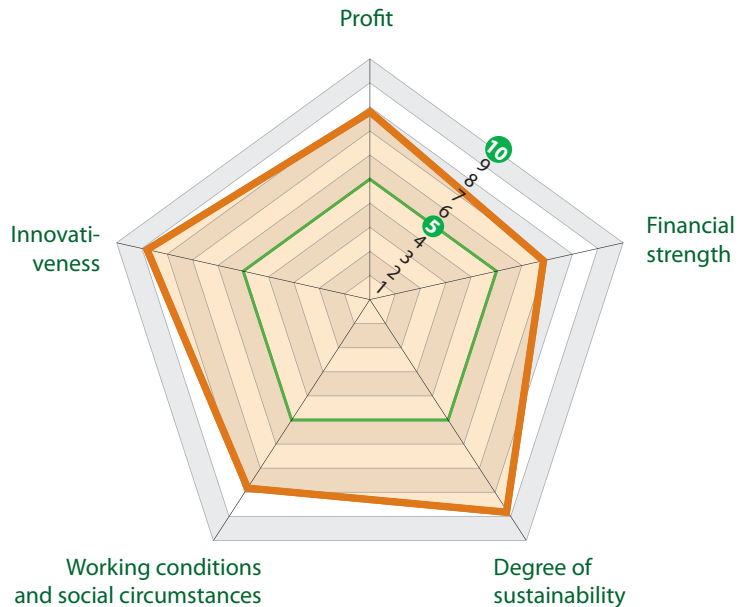
- Specialisation in milk with increasing production

The reason for this: The chosen strategy is most suitable for my ambitions and goals. The traditions on my farm (started by my father) are related to milk production and the previous production results are satisfactory.

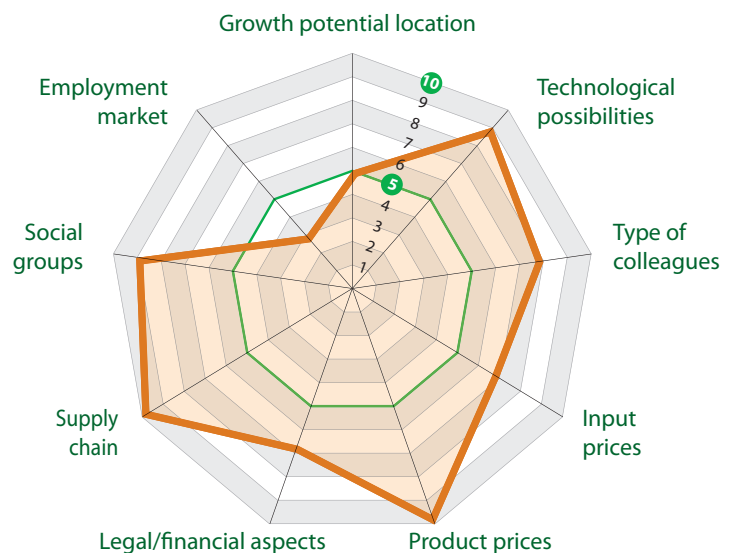
Critical success factors – in relation to my chosen strategy

The enlargement of my business is related to the availability of financial funds and space. To realise my goals, I need financial support, whether EU funds will be available in the future or a new loan will be needed.

Spider web of the farm performance



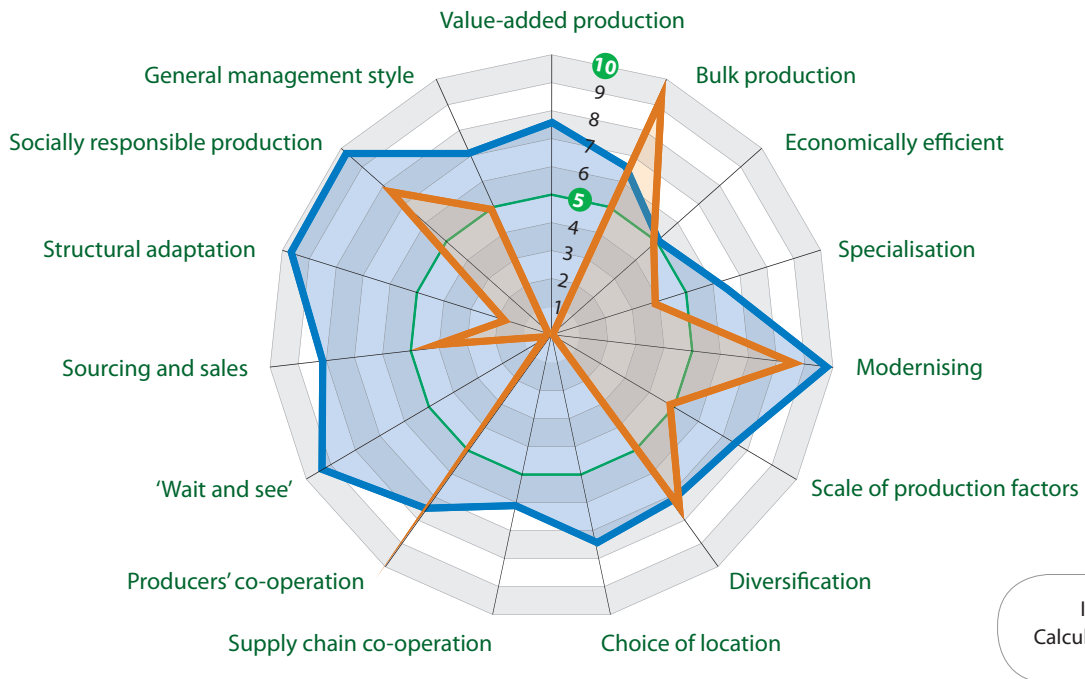
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1:		Strategy 2:	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> Continuation of the farm tradition Stability of income 	<ul style="list-style-type: none"> A higher workload and time-consuming 	<ul style="list-style-type: none"> More efficient use of machines and equipment More spare time for the family 	<ul style="list-style-type: none"> Unstable incomes Unknown demand for the services

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Purchasing of rented land	In 5 years, when financial funds are available	Looking for the best option	Other farmers	Financial funds
Applying for EU funds	In progress now	Working on the documentation	Agricultural Adviser	Limitation of funds
New loan	If do not receive EU funds	Preparation of documentation due to bank requirements	Bank Consultant	Bank acceptance of the business plan
Purchasing of new equipment (replacing old)	When financial funds are available	Looking for the best option	Consultant on machines and equipment	Available financial resources

Case 7: Organic farm Meden, Slovenia

Family members: Father Niko and his wife Irena, daughters: Monika & Nikita, Young family: Anika (daughter), husband Ervin & sons Tadej and Matic

Supervised by: Marija Klopčič, University of Ljubljana, Biotechnical Faculty

The farmer

- I am persistent and good in cooperation with other people. My family members and I are hard workers. I am responsible to consumers and to society with the production of high quality products from farming in the organic way. We are all modest people with a lot of respect for the people around us!
- My ambition is to ensure the welfare of the animals in the barn and thereby allow the optimal feed efficiency, good fertility and the longevity of the animals.
- If I were not an entrepreneur in agriculture I would work with children or study/investigate birds.

The farm

The main activities on the farm:

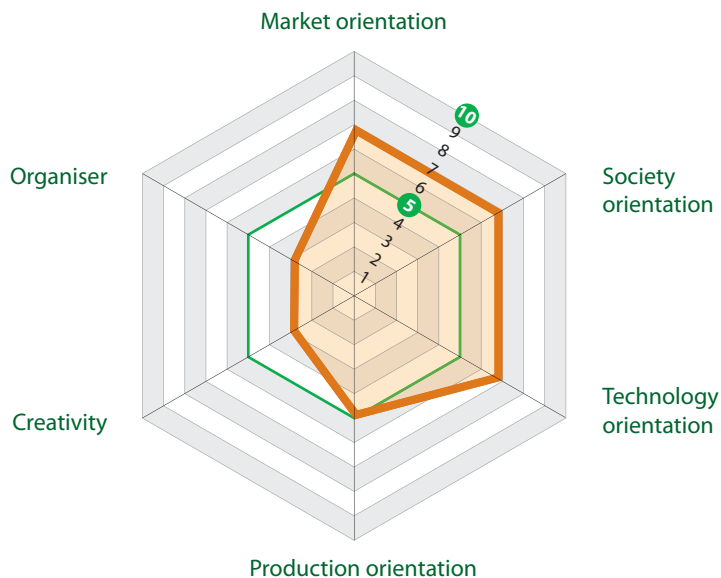
- Milk production
- Direct sales of milk with the milkomat
- Rearing and breeding of heifers
- Sale of breeding heifers to other organic and non-organic farms
- Breeding of bull dams – Brown Breed

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	7 / 3
No. of cattle (total)	55
No. of dairy cows	29
No. of heifers (+ young stock)	15 + 11
Agricultural land (ha, own + rented)	82 ha total (20 ha own + 62 ha rented)
Milk production in 2011 – total (kg)	190,000
Milk quota in year 2011/2012 (kg)	200,000
Milk production per cow in 2011 (kg)	5,900
Breed of cows	Brown



Spider web of the farmer competencies



Strong points

- Innovation
- Progress of technology
- The results of production
- Animal health

Weak points

- An area with limited conditions for farming
- Fragmentation of the land
- The lack of labour

External factors

Location

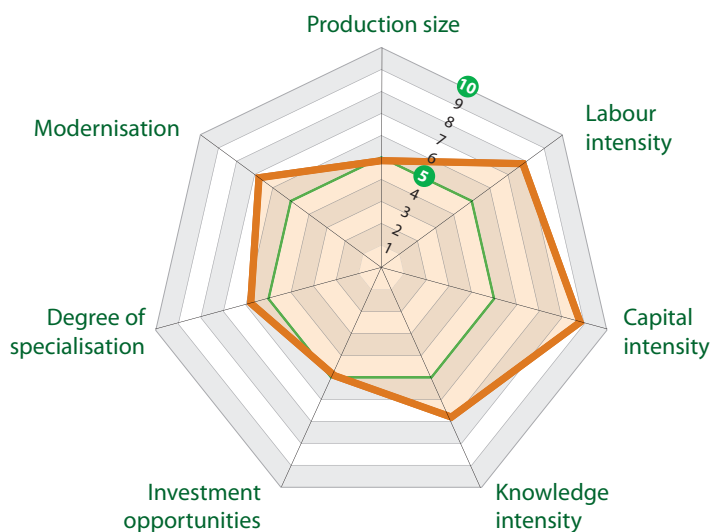
- The farm is located in the Karst region (a hilly area)
- Conditions for farming are tougher due to the Karst area, Bora and extremely large fragmentation of agricultural land
- My farm is located in an extremely less favourable area for farming
- There are 750 small fields / 120 gerks
- The distance to the nearest town is 15 km (Sežana)
- The farm is located outside the settlement of Senožče, close to the mountain path to Mount Vremščica, while in the vicinity there are also the Škocjan caves and other attractions

Other

- The Law on Agricultural Land (legislation) favours people with agricultural land and changing it into building land
- Imbalanced prices on the food chain
- Consumers



Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- We will continue to remain in organic farming
- We want to ensure that animals have better conditions in the barn
- A reduction of operating costs on the farm (a reduction of the cost of inputs)
- Obtain a higher price for the outputs (e.g. organic milk, milk products, animals from an organic farm)
- Purchase one additional milkomat
- To receive consumers on the farm
- To merge agricultural land to form larger units
- Healthy animals with good fertility and with optimal body condition scoring, with good longevity in the original type of the Brown breed, all with the kappa-casein BB
- The barn will be equipped with high technics – modern equipment (milking robot, automatic system for feeding of concentrate – automated feeder), which ensures the animals' welfare (spacious and bright barn with a lot of fresh air (good ventilation) and light, a barn where there is a smaller possibility of injury to the animals).

Strategy

I am considering two possible strategies

Strategy 1

- The purchase of one additional milkomat

Strategy 2

- The adaptation of the barn with new machinery and improve animal welfare

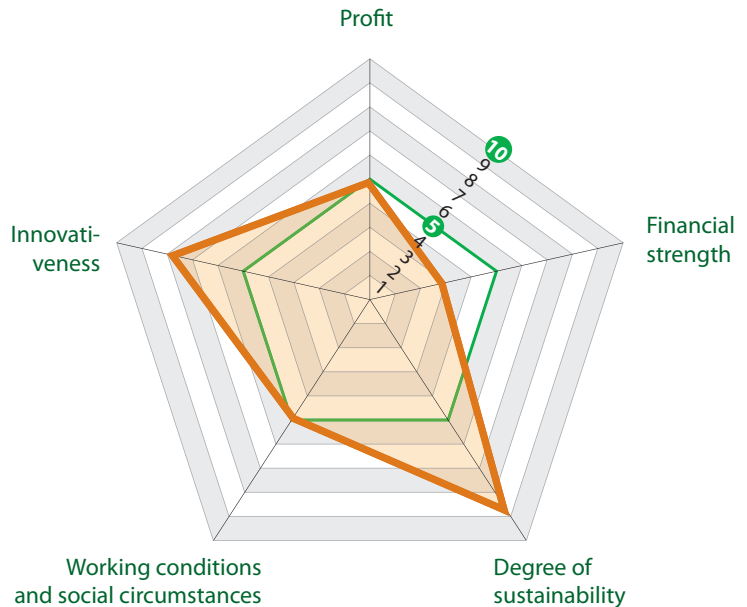
My chosen strategy:

- The adaptation of the barn with new machinery and animal welfare – because this will lead to better animal welfare, fewer injuries to the animals, better fertility and thereby lower production costs.

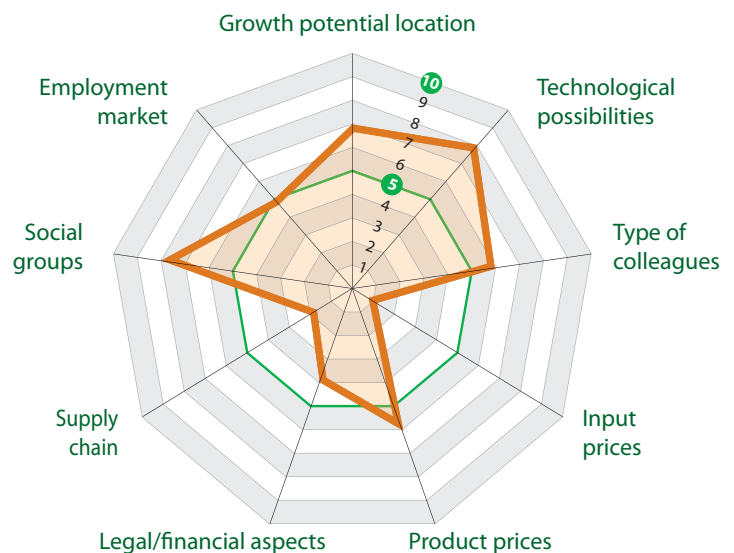
Critical success factors – in relation to my chosen strategy

- A great investment for adapting the barn and high costs of the milking robot
- The lack of experts with knowledge regarding housing systems and the use of technologies on the farm
- Too small a response from consumers in the farm's surroundings for organic milk

Spider web of the farm performance



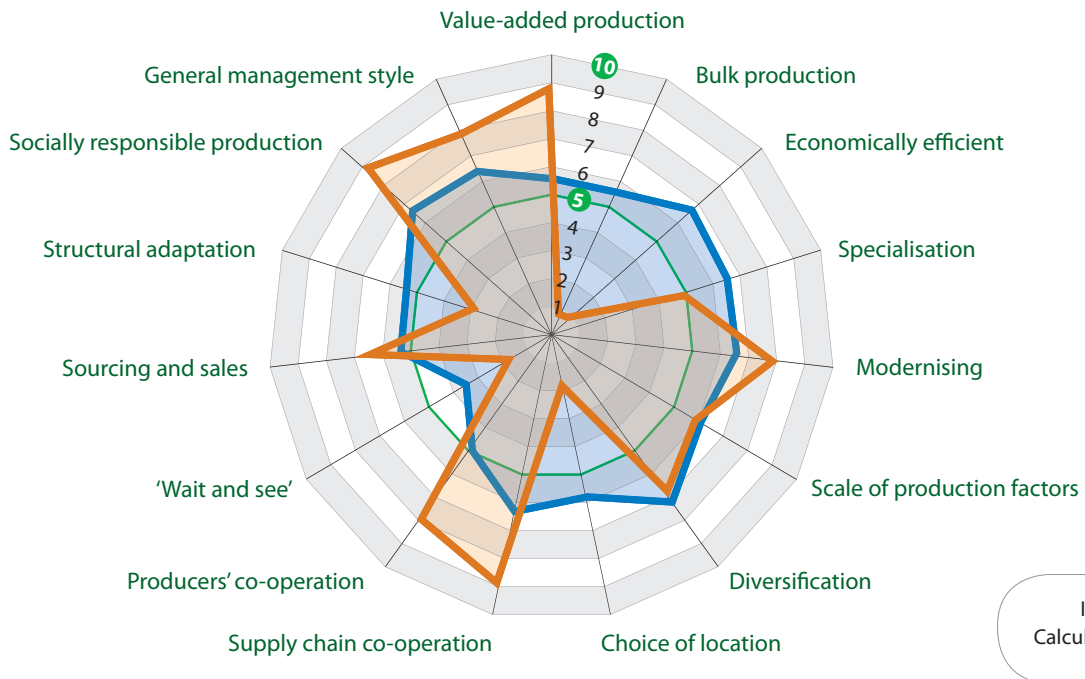
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1		Strategy 2	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> • Direct sales of milk to consumers • Higher income • To ensure a new job (working place) on the farm 	<ul style="list-style-type: none"> • More work • Risky sales volume • High initial investment • Risk of vandalism/ damage to milkomats 	<ul style="list-style-type: none"> • Better animal welfare • Better monitoring of the herd • Lower production costs • To preserve the good fertility of the animals 	<ul style="list-style-type: none"> • High investment • The lack of experts to advise regarding housing systems

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Knowledge	In 2 to 6 months	To get additional education, experiences in the field of housing systems. To visit farms with new housing systems in other countries	Knowledge, Experts in housing systems	The high initial investment
Money	In 2 to 6 months	Tender for EU investment funds and negotiations with the bank	Bank, Financial advisers	Limitations of land and investment capacity
Paper / permission	Now	Obtaining the necessary permits and approval for building	The local community	Limitation because of the Karst area

Case 8: Family farm Ku-kenberger, Slovenia

Family members: grandfather Anton (85) & grandmother Marija (80), father Anton (52) & mother Valentina (53), young family: Toni (son)(25) & his wife Nina (23), sister Manca (19)

Supervised by: Marija Klopčič, University of Ljubljana, Biotechnical Faculty



The farmer

- My skills are knowledge of the market, constantly refining that knowledge, my ability to organise, flexibility, diligence, perseverance and modesty
- My ambitions are to maintain the level of milk production, to increase the protein content, the transition to the Brown breed, that all milk is processed, the transition to a system of feeding exclusively with hay
- If I were not an entrepreneur in agriculture I would work as an adviser in the agricultural sector.



The farm

The main activities on the farm:

- Milk production
- Milk processing
- Production of cereals
- Production and selling of wine

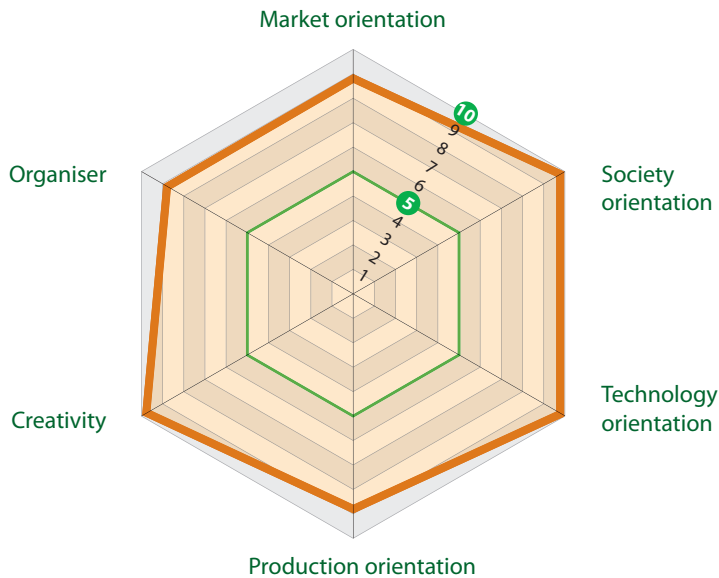


Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	7 / 2
No. of cattle (total)	20 to 25
No. of dairy cows	15
No. of heifers (+ young stock)	5 + 10
Agricultural land (ha, own + rented)	20 ha total (10 ha own + 10 ha rented)
Milk production in 2011 – total (kg)	100,000
Milk quota in year 2011/2012 (kg)	100,600
Milk production per cow in 2011 (kg)	HF: 8,634 / BS: 7,414
Breed of cows	Brown, HF



Spider web of the farmer competencies



Strong points

- The strong relationship and cooperation between family members
- Healthy animals
- High production of protein per cow
- The location: next to prestigious restaurants, close to a highway and towns
- All agricultural land up to 1 km away from the farm
- Freedom from debt
- Innovation
- Progress of technology
- The results of production

Weak points

- Location in the middle of a village and the inability to increase/expand the farm
- The high labour intensity creating inefficiency due to rearing cows in a tied-in housing system
- The lack of labour

External factors

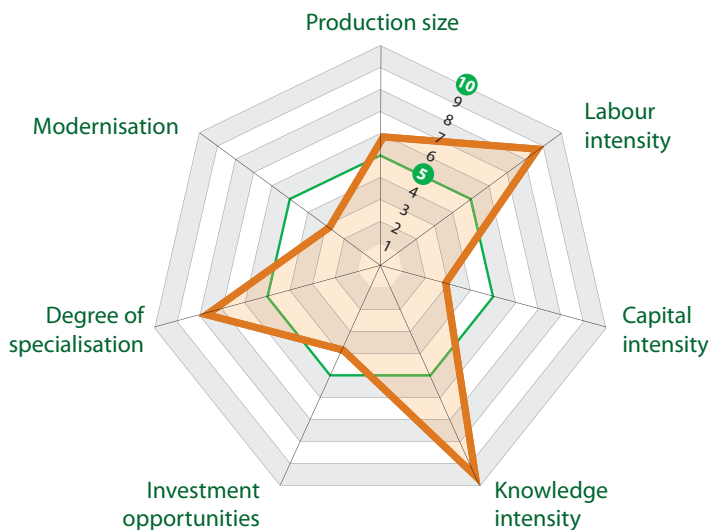
Location

- In the centre of a village
- Near main roads and the railway station
- Close to cities (3.5 km from Trebnje, 15 km from Novo mesto)
- Close to restaurants
- Flat farm on the Karst: 280 m above sea level
- The farm is included in the Agricultural Environmental Programme
- 26 fields

Other

- Market, consumers
- Legislation, rules
- EU subsidies
- Health status of family members
- Health status of animals

Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- Transition of the housing system from tied-in to a free-range housing system
- Introduction of pasture
- Cost reduction (optimisation of work processes and consideration of using our own work and wood instead of buying expensive equipment for the barn)
- Health in the family
- Create my own family
- Healthy animals
- Excellent relations with consumers
- Breeding exclusively the Brown breed, 85% cows with kappa casein BB
- Milk yield: 7,000 kg milk, 4.7% fat and 4% protein
- Feeding of cows only with hay
- To achieve double the income than now
- Restoration of the mill on the stones and grinding our own spelt flour, sales of flour and home-baked bread
- Processing and selling all milk and sold milk products on the farm (a farm shop).

Strategy

I am considering two possible strategies

Strategy 1

- Reconstruction of the barn and the construction of a cheese factory through a bank loan

Strategy 2

- Reconstruction of the barn and the construction of a cheese factory using our own money

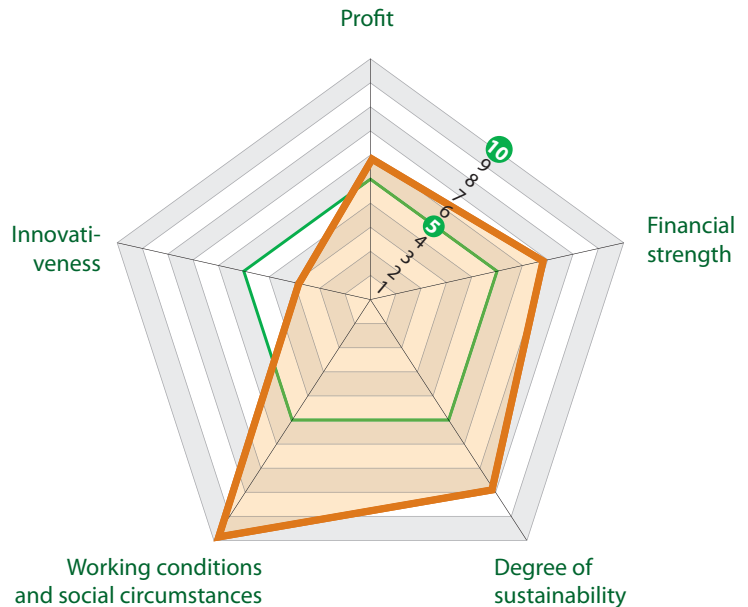
My chosen strategy:

- Reconstruction of the barn and the construction of a cheese factory through a bank loan.
- I choose this strategy due to the desire to process milk to achieve greater revenue through added value.

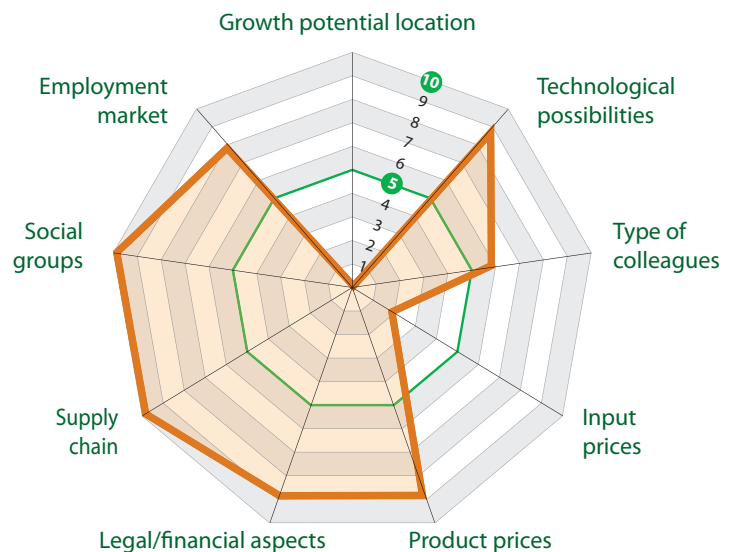
Critical success factors – in relation to my chosen strategy

- Health of the family
- Health of the herd
- Media affair in relation to food
- A decline in demand for domestic products
- Expensive loans

Spider web of the farm performance



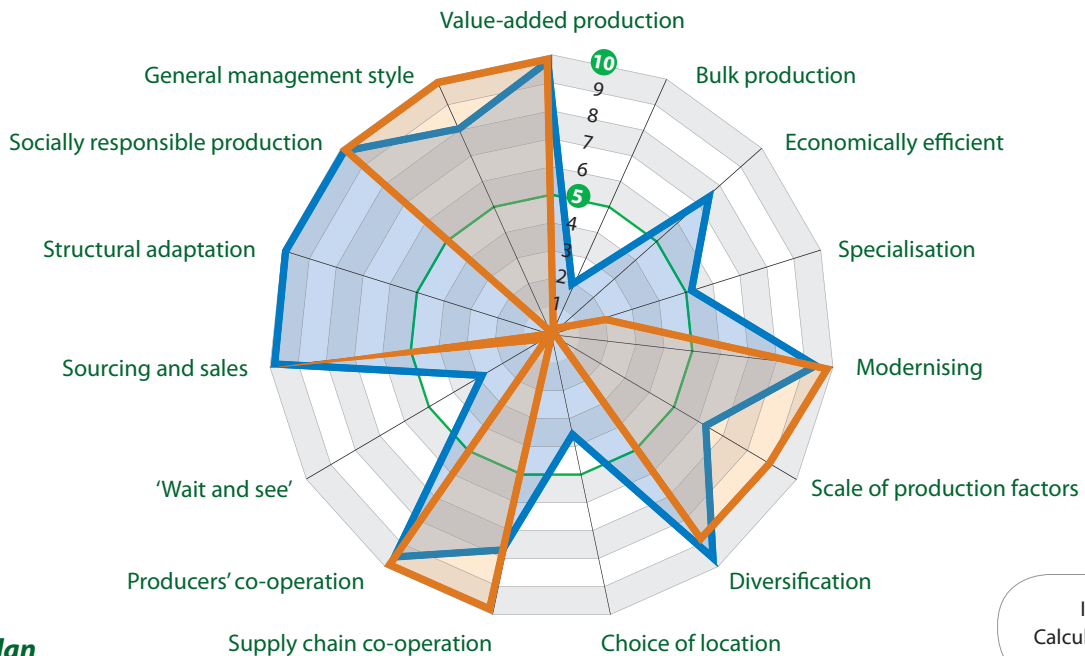
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1		Strategy 2	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> Fast construction and an increase in marketing Greater income Co-financing by the EU 	<ul style="list-style-type: none"> The risk of not being able to repay the bank loan 	<ul style="list-style-type: none"> Construction of a cheese factory with its own resources, without or with smaller, short-term bank loans 	<ul style="list-style-type: none"> Long-term construction and a longer wait for a new environment to facilitate the work and to have greater storage capacity

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
To obtain documentation	In 2 to 6 months	By acquiring the documentation	The local community	The reluctance (resistance) of the local community
Application for the grant of EU investment funds	This year	Candidacy for grants (investment subsidies)	Agricultural advisory service	Unsuccessful tender
Getting bank credits	This year	To take out a bank loan	The bank	Expensive loans
Reconstruction of barn	In 3 years	Construction of the barn	Other farmers (experience)	Diseases in the family or in the herd, natural disasters
Building of a cheese dairy	In 3 years	To build a cheese plant	Other farmers (experience)	Decline in demand

Case 9: Family farm Alojz Vernik, Slovenia

Family members: father Alojz (44) & mother Rosina (45), daughter: Nastja (19), son: Danijel (17), grandparents: grandfather (76) & grandmother (75)

Supervised by: Marija Klopčič, University of Ljubljana, Biotechnical Faculty



The farmer

- I am a person that trying to set goals to carry out fully and do their best. As the mother of a child with a high school meet new challenges every day. With a good organisation of work, however, remains for me a little more time for other activities. I care for our agriculture, and also served as a municipal councillor, I'm trying to be aware of the importance of agriculture for the local community.
- I'm extremely determined, demanding and socially responsible. I have good organizational skills. I am socially active (in different associations and in local community).
- If I was not an entrepreneur in agriculture I would probably be a lawyer or have a private counseling.

The farm

The main activities on the farm:

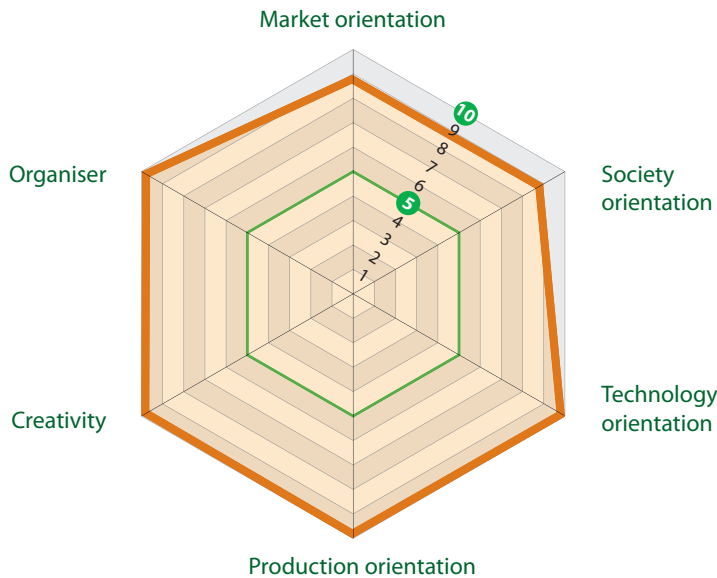
- Milk production
- Fattening of young bulls / beef production
- Rearing of breeding heifers
- Production of cereals

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	6 / 2
No. of cattle (total)	149
No. of dairy cows	52
No. of heifers (+ young stock)	33 + 64
Agricultural land (ha, own + rented)	44,4 ha total (13,3 ha own + 31,1 ha rented)
Milk production in 2011 – total (kg)	379,600
Milk quota in year 2011/2012 (kg)	310,000
Milk production per cow in 2011 (kg)	HF: 9,450/ SIM: 7,400
Breed of cows	HF, Simmental



Spider web of the farmer competencies



Strong points

- Constantly monitor the use of new technologies in the field of agriculture
- Organisation of work on the farm
- Milk production level
- Healthy animals
- Openness to others
- Good understanding / harmony in the family

Weak points

- The lack of agricultural land
- Limitation for farming – farm is located on protected water area
- Too much administration, which do not give any added value to our product, just take us precious time that could be better used in the actual work on the farm

External factors

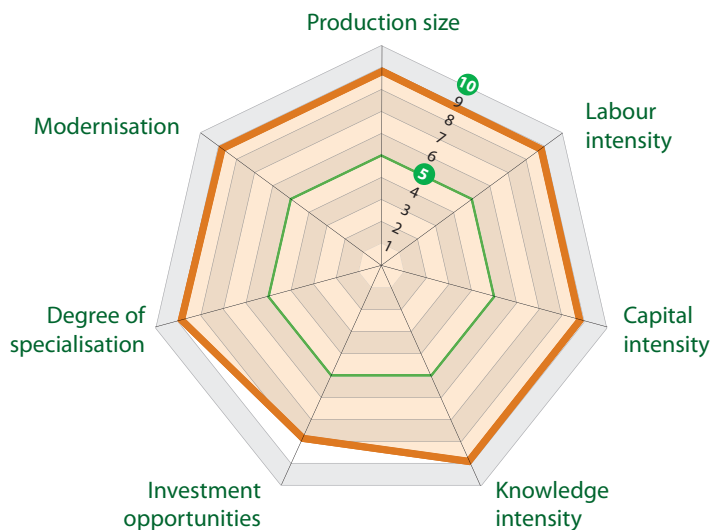
Location

- Farm is located in the village under the foothill of Pohorje
- Flat farm on water protected area: 280 m above sea level
- Part of farm is included in NATURA 2000
- 31 fields
- In the vicinity of the Faculty of agriculture and the Botanical Garden
- Location of farm give possibilities for agro-tourism and other activities on the farm
- The nearest neighbour is distant from the farm less than 100 meters
- Farm is situated near a very busy road

Other

- Market (demand for a better and higher quality products with attractive prices)
- Agricultural Cooperatives
- Food Processing Industry
- Suppliers of input
- Increasingly demanding consumers
- Legislation and rules regarding animal welfare, nitrate directive, ...
- Public opinion
- Health status of family members
- Health status of animals

Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- Increasing of milk production
- Increasing of number of dairy cows
- Increasing of milk production per cow
- Improvement of technology on the farm – introducing of milking robot
- Purchase of agricultural land (this is very important tasks for our farm – but it will be very difficult, because in our surroundings is lack of land and demand for land is extremely high)
- Introduction of agro-tourism on the farm
- Introduction of agricultural and non-agricultural activities (biodiversity): agro tourism and production of electricity (using of solar energy)
- Higher added value farming
- Provide working place to successor
- Good future for our farm
- Farm shop
- Health and harmony in the family
- Healthy animals
- Excellent relations with society.

Strategy

I am considering two possible strategies

Strategy 1

- Increase milk production
- Electricity production
- Modernization of milking system with buying of milking robot

Strategy 2

- Agro-tourism on the farm
- Creation of own tourist agency
- Processing of milk into cottage cheese and cheeses

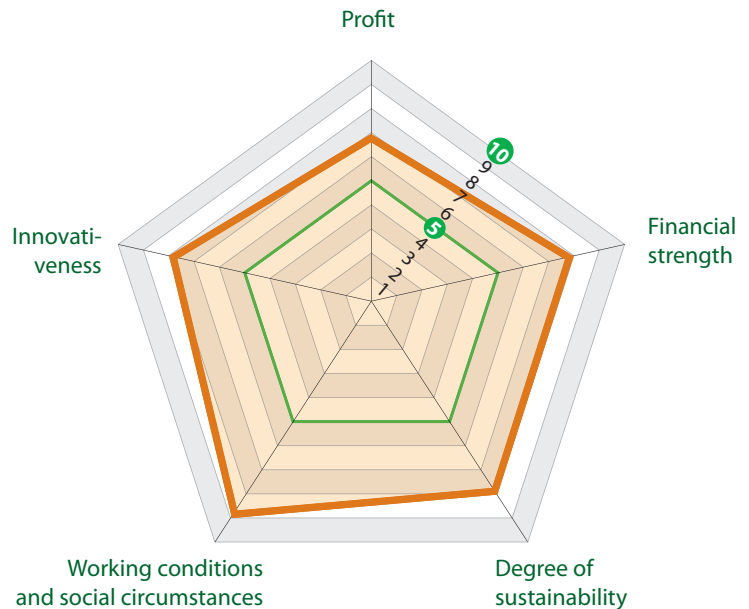
My chosen strategy:

- Increase milk production
- Electricity production
- Modernization of milking system with buying of milking robot

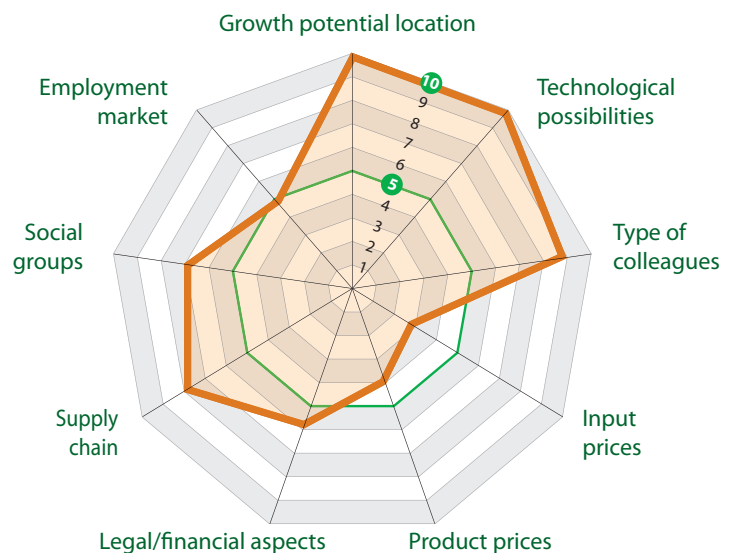
Critical success factors – in relation to my chosen strategy

- Health in the family
- Reducing of prices for agricultural products
- Lack of agricultural land (uncertainty with rented land)
- Lack of labours (very difficult to get good worker)

Spider web of the farm performance



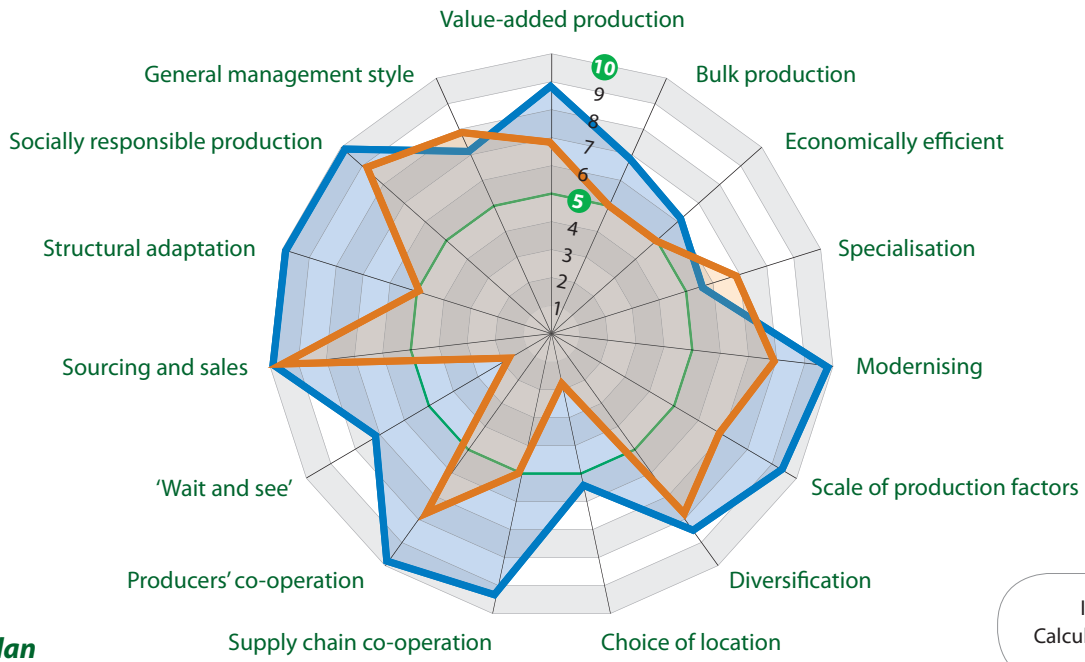
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1		Strategy 2	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> • Having knowledge and experience • Added value of farm with production of electricity • Home grown and home produced food to offer at home yard – farm shop 	<ul style="list-style-type: none"> • Lack of agricultural land • Water protected area • Too much administration • Financial resources • How to obtain customers? 	<ul style="list-style-type: none"> • Good position of farm • Offer of local products on the farm • Good relationship with other tourist farms 	<ul style="list-style-type: none"> • To provide financial resources for new investment • To provide labours (workers) • To get tourists

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Increase of milk production	In next few years	With improvement of feeding ratio and forage quality	Professional advice and a lot of own input	Natural disasters (droughts, floods, hailstorms) and climatic changes
Construction of solar cells on the roofs of stable and other buildings	In next 2 years	With help of company which install this equipment	Good experiences of other farmers with the same situation	Reducing of subsidies for solar energy in future
Arrangement of farm shop	In next few years	Own input	Own input	Need of buyers, lack of interest for home made products
Buying of land	Depend from the offer	With help of banks – funds	Financial support	Too high prices because big demand for land in the neighbourhood

Student case: **Family Stanisławscy farm, Poland**

Family members: Witold (the student farmer), Janina (mother) and Zbigniew (father)

Supervised by: Agata Malak-Rawlikowska, Warsaw University of Life Sciences

The student farmer

- I am a student at an agricultural university. I think I am a very optimistic person. I am scrupulous, responsible and diligent at work. I can deal with difficult situations and use my knowledge when managing the farm. Maybe I have some problems with determining the priority tasks. I am still learning and collecting experiences. I often participate in training courses for farmers.
- If I were not an entrepreneur in an agricultural business I would like to find a job according to my interests and education. Anyway, it would still be related to agriculture.

The farm

The main activities on the farm:

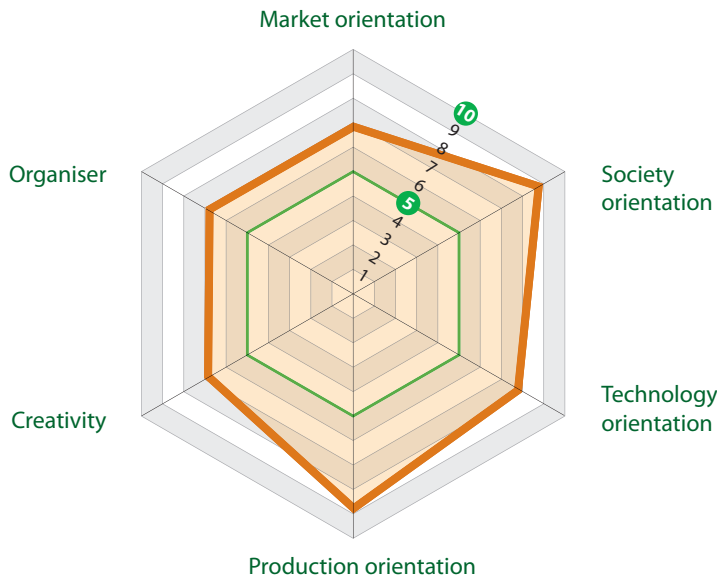
- Milk production
- Beef cattle keeping
- Production of cereals and agricultural services

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	3
No. of cattle (total)	33
No. of dairy cows	13
No. of heifers (+ young stock)	20
Agricultural land (ha, own + rented)	31 ha total (18 own + 13 rented)
Milk production in 2011 – total (kg)	95,500
Milk quota in year 2011/2012 (kg)	98,720
Milk production per cow in 2011 (kg)	7,300
Breed of cows	HF



Spider web of the farmer competencies



Strong points

- We achieve quite a high yield of cereals and fodder when taking the poor quality of the soil into account
- Implementation of the planning of fertilisation helped me reduce costs and we meet the standards of maximum nitrogen delivered into the soil
- Mechanisation of the farm is at a good level.

Weak points

- We are not satisfied with the actual milk production – we are trying to increase the milk yield
- The soil quality is poor but the proper fertilisation allows us to carry out sufficient plant production.

External factors

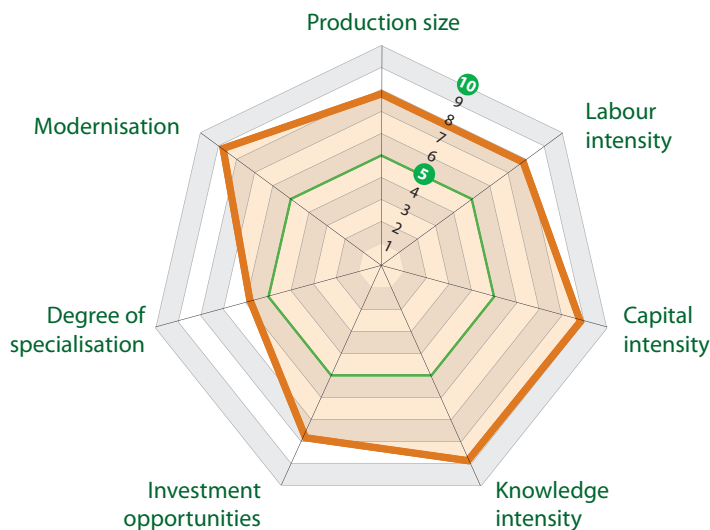
Location

- The location of our farm is favourable to development. Our farm is located 12 km from a city but is within easy reach of it. In the neighbourhood there is a company for purchasing cereals, a mill and a dairy processing plant which collects milk from local farmers.

Other

- I think the lack of cooperation with local farmers is a big barrier to development. Unfortunately, it is because of their 'mentality' so it is hard to change this rapidly. It needs time. The same situation is with bureaucracy which can hamper access to EU funds. From the agricultural point of view, the biggest development problem is the "hunger for land" – the lack of land is creating problems with expansion of the farm.

Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- We plan to extend our farm (up to 100 ha) and increase the milk production to about 200,000 kg and make direct sales via milkomats
- Optimise the production of beef cattle to around 20 head per year
- Modernisation of the barn and providing some agricultural services for other farmers

Strategy

I am considering two possible strategies

Strategy 1

- Specialisation in dairy with increasing milk production and direct sales (milkomats)

Strategy 2

- The diversification of animal production (beef cattle) and agricultural and advisory services

My chosen strategy:

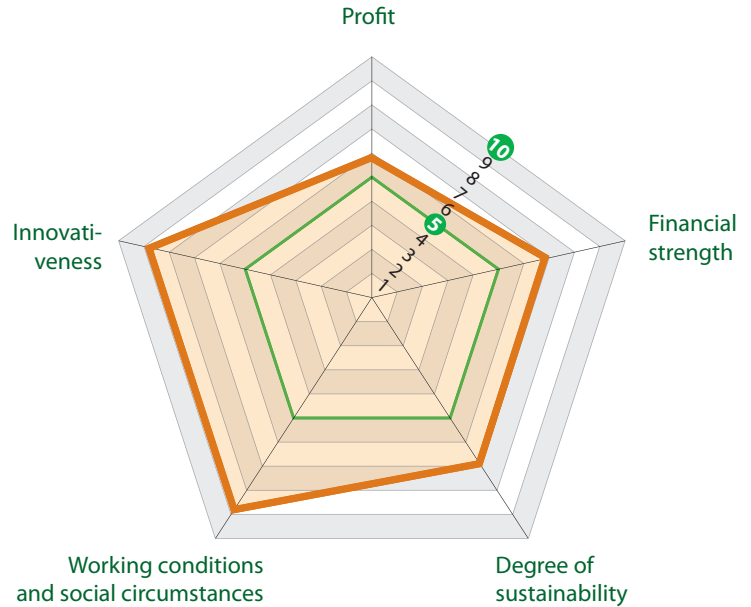
- The diversification of animal production (beef cattle) and providing agricultural services and advisory

The reason for this: I chose this strategy because the farm is already equipped with agricultural machinery so we do not need to obtain additional funds as for the case of purchasing milkomats. The selling price of beef cattle is stable so far and the services and advisory are wanted by farmers. When combining these two activities, I am able to achieve a satisfactory level of income.

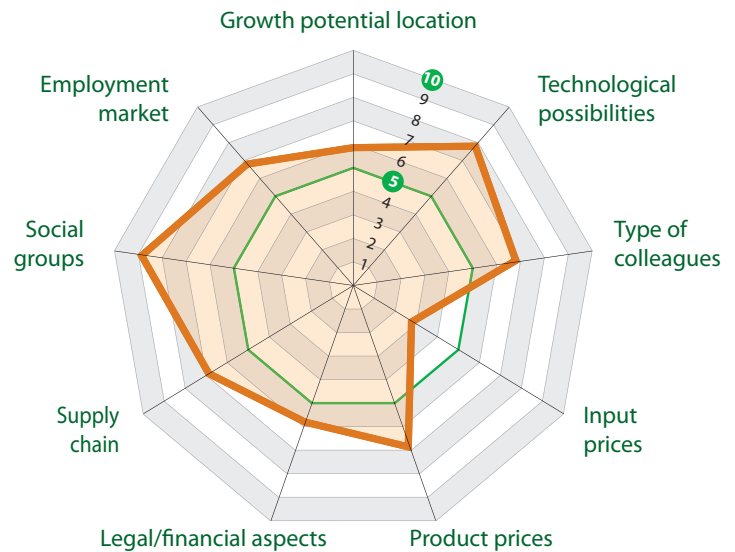
Critical success factors – in relation to my chosen strategy

In my opinion, the most limiting factor is the need to gain training and experience in the field of agricultural advisory services. However, I already have knowledge of beef cattle nutrition and providing such agricultural advice. When working in two places you are at the risk of delaying necessary work on the farm due to the limited time. The benefits may include various sources of income and the possibility of a contract on the sale of beef cattle without the need to cooperate with the neighbours.

Spider web of the farm performance



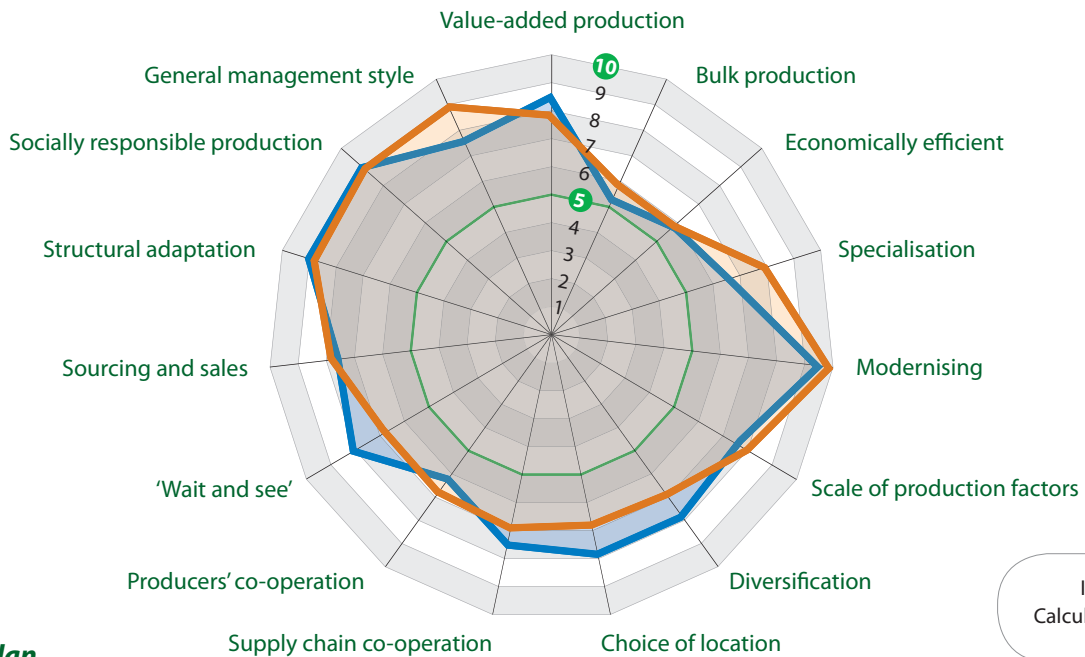
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1:		Strategy 2:	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> • Continuous development and increasing milk production • Higher profitability from direct sales • Stability of a high income 	<ul style="list-style-type: none"> • A lot of formalities involved in obtaining permission for the installation of milkomats • The problem with the direct selling of milk • The problem with milk that is not sold 	<ul style="list-style-type: none"> • Possibility of using the agricultural machines better • Higher income from beef cattle 	<ul style="list-style-type: none"> • An unknown market for agricultural services and advisory services • Risk of a price decrease for beef cattle

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Preparation of a business plan	Waiting for the call for applications	Preparing the application and business plan	Agricultural Adviser or by myself	Personal motivation and determination
Applying for EU funds	Waiting for the call for applications	Preparing the application	Agricultural Adviser	Limitation of funds
New loan	If do not receive EU funds	Preparation of documentation meeting the bank's requirements	Bank Consultant	Bank acceptance of the business plan
Purchasing young cattle	When financial funds are available (2014)	Looking for the best option for buying (price)	Support from a consultant on animal production	Available funds
Training and learning	Constantly	Taking part in organised trainings	Experienced advisors	Only my determination

Student case: **Family farm Černivec, Slovenia**

Family members: Špela (the student farmer) (20), father Tomaž (44) and mother Helena (42), sisters: Petra (18) and Tjaša (10), grandparents: Alojz (75) and Julijana (70)

Supervised by: Marija Klopčič, University of Ljubljana, Biotechnical Faculty

The student farmer

- I am ambitious and like new things and new technologies. I am market oriented and I always look for new market niches. I have good organisational skills. I am socially active (in different associations and in the local community).
- If I were not a student of Animal Science I would probably have studied economics or business management.

The farm

The main activities on the farm:

- Milk production
- Rearing and breeding of heifers
- Selling male calves at the age of 10 to 14 days
- Sale of beef
- Direct sales of milk via milkomats
- Breeding of bull dams – Holstein breed

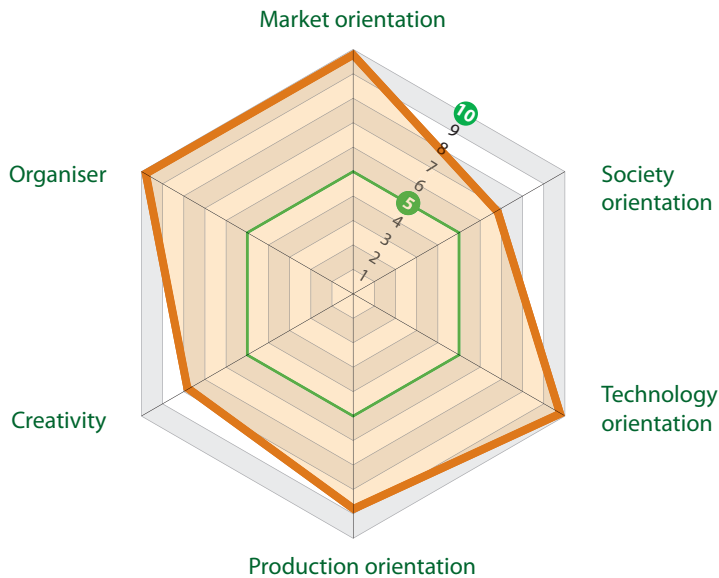
The farm is a family farm which mainly deals with live-stock. The farm is located in a flat area. For work on the farm we mostly use our own machinery.

Present situation on the farm

Family farm (no. of family members / no. of family members working on the farm)	7 / 4
No. of cattle (total)	186
No. of dairy cows	102
No. of heifers (+ young stock)	84
Agricultural land (ha, own + rented)	120 ha total (40 ha own + 80 ha rented)
Milk production in 2011 – total (kg)	800,000
Milk quota in year 2011/2012 (kg)	780,000
Milk production per cow in 2011 (kg)	9,200
Breed of cows	Holstein-Friesian



Spider web of the farmer competencies



Strong points

- Good economic and technical operation
- Constantly monitoring the use of new technologies in the field of agriculture
- The organisation of work on the farm
- The milk production level
- Healthy animals
- Good understanding/harmony in the family

Weak points

- The lack of agricultural land
- The very high price for agricultural land
- Too much administration which does not give any added value to our product

External factors

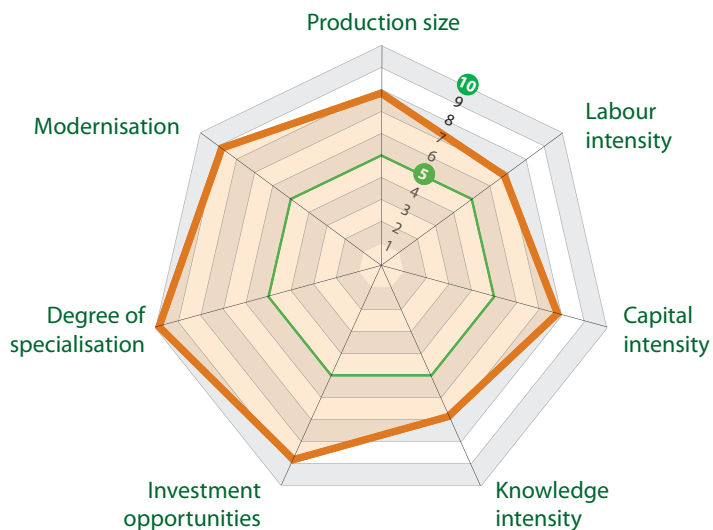
Location

- The farm is located in the village of Zgornje Jarše
- A flat farm: 304 m above sea level
- 3 km from the city of Domžale and 1 km from the city of Mengeš
- In the vicinity of the Department of Animal Science of the Biotechnical Faculty
- In the vicinity of the Volčji potok Arboretum
- The farm is situated near busy roads and a train station

Other

- Milk price
- Public opinion on agriculture
- Weather conditions (frequent dryness)
- The market (the demand for better and higher quality products at attractive prices)
- Suppliers of input
- Prices of inputs such as feed, energy, fertilisers, seeds...
- Increasingly demanding consumers
- The health status of family members
- The health status of the animals

Spider web of the Internal farm factors



Mission, vision and goals

My goals for the future are (5–10 years) (dream)

- Increased milk production per cow
- To improve the health and longevity of the cows
- To purchase agricultural land (this is a very important task for our farm – but it will be very difficult because there is a lack of land and the demand for land is extremely high in our surroundings)
- Higher added-value farming
- A good future for our farm
- Health and harmony in the family
- Healthy animals

Strategy

I am considering two possible strategies

Strategy 1

- An increase in milk production per cow
- Improvement of the health and longevity of the cows

Strategy 2

- Processing of milk for high-quality milk products (cheeses, yoghurts, cottage cheese and other milk products)

My chosen strategy:

- An increase in milk production
- Improvement of feeding for cows
- To assure better quality forage (hay, silage, corn)
- To make a more intensive selection of cows by using top/high genetic bulls

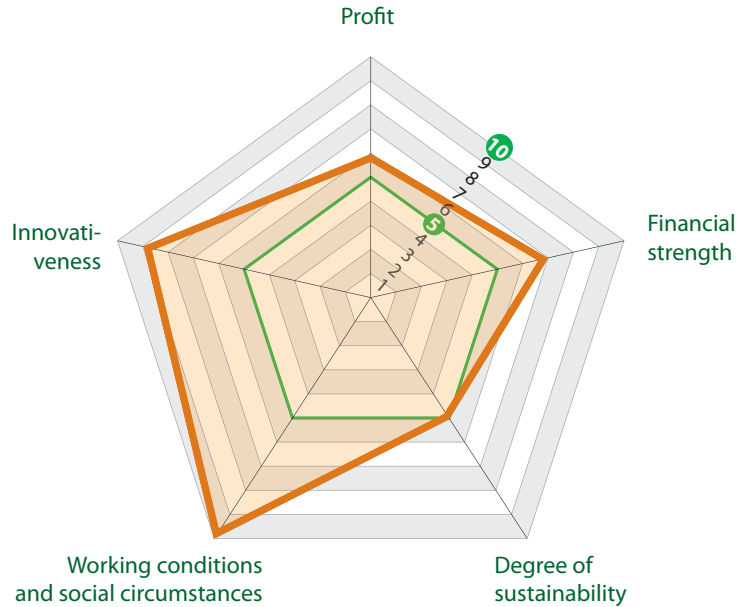
The reasons for this:

- Milk production is already underway on the farm – the knowledge, experience and capacity are available

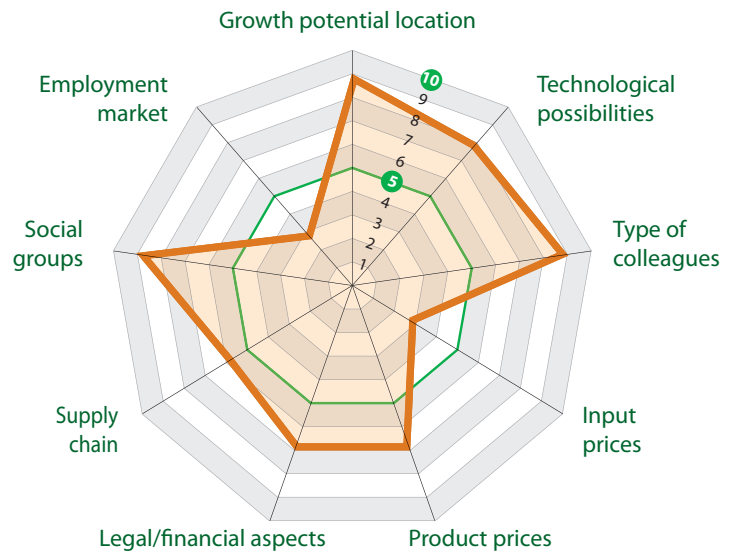
Critical success factors – in relation to my chosen strategy

- Health of the family
- Health of the animals
- The lack of agricultural land (loss of rented land – uncertainty with rented land)
- Milk and milk product markets

Spider web of the farm performance



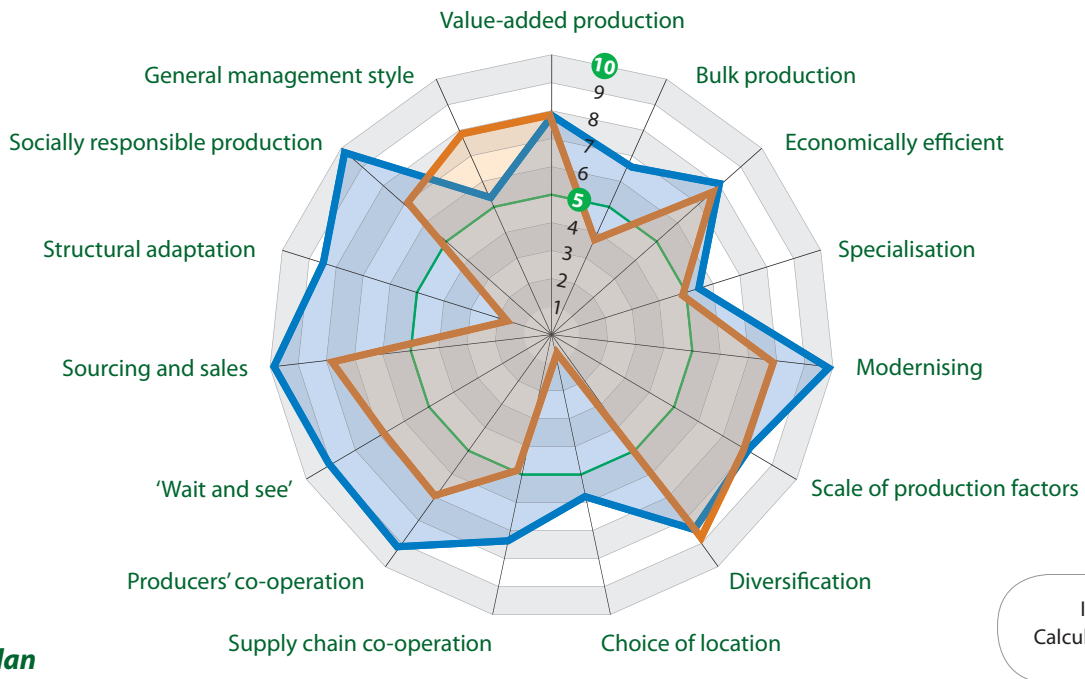
Spider web of the external farm factors



The advantages and disadvantages

Strategy 1: An increase in milk production per cow		Strategy 2: Processing milk for high-quality milk products	
Advantages:	Disadvantages:	Advantages:	Disadvantages:
<ul style="list-style-type: none"> Higher milk production Increase in farm income Continuation of the farm tradition 	<ul style="list-style-type: none"> The lack of agricultural land More sensitive cows (higher risk of animal diseases related to highly productive cows) 	<ul style="list-style-type: none"> Good position of the farm An offer of high-quality milk products on the farm To ensure a new job for family members on the farm To achieve a higher milk price over milk products 	<ul style="list-style-type: none"> To provide the appropriate documentation To provide financial resources for a new investment To provide labour (workers) To attract consumers for the farm's milk products

Spider web of the strategy original and calculated



Action plan

What?	When?	How?	Whose help do you need?	Critical success factor?
Increase in milk production per cow	In the next few years	By improving the feeding ratio and forage quality	Professional advice and a lot of own input	Animal health Loss of rented land
Buying of land	Depends on the offer	With the help of banks – funds	Financial support	Prices are too high because supply is insufficient and there is big demand for land in the neighbourhood
Improvement of forage quality	In the next few years	By using good quality seeds and improving the technology for producing forage	Professional advice, new knowledge in the area of forage production	Natural disasters, Weather conditions

Conclusions concerning the students' trainings

Conclusions concerning the students' training in Poland

Based on the experiences with training students to be future farm successors, the following conclusions can be made:

- It was observed that students have higher computer skills and are more efficient in work with the Internet ISM tool. They were also working with the tool at home, improving the content of their reports after each training day.
- Similarly to the farmers' training, the facilitator has a key role in the process. He must be able to stimulate student-farmers to think realistically rather than idealistically about their future plans and to show them how to prepare a valuable farm analysis.
- Students were less certain about their future strategy, usually the farmers already had some development path in mind which they expressed at the training, whereas the students tended to create the strategy at the training. Students also found many more critical success factors for their business.
- Students more often chose labour-intensive production for the future in order to have more time for themselves.

Conclusions concerning the students' training in Slovenia

During the Leonardo da Vinci project we organised ISM training with students – future successors of their family farms at two different locations: in Ljubljana and in Maribor. A total of 25 students participated in the 3-day trainings.

These students were at least as creative when using the tool and formulating goals as the farmers. The students are much better with computer work and more creative than the farmers; sometimes they filled in a dream (unrealistic future goals based on EU investment money). They still have fewer restrictions when it comes to their future thoughts. During the training days, one student who does not come from a farm even developed a “dream” farm in New Zealand, a country he would like to go to to realise his dream. But, on the opposite, the other students were very much attached to their roots, as we expected from these Slovenian young people. We must realise that, in Slovenia, farmers and also other land owners are extremely attached to their land and region. This is part of the culture.

Concerning the use of the ISM tool: the ISM methodology could be a method for use in business-oriented classes or as part of curriculums related to farm management.



Homework assignment: Interview with an entrepreneur outside the agricultural sector

To look beyond the boundaries of their company, even outside the agricultural sector, the farmers had to do homework assignments. One of the assignments was to interview an entrepreneur from a different sector. The goal of the assignment is to have a conversation with another entrepreneur on the strategic level. At first sight, it seems hard to compare a farm with a company outside of agriculture. But, if you look at it from a strategic level, then there are many similarities: uncertainty about market developments, dealing with stakeholders e.g. neighbours, changing legislation etc. And because the two entrepreneurs do not understand the operational details of each other's company, it is easier to discuss on the strategic and tactical levels.

With this conversation the farmer sees similarities with other businesses and becomes more confident because he learns that other entrepreneurs are also interested in the business of a farmer. Another effect is that the farmer also obtains feedback on how somebody from the outside looks at his business. The farmer learns how to network, how to get in touch with somebody outside his usual network.

In this chapter, two homework assignments will be presented.

Interview with an entrepreneur outside the agricultural sector, Poland

At the beginning, we started our business as a state store specialised in hydraulics. After a long time we became the private owners – we bought the store from the state. Taking over the store and starting self-employment was then the best choice. After that, we began to take the first steps in the Polish market as a private business. Initially, we had a dozen customers, a small shop (40 m²) and a storeroom. The main aim of the business was to expand and to gain new customers and to offer new products of high quality and durability. The personal purpose was (and still is) a steady income as financial support to our family.

To describe the current situation, our shop area is about 600 m² and a few hundred customers are interested in our shop. We are also a wholesaler and we supply other brand shops as well as we are representatives of a large number of major manufacturers of hydraulics and sanitary items. The main business goal is considerable progress by constantly expanding the range of products. As we are talking about the disadvantages of our business, the fixed working hours and the stress of running a private business are still the main difficulties. The biggest advantage is the possibility to continuously learn about new technologies and technical innovations.

Certainly, the important person in creating our business is my dad, who was the founder of the company. He gave me the necessary experience in running the business. He showed me how to manage the company and to set the direction of the company, which is still the main strategic objective of our business.



Interview with an entrepreneur outside the agricultural sector, Slovenia

Jerman Transport is a family-owned company with over 30 years of experience (it was founded in 1971). Since 1991 the firm has also been offering international transport. Another activity is the purchase and repair of damaged trucks. The owner, his wife and two sons are working in the company along with 50 employees.

The company's objective is to ensure good quality organisation and realisation of transport and it is constantly responding to the needs of its customers with vehicles that meet the strictest ecological criteria.

The company's strong points are the size of the company, accurateness, trustworthiness, flexibility, and self-financing. The company's weak points are the unregulated and variable law, financial indiscipline and the big competition in the business of international carriers.

The objectives of the company are slow and reliable growth, and modernisation of the rolling stock and technical equipment. The entrepreneur will achieve the objectives by relying on his own ingenuity, continuously monitoring the performance indicators, fast troubleshooting and monitoring and ensuring compliance with the legislation. Close family members who know the business help him the most in achieving the objectives. The company's strategy is specialisation with cost reduction as revenue.



Chapters 4, 5 and 6

Results



4. Results: Analyses of strategies and learning process

There are several ways to look at the results of the ISM trainings. In this chapter we focus on three aspects – *first*, differences and similarities between the farmers in terms of the chosen development paths and its continuation after the return meeting; *second*, on critical success factors which determine the realisation of each strategy, and *third*, an evaluation of the trainings from the perspective of the farmer and learning process.

One of the main goals of the ISM training is to support a farmer in developing a fitting strategy. So it is interesting to have an overview of the strategies the farmers have chosen in the ISM training to get some picture of the development paths they have in mind. This analysis is presented in the first part of this chapter.

One of the aspects of the training is that farmers are asked to write down those factors that are crucial for a successful implementation of their strategy. An overview of those critical success factors in each country can be found in the second part of this chapter.

A variety of evaluation methods has been used during and after the trainings. Farmers have filled in evaluation forms directly after each training day and have also received a phone call from the project team sometime after the training for evaluation purposes. The results of all these evaluations can be found in the third part of this chapter.

Parallel to the ISM-trainings, a survey was carried out amongst a large group of dairy farmers in all three countries, including the ISM farmers, that contained questions about farm strategies, perceived competencies, entrepreneurial features, future expectations, opportunities and threats and the availability of resources. These questionnaires

were used to study the development paths in Eastern Europe (reported in Kuipers *et al.*, 2014), but were also used in the analysis of the effect measurement of ISM, as presented in chapter 5 of this publication.

4.1

Chosen strategies

In order to get a general picture of the strategies as chosen by the farmers and to check to which degree farmers did change from primarily chosen strategy, the ISM reports of the participating farmers have been analysed. In this ISM report the farmer writes in his own words what his intended strategy is. The farmer is allowed to formulate up to three strategies, a 1st, 2nd and 3rd priority strategy. The strategies that the farmer writes down are usually more specific than the generic strategies from the ISM tool (these are listed in Figure 1.1). Especially, because in these trainings only dairy farmers participated, it is interesting to look at the more specific strategies as formulated by the farmer himself than the global strategies from the tool itself. For all three countries, the large variety of strategies in the ISM reports were ‘grouped’ into the following 8 strategic categories:

1. Enlargement dairy farm: increase in milk volume, number of cows, in combination with acreage;
2. Improvement of herd: increasing milk yield per cow, improving quality of milk and its composition, fertility of cows, genetic level of the herd;
3. Improvement of farm performance: restructuring land parcels/area, buying milk robot, renovating housing, machines and equipment;
4. Diversification in animals: e.g. fattening bulls, horses, heifer raising, in combination with acreage
5. Diversification in other branches: e.g. agro-tourism, own production/selling of products, machine service;
6. Vertical cooperation: working closely together with other chain partners e.g. dairy processors;

Table 4.1: Chosen strategies (1st, 2nd and 3rd choice) of farmers participating in the first 3-day ISM trainings in percentage of the total number of chosen strategies per country¹

	Enlarge- ment dairy farm	Improve- ment herd	Improvement farm perfor- mance	Diversifi- cation in animals	Diversification in other branches	Vertical coopera- tion	Horizontal coopera- tion	Extensifi- cation	Total
Poland	37.0	8.7	10.9	19.6	19.6	0.0	0.0	4.3	100
Lithuania	14.4	14.4	34.6	5.8	12.5	4.8	9.6	3.8	100
Slovenia	23.0	24.6	9.5	6.3	11.1	9.5	15.1	0.8	100

¹Results of in total 106 farmers (Poland 24; Lithuania 40 and Slovenia 42) that participated as well in the ISM training as in the return meeting.

7. Horizontal cooperation; working closely together with other farmers e.g. to buy inputs more efficient or, to share machinery or to sell products at a better price;
8. Extensification: more acreage with similar number of animals, nature orientation, ecological farming.

The group of farmers participating to the ISM trainings is, of course, only a very small group compared to the farmers' total population. Also, translating the farmers' description of a strategy into the strategic categories is somewhat subjective, while the choice of strategies may also have been influenced a bit by the facilitators in the three countries. A facilitator does, naturally, have his own preferences and interests, although they should not really play a role in the facilitation process. Therefore, the overview of strategies as shown in table 4.1 provides us only with a picture of the strategies related to these particular groups of farms and is surely not representative for the

sector in these countries.

In Table 4.1, all 3 (or 2) strategies as chosen and described by a farmer were included in the analysis. Each 1st, 2nd or 3rd strategy counted for one. We do see a quite strong focus of the participating farmers on the core business of a dairy farm. The combination of enlargement of the dairy farm and the 2 improvement strategies counts up to around 60% in all three countries. Within this group of three strategic categories, the focus of the participating Polish farmers seemed to be more on enlargement of the dairy farm and especially in Lithuania more on the improvement strategies. Diversification scored higher with the Polish group, both on diversification in animals as on diversification in other branches (both nearly 20%). Detailed information from the diversification strategies was not analysed, but the general picture from the trainers is that diversification in Slovenia focussed more on processing milk on the farm, whereas in Poland diversification focussed on production of beef or pork. Within the Lithuanian group, the focus of diversification strategies was mostly on growing other crops. The participating Lithuanian farmers were, relatively, quite extensive and had a surplus of land and, therefore, the possibility to grow other crops. The coopera-

Table 4.2: Chosen strategies (1st, 2nd and 3rd choice) of farmers participating in the return meetings in percentage of the total number of chosen strategies per country¹

	Enlarge- ment dairy farm	Improve- ment herd	Improvement farm perfor- mance	Diversifi- cation in animals	Diversification in other branches	Vertical coopera- tion	Horizontal coopera- tion	Extensifi- cation	Total
Poland	37.5	7.5	15.0	17.5	20.0	0.0	0.0	2.5	100
Lithuania	21.4	15.2	33.9	8.9	8.9	4.5	5.4	1.8	100
Slovenia	23.0	23.0	7.9	7.9	7.9	12.7	15.5	2.0	100

¹ Results of in total 106 farmers that participated as well in the ISM training as in the return meeting.

tion strategies are chosen mostly by the Slovenian farmers (nearly 25%) and were not chosen by the participating farmers in Poland.

In the return meeting (about one year later) the farmers looked back at their action plan and their achievements during the past year. What actions had been implemented, which changes were made on the farm, but also in their plans. The farmers also repeated the process of developing a strategy. The formulated strategies in the first training year and at the return meetings, categorized as explained above, were used to examine if the participating farmers changed their strategic choice after 1 year.

On average, the focus of the strategies of the farmers is still on the core business of the dairy farm: enlargement of the dairy farm and the improvement strategies are the predominant choices (see Table 4.2). The focus seems to be even stronger on these core business strategies. This is especially the case with the Lithuanian farmers' group, which experienced a 7% increase in the choice for the dairy enlargement category from the first training to the return meeting.

The Polish farmers seem to concentrate somewhat more on the improvement strategies. The Slovenian farmers focus after one year less on the improvement strategies and give more weight to the alternative strategies, like diversification in animals and also towards cooperation.

But in which degree did individual farmers change from strategy? This was analysed as follows: if in the return meetings the same three strategies were mentioned as in the first training, independent of the order of strategies, than a score of 1.00 was given. If two out of three strategies were the same, than a score of 0.66 was given, if one strategy the same 0.33 and no strategy the same a score of 0. With two strategies instead of three these scores were, respectively, 1, 0.5 and 0. This resulted in average scores for the farmer groups in Poland, Lithuania and Slovenia of, respectively, 0.78, 0.78 and 0.69, indicating that, respectively, 78, 78 and 69% of the 3 (or 2) listed strategies during the first

trainings were chosen again in the return meetings. Of the total group of 106 farmers, there was only one farmer that changed all three priority strategies. This farmer is now planning to build a new barn on a new location. This is probably the background for the total shift in strategies.

The question is, of course, if it is positive or negative that the chosen strategies have changed within one year. The answer depends on the reason for the change. Generally speaking a strategic choice is for a period of 2 to 5 years, so from that perspective it should be more or less the same a year later. But circumstances can change. One can imagine that a farmer did choose the strategy of enlargement of the dairy farm. In the meantime, he made his investment in the barn and he is milking more cows, so now his focus shifted to improvement of the farm or the herd performance. Also, the market situation can change. If (the forecast for) the milk price is better now, obviously, enlargement of the dairy farm will score higher as an option. Moreover, these farmers experienced a strategic training, which may have changed their thoughts about future plans.

In general, it is very important to observe that the training made farmers to think about the future, to work on the vision of the farm and to start analysing their development path. It is also positive that the analysis did not stop with the last day of the training. Many farmers rethought their strategy, and decided for little (or sometimes larger) changes in the action plans after a year from the basic training.

Detailed information about the strategic choices of the dairy farmers in Lithuania, Poland and Slovenia, and a whole set of factors influencing these choices, like farming goals, resources and opportunities&threats, are presented in, respectively, Stalgiene and Kuipers (2014), Malak-Rawlikowska and Żekało (2014) and Klopčič *et. al.* (2014), based on a total of 1038 questionnaires as collected in those countries.

4.2 Critical success factors

One of the aspects of the training is that farmers are asked to write down those factors that are crucial for a successful implementation of their strategy. The ISM reports of the participating farmers have been analysed in the same ways for the critical success factors as for the strategies. The words written down in the ISM report have been checked for three main groups of critical success factors. The first group is related to the farmer himself: health, family, successor and own knowledge and competencies.

The second group is related to the farm structure and the farm performance: farm structure, technical results, economical results and room to invest. The third group is related to the environment: space to develop, price of milk or other products, availability and price for production factors, financial funds (e.g. with banks, EU subsidies), and legislation/rules/requirements. Some farmers mentioned other aspects that were not in this list. They are counted in the category “other”.

The number of critical success factors listed by the farmers in the ISM reports varied from 1 till 10 per described strategy.

Table 4.3 shows that between 11-25% of the mentioned critical success factors are related to the farmer. It is interesting to observe that in all three countries the emphasis on the particular farmer-related factors is different. In Lithuania 9% of the farmers mentioned knowledge and competencies as the most important farmer related constraint. Whereas in Slovenia, the biggest concern was related to health and family issues.

Table 4.4 shows that in general the economical results are considered to be an important critical success factor for the future strategy (8-26% of all mentioned critical success factors). This can be confirmed by Table 4.5, where prices of products and production inputs like feed, land and labour are the most commonly mentioned environmental factors affecting the farm development success. It indicates that farm performance and availability of own capital for investment is, according to the farmers, rather more affecting the future than availability of external resources.

Table 4.3: Share of the Critical Success Factors (CSF's) related to the farmer himself in the total number of CSF mentioned by farmers (in percentages)

Country	Health	Family	Successor	Knowledge/competencies	Total
Lithuania	1	2	0	9	12
Poland	2	3	2	5	12
Slovenia	11	12	1	1	25
Average	5	5	1	5	

Table 4.4: Share of the Critical Success Factors (CSF's) related to the farm structure and farm performance in the total number of CSF's mentioned by farmers (in percentages)

Country	Room to invest	Economical results	Technical results	Farm structure	Total
Lithuania	3	26	14	6	49
Poland	0	8	0	0	8
Slovenia	0	11	1	9	21
Average	1	15	5	5	

Critical success factors related to the environment score the highest: from 39% in Lithuania to 80% of the total number of critical success factors in Poland (see Table 4.5). As can be seen by the large variety in outcomes, these results only provide some indications.

Space to develop is sometimes considered a problem, for instance when the farm buildings are located within a village or a town. Milk price is mentioned quite often as critical success factor, which is of course quite obvious because the milk price is one of the key factors for the revenues of the farm. Availability or price of production factors seem to be crucial in Poland and Slovenia.

Table 4.5: Share of the Critical Success Factors (CSF's) related to the environment in the total number of CSF's mentioned by farmers (in percentages)

Country	Space to develop	Price of milk or other products	Availability/ price for production factors	Financial funds (e.g. with banks)	EU subsidies	Legislation/ rules/ requirements	Other	Total
Lithuania	5	17	1	6	5	0	5	39
Poland	2	14	23	17	14	3	7	80
Slovenia	4	13	13	9	5	5	5	54
Average	4	15	13	11	8	3	6	

This is usually availability of land to buy. Land was mentioned very often as one of the most limiting resources. In Slovenia was mentioned that this is a major problem because (retired) farmers do hardly ever sell their land. Financial funds and EU subsidies were also mentioned often as key factors. This was often related to investments in barns, milking equipment or machinery. From the discussions it seemed that e.g. EU funds played almost a leading role in these decisions. In the category “other” weather risks are mentioned most often, but also market demand and a growing influence of the society are mentioned as critical success factors.

Farmers mentioned mostly the critical success factors that are related to the environment. In general these factors are hard to influence by the farmers. So it looks like farmers feel that the success of their farm depends mostly on outside factors. Within the farm factors, the economical results are mentioned most. The economical results are influenced by farm management, but of course also by the external factors like milk price. Within the farmer related factors, family and health and personal competencies are the most mentioned critical factors for the success of the farm.

4.3

Evaluation of the ISM trainings

Evaluation is a very important element of the ISM method and learning process. It helps to check whether the method and training were carried out in a proper way. The evaluation also allows to detect potential problems of the ISM training and prevent their occurrence in the future. For the purpose of the evaluation of the ISM trainings, two methods were used: evaluation forms and a telephone evaluation two months after the training.

Evaluation forms

Evaluation forms were prepared and collected about the training to be filled in by the farmers (after each training day); about the training and the group to be filled in by the facilitator (2 times per training day); and about the use of the ISM

tool, the farmers’ group and the facilitator to be filled in by an independent observer. The evaluation helped to assess the training itself and to make improvements and adjustments for the future.

The evaluation results showed that, in all three countries, the farmers’ expectation about the training were mostly fulfilled (Figure 4.1). This confirms that the recruitment of farmers and informing them before the training about the training content was done in a proper way. It can be observed, however, that after the first training day a part of the participating farmers were

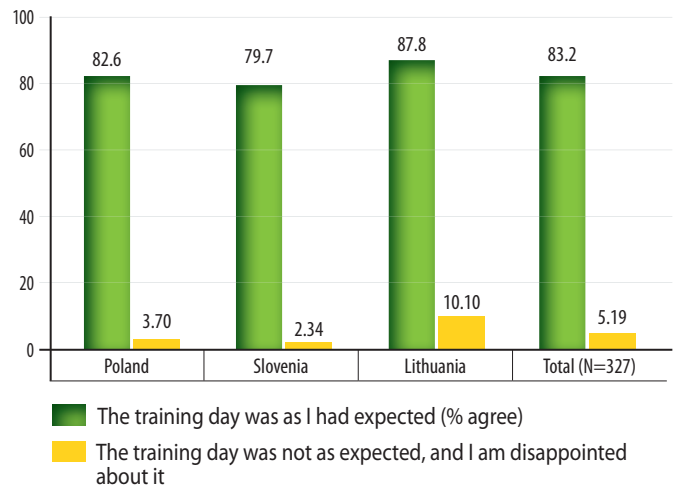


Figure 4.1: Expectations about trainings by country (% agree)



Figure 4.2: Expectations about training by day

surprised by the form of the training (Figure 4.2). The reason might be that in the three countries in which the evaluation was carried out, farmers are rather used to the “lecture type” of trainings, where interaction with the lecturer is minor. During the ISM trainings farmers had to work themselves with computers and they had to analyse and discuss the findings about themselves and their farm with the group. This might have caused some concerns of the participants.

In all three countries about 85% of farmers conclude that they learned a lot during the ISM training (Figure 4.3). The most valuable and new knowledge was obtained during the second and third training day (Figure 4.4), during which the participants analysed, discussed and presented the future strategies for their farms and their action plan. Figure 4.3 shows that farmers assessed the training environment – rooms, computers, meals etc. – very positively. Regarding the homework assignments, 75% of farmers assessed the homework “an interview with non-agricultural entrepreneur”, as useful and 68% stated that this homework “made them think”. The second homework assessment – presentation of the future farm strategy with an action plan which was later discussed during the training day with the group – , was evaluated even more positively. About 87% of farmers think that it was useful and about 74% that “it made them think”. These positive results are quite surprising because, in general, participants of trainings are reluctant to homework assignments.

During the project about 15 trainers were trained how to facilitate ISM trainings, and 8 of them were directly leading the trainings. The results of the participants’ evaluations of the trainers are presented in Figure 4.5. It can be observed that in all three countries farmers were very positive about the facilitators (trainers) of the ISM training. Facilitators were also evaluated by independent observers and their opinions were also very positive. However, the results may be a bit influenced by the relation between facilitator and farmers. A farmer may not easily react too negatively when

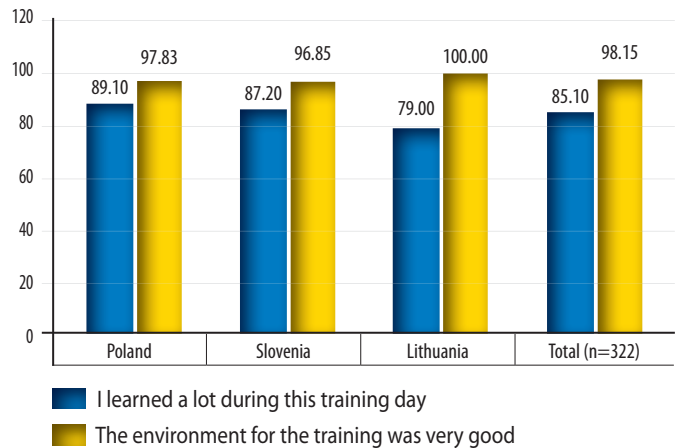


Figure 4.3: Evaluation of knowledge obtained and environment of the training by country (% agree)

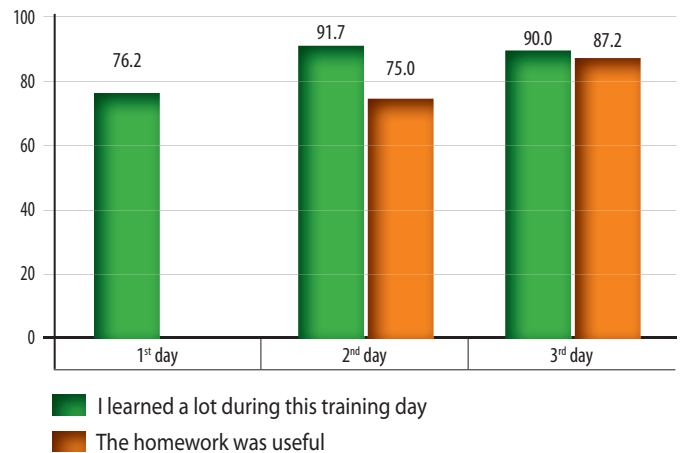


Figure 4.4: Evaluation of knowledge obtained and homework by day (% agree)

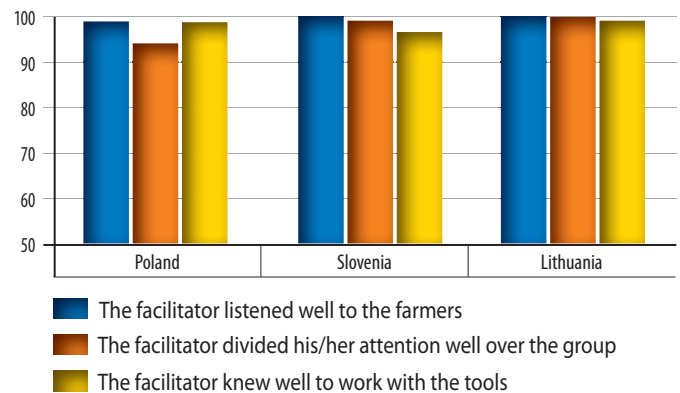


Figure 4.5: Evaluation of the trainers by farmers

asked to judge his guide in the training process. Nevertheless, the functioning of the facilitator is an important factor, because good facilitation of the training is a key factor of its success. The relation between the facilitator and the farmers group relies on the mutual trust and respect, and is very sensitive. Therefore well trained and chosen facilitators are crucial for the learning process.

Two months after the last training a telephone evaluation was organised in each country. The effects of the evaluation (Figure 4.6) show that about 78% of the farmers expressed that the training helped them to get insight into their future plans and that on average 81% of them has a different view on their business after the training. They are more self-confident and more aware about their own and their farms' strengths and weaknesses and the environment. Besides this, about 63% of them see more opportunities for their farm since the ISM training.

Some answers to open questions in the telephone evaluation about positive points of training were: "Training helped me to be more open to other solutions"; "I learned that there are new strategies"; "I had possibility to look on my farm from other perspective". In general, the farmers were appreciating the common discussions with other people and emphasized the good atmosphere and well prepared trainers. Farmers rarely mentioned weak points of the training. The most common more negative comments were about the length of the training – "three days are too much for dairy farmers" – and about its timing: "training should be organised in the winter".

After the ISM training about 25% of all participants declared to change their future strategy and 75% will continue the current path of development. Since the main goal of the training was to teach the farmers how to analyse their business and how to prepare a good, realistic strategy for their farm, we expected that the farmer's consciousness about future plans increases, rather than that the future strategy would change. Therefore, it was surprisingly that about 25% of farmers declared to modify the strategy of their business.

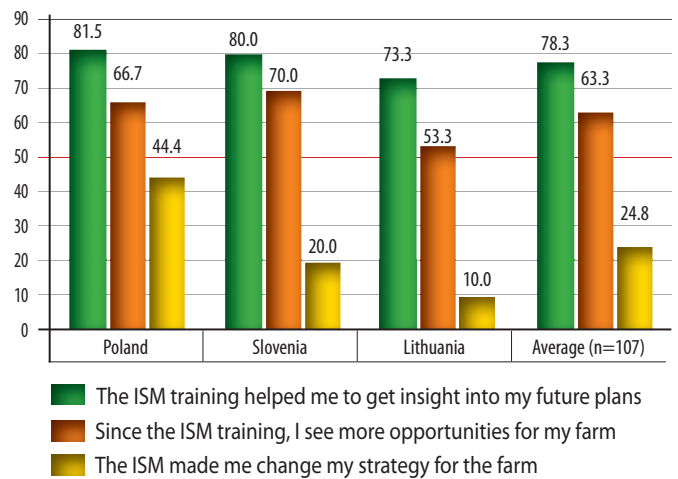


Figure 4.6: Opinion of farmers about effect of trainings on their farm business plans by telephone interview (% of agree)

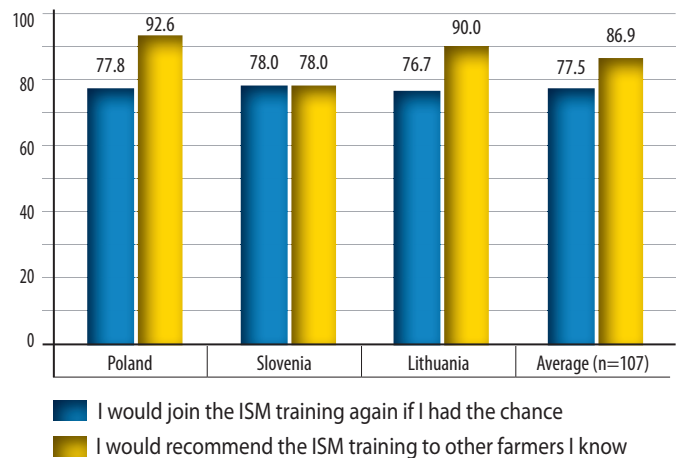


Figure 4.7: Opinion of farmers about usefulness of trainings by telephone interview (% of agree)

It is important that 87% of participants would recommend the training to other farmers and 77.5% would join the ISM training again if they had a chance (Figure 4.7).

5. Measuring the effect of ISM empirically: Does it really work?

In the previous section it became clear that the dairy farmers and their facilitators were quite positive about the ISM trainings. In all three participating countries, during the telephone evaluation carried out approximately two months after the training, most farmers said that they had learned a lot during the training, the training had helped them gain insights into their future plans, they could see more opportunities for their farms after the training, they would join the training again if they had the chance and that they would recommend the training to other farmers.

But is it also possible to show the effect of the ISM trainings in the longer term and in an empirical way?

To be able to answer this question, two surveys were carried out in Lithuania, Poland and Slovenia. Both surveys contained the same questions about farm strategies, competencies, entrepreneurial features, future expectations, perceived opportunities and threats and the perceived availability of resources. The first survey was carried out before the ISM trainings started. This resulted in 334, 334 and 362 questionnaires from Lithuania, Poland and Slovenia, respectively, being analysed. Of these farmers, 47, 33 and 50 were asked to participate in the ISM trainings in Lithuania, Poland and Slovenia, respectively. They are referred to as ISM farmers. The second survey was carried out after the return meetings of the ISM trainings. The ISM farmers who participated in these meetings were asked to complete the survey again. This concerned 39 dairy farmers in Lithuania, 22 dairy farmers in Poland and 41 dairy farmers in Slovenia. Besides this, respectively 63, 49 and 138 Lithuanian, Polish and Slovenian dairy farmers who had completed the survey the first time but did not participate in the ISM trainings were asked to fill in the second questionnaire.

They are referred to as the ‘not trained control group’. Only questions about entrepreneurial features, competencies and farm features are elaborated here.

The effects of the ISM trainings were measured according to a statistically sound method. The hypothesis was that the scores would change in a positive way after the ISM trainings in the ISM group and would not change or change to a smaller extent or in another direction in the not trained control group. Results are only mentioned if a significant increase or decrease was found after the ISM training or a tendency for such an increase or decrease for the ISM group and/or the not trained control group in at least one of the participating countries¹.

The results reveal that the ISM trainings did indeed seem to have some effects on the farmers’ competencies and entrepreneurial features. However, the results are not consistent between the countries. In Poland, the ISM farmers perceived their analysing and pursuing competencies significantly higher after the ISM trainings and they were also significantly more positive about the way they approached their customers (Figure 5.1). This means that after the ISM trainings Polish ISM farmers had higher scores for questions like “I am able to observe the opportunities and weaknesses of my farm” and “I know how to describe the problems in my enterprise” (examples of questions about analysing competencies), questions like “I look for new information all the time” and “I am continuously looking for new possibilities” (examples of questions about pursuing competencies) as well as the questions “I can easily understand the wishes of consumers” and “I listen carefully to the person or organisation who buys my milk”(questions about customer orientation).

In Lithuania, after the trainings the ISM farmers perceived their performance and networking competencies slightly (but not significantly) higher but the farmers in the not trained control group perceived these competencies significantly lower after a year (Figure 5.2). The same was found in Lithuania for the en-

¹ “Significant” means that there is a statistical basis to say the farmers answered the questions differently before and after the ISM trainings; a “tendency” means there is an indication that such difference exists.

entrepreneurial features ambition, customer orientation, locus of control and strategic reflection. The ISM farmers perceived these features slightly (but not significantly) higher or more or less equal after the ISM trainings, while farmers in the not trained control group perceived these features significantly lower (ambition and strategic reflection) or tended to perceive these features (customer orientation and locus of control) lower after a year (Figure 5.3). Examples of questions about performance are “compared to colleagues, I gain good financial results of my farm” and “I gain a good income with my farm”, examples of questions about networking are “I have many contacts outside the agricultural sector” and “I can transfer my ideas easily to the an audience”, examples of questions about ambition are “my farm is larger and more modern than other farms; it leads the way” and “the technical results are as high as possible” examples of questions about strategic reflection are “I explore new market opportunities at least once a month” and “I follow developments regarding milk prices closely”, while examples of locus of control are “the results of my farm depend largely on myself” and “I have enough money (time, space, courage) to develop my farm the way I want”. Another result was that the ISM farmers in Lithuania tended to perceive themselves as slightly more financially careful after the ISM trainings, which means they had slightly higher scores for the questions “I keep costs as low as possible” and “I try to employ myself and other family members as much as possible”.

In Slovenia, the scores for competencies and entrepreneurial features did not change for the ISM farmers and the farmers in the not trained control group.

The ISM trainings also seemed to affect some other aspects of dairy farming in the participating countries. It appeared in Slovenia that the hectares of rented land (UAA) increased on average by 5 ha for the ISM farmers after the ISM trainings and decreased on average by 0.5 ha for farmers in the not trained control group. This may indicate that the ISM farmers in Slovenia became more active

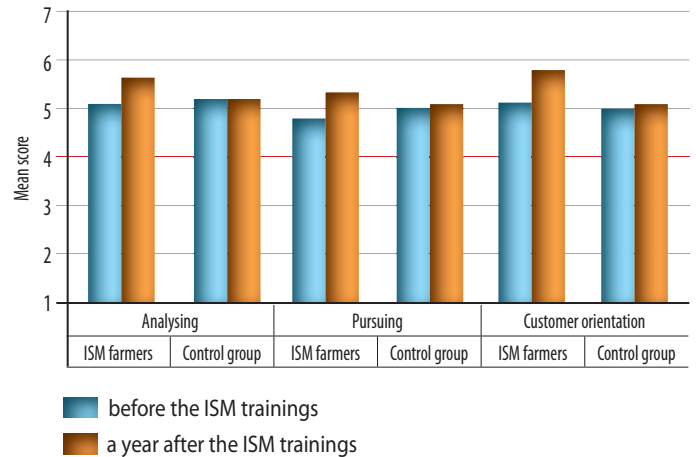


Figure 5.1: Changes in competencies and entrepreneurial features as perceived by the ISM farmers and the farmers in the not trained control group in Poland before and after the ISM trainings (mean scores on a 7-point scale, 1 = totally disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree, 7 = totally agree)

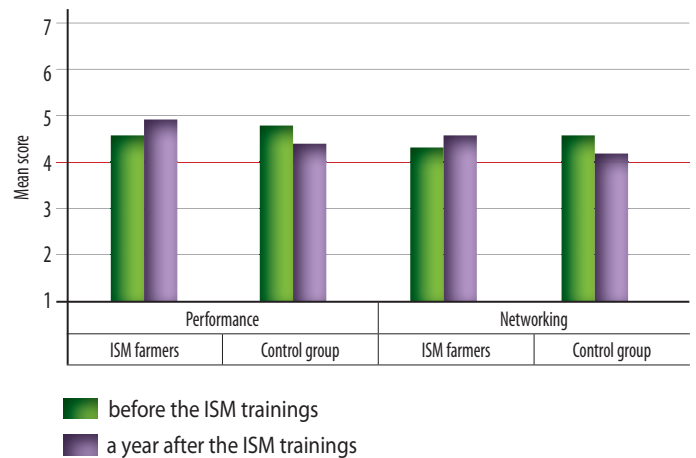


Figure 5.2: Changes in competencies as perceived by the ISM farmers and farmers in the not trained control group in Lithuania before and after the ISM trainings (mean scores on a 7-point scale; 1 = totally disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree, 7 = totally agree)

in terms of obtaining land after the ISM trainings. Comparable effects were not found in Poland and Lithuania. No effects of the ISM trainings were found in either the number of dairy cows or the hectares of land owned.

Based on the results, it can be concluded that the ISM trainings seem to have had a positive effect on the farmers' competencies and entrepreneurial features – at least in Poland and Lithuania. This is important because the development of competencies is essential for the growth, innovation and diversification of enterprises and for continuously recognising new business opportunities (Batterink *et al.*, 2006; Nuthall, 2006; Lans, 2009). Further analysis of the context in which the farmers in different countries have to operate and of the ISM process in the participating countries may help to clarify why the results are inconsistent between the countries².



² It should be noted however that both the farmers of the ISM group and the not trained control group may differ in terms of their sociocultural, sociodemographic and socioeconomic characteristics from the whole population of agricultural entrepreneurs in the case study countries. Hence, results of this comparative analysis may not be representative and we do not claim generic validity of our conclusions about the effectiveness of the ISM training programme.

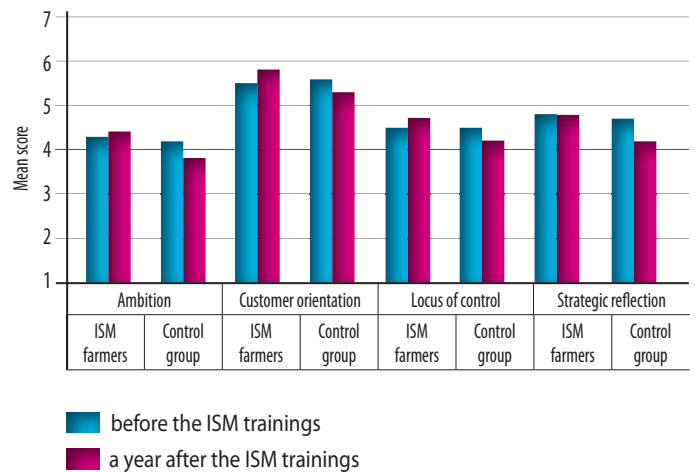
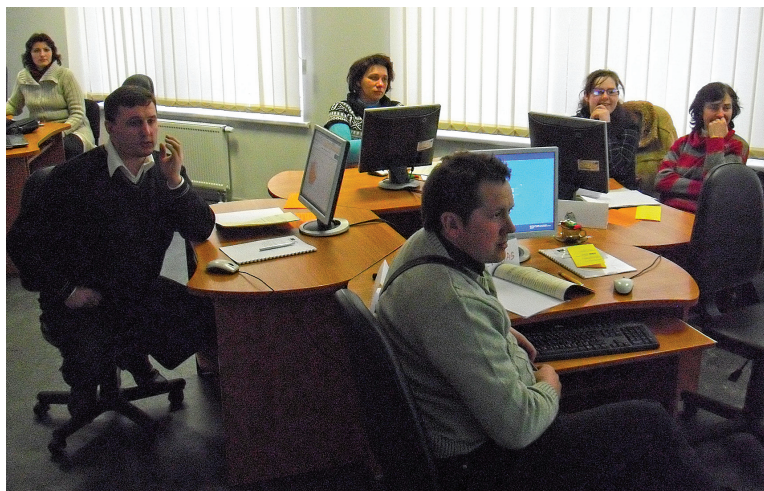


Figure 5.3: Changes in entrepreneurial features as perceived by the ISM farmers and not trained farmers in the control group in Lithuania before and after the ISM trainings (mean scores on a 7-point scale; 1 = totally disagree, 2 = disagree, 3 = slightly disagree, 4 = neutral, 5 = slightly agree, 6 = agree, 7 = totally agree)



6. Concluding remarks

The project has been stimulating and inspiring for all persons involved. Exchanging experiences, translating and adapting processes and an educational tool not only to different languages and sectors, but also to different cultures have been quite challenging and rewarding in the way of learning and new friendships.

The main conclusions from this book and the project focus on two areas: the key success factors for the training and opportunities for implementation of the training and advise for the future.

Key factors for a successful ISM training:

1. This type of interactive training is very different from the usual kind of trainings and lectures that is being offered these days to the farmers. It is important to be aware of this difference in the way of communication, when selecting participants and when choosing and training the facilitators.
2. The expectations about the training should be clear. People have different views on strategic plans. Some people think strategic planning is about financial calculations, which is not a major topic of this training. This training is more about creating awareness of farmers concerning their own situation and future expectations and goals. It is essential that the content and results of the training are well understood by the farmer to avoid misunderstandings.
3. The timing and the season are important. Training should be planned during the winter, because during spring and summer farmers are too busy with fieldwork. It is not just the time needed for the training itself, but the farmers also need time for the homework assignments and time to reflect and think about new ideas and possibilities.
4. Good trainers/facilitators are needed. The facilitator has a key role in the process. He or she must be able to stimulate farmers to think outside the box and to stimulate them to interact with colleagues and others. The facilitator must understand the process oriented approach of the training and should have the skills to perform this approach with a group of farmers. The facilitation is a lot easier if he has knowledge of the sector and is aware of the current issues in the sector. Knowledge of the sector also helps to ask the right questions and to give good and inspiring examples.
5. The farmers attending the training should be self-motivated to work and to discuss strategic choices. Therefore, an appropriate recruitment of the farmers is essential. If farmers are not motivated, the process is difficult to manage. Because the training is with a group, the farmers must be willing to share data and views with their colleagues and the trainer. During the training the farmers work with a computer, therefore, some experience with working with the computer is helpful for a successful training.
6. Involvement of the participant is a key factor to success. It is important that the farmers are fully involved in the training. This means participating in the interaction during the training days and doing the homework assignments after each training session. Farmers should also be present during all three training days. If you miss out one day it is very difficult to pick up the process again.
7. A mixture of farmers from different regions may work better than a group of farmers from, for instance, the same village, to be more open towards the discussions and interaction in the group.
8. During the training the farmers have to work with a web based tool. An important condition is that the ISM tool should work properly. This implies that the location for the training should have good internet access. A back up office is needed in case of soft-ware or other difficulties that may arise. It is important to test the tool on location before the training. In problem situations, it is helpful to have a paper version on hand the farmers can work with. But especially during day 2 the use of the tool is quite essential for the training.

Opportunities for trainings focussing on entrepreneurship in the future

The ISM trainings described in this book focused on groups of dairy farmers. However, working with farmers from different sectors could fit better with the purpose of the training. The training may actually better work with mixed groups, because when farmers come from different sectors, less discussion will be on operational issues, hitherto the focus of the training is expected to be largely on strategic issues as it is meant to be.

In the participating countries in this project several cooperatives or producer groups have emerged in recent years. Usually, these groups of farmers try to sell their milk as a collective to a processor, while some also buy inputs together or develop other activities together. For these producer groups developing a common strategy is very important, so it might be a target group for the training in the future.

During the execution of the project there have been new developments in tools and methods that could further enhance this type of training. A new version of the web based tool has been developed. More recent knowledge on entrepreneurial competencies and (market-) strategies have been included in the tool. For instance, a gap analysis is part of this new version of the tool. In this analysis the tool 'explains' the difference between the score of the farmer himself for the various strategies and the score the tool has calculated for these strategies.

Another new development is the use of the method of business model innovation from Osterwalder (Osterwalder and Pigneur, 2009) in agriculture. In this approach the focus is more on the total business model. The method supports farmers (entrepreneurs in general) to innovate their business model to adapt to changing circumstances. A strong focus in this method is on value

proposition and market segments. It has been implemented in the last couple of years in different projects with farmers from different sectors.

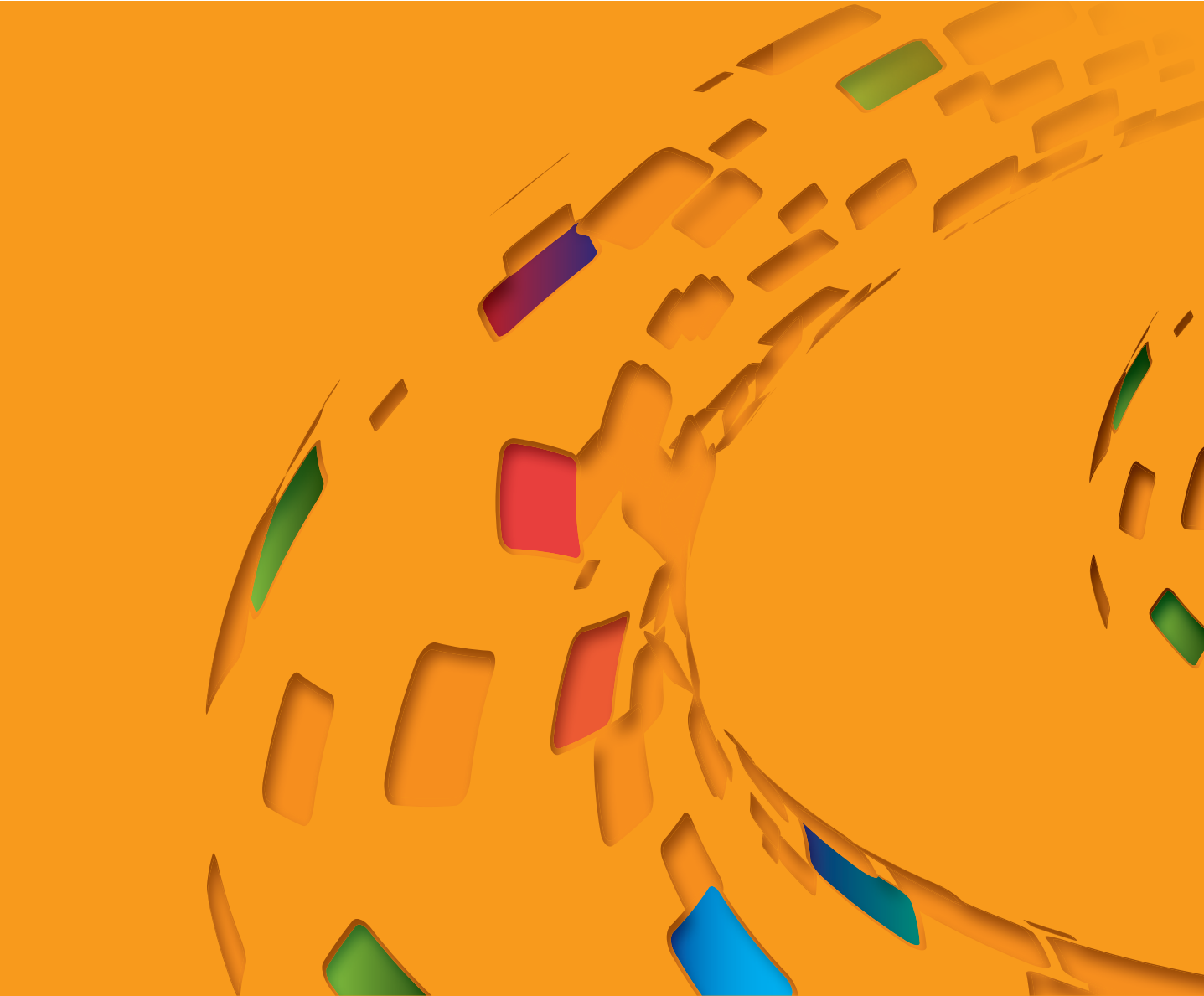
Finally

The evaluation of the training method by the participating farmers and facilitators has been very positive. In all three partner countries, most farmers said that they had learned a lot during the training, the training had helped them gain insights into their future plans, they could see more opportunities for their farms since the training, they would join the training again if they had the chance and that they would recommend the training to other farmers.

Based on a statistical analysis, it was shown that, at least for part of the farmers, the ISM trainings seem to have had a positive effect on some of the farmers' competencies and entrepreneurial features. This analysis will be continued to further explore effects of such kind of trainings.

Since the method was successfully implemented in this project in the dairy sectors in three Central and Eastern European countries, it is worth extending to other countries and other sectors than dairy.





Appendices 1 and 2

An abstract graphic on an orange background. It features a large, faint circular outline. Inside and around this outline are numerous small, colorful rectangular blocks in shades of blue, green, yellow, red, and purple. The blocks are arranged in a way that suggests a circular path or a collection of data points.

Appendix 1: Description of the factors and strategies

This Appendix 1 describes the factors and strategies introduced in the chapter 2 “Set-up of the Interactive Strategic Management training”. We start with the various elements that play a role in the competencies of the entrepreneur, the internal business factors, the business performance and the external factors, respectively. This is followed by a discussion of the alternative strategies.

A. Description of the factors

Competencies of the entrepreneur

This factor focuses on what the entrepreneur is good at: his abilities or personal characteristics.

1. Market orientation

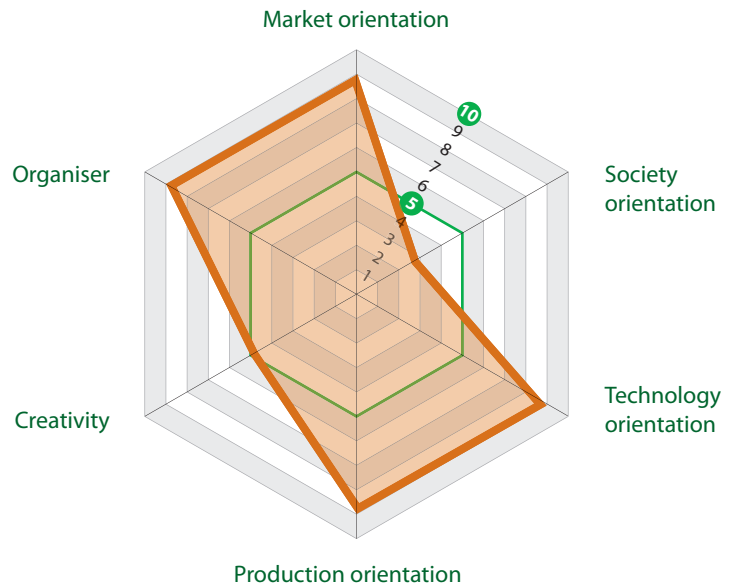
A market-oriented entrepreneur:

- is attuned to demands of segment and niche markets
- regards ‘gaps’ in the market as opportunities
- utilises the advantages provided by the production chain to fill these gaps

2. Society orientation

A society-oriented entrepreneur:

- is attuned to the demands of society (or a specific segment thereof)
- seeks ways to satisfy these demands and has the desire to do so
- has many social contacts outside the agricultural sector
- knows how to distinguish between fundamentally important and trivial public concerns
- does not automatically assume that governmental policies are to blame for these concerns
- would like to contribute to rebuilding the integration that has been lost in society



-
- believes that socially responsible production is more important than agricultural performance (such as the realisation of higher rates of production per animal, hectare or m²)

3. Technology orientation

A technology-oriented entrepreneur:

- believes in technology as the most important solution to development problems
- has a ‘feeling’ for and an interest in technology
- keeps track of technological developments or initiates them himself and applies them to his business
- adopts new technologies as soon as they are (somewhat) usable

4. Production orientation

A production-oriented entrepreneur:

- believes that food production is the single most important function of the agricultural sector
- strives for high efficiency and a continual improvement of agricultural production
- believes that broadening one’s perspective is a lot of nonsense

that will not earn him anything

- considers agricultural performance (such as high production per animal and/or hectare or m²) to be very important
- tries to attain this, even though it creates high demands on the means of production (such as feed and fertiliser)

5. Creativity

A creative entrepreneur

- is determined to achieve his goal
- is open to creative solutions and does not disregard any potentially successful options
- enjoys the creative and continual search for original solutions to the challenges he faces
- is not bogged down in existing structures

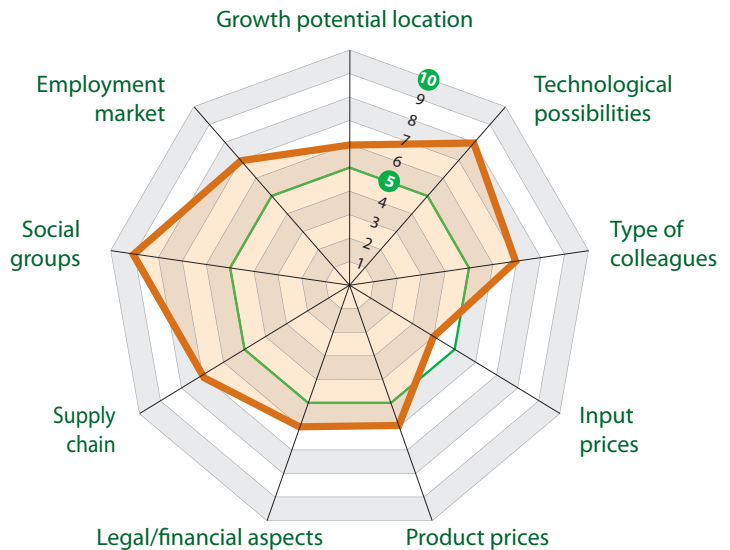
6. Organiser

An entrepreneur who is a good organiser:

- makes social contacts easily, gets along well with others, is a good judge of character and knows how to motivate people
- has experience with and enjoys organising events together with others
- is exceptionally good at setting up a well-functioning system (such as a business or production chain) and is good at planning and organising various tasks
- prefers to work in cooperation with others (such as colleagues, chain partners, market actors, social organisations)
- can easily adapt the organisation of a system to new demands and insights

External factors

This factor considers how an entrepreneur views his environment: which developments does he see around his farm. Where does he see opportunities and where does he see threats? An opportunity means that a certain expected development offers the chance to initiate an action concerning the business which is desired by the entrepreneur. A threat means that the desired action may be hindered by factors that are critical to the entrepreneur's success.



.....

1. Growth potential location

If the firm's current location offers sufficient opportunities for expansion:

- there is plenty of space
- the firm is located far enough away from other businesses to ensure that it does not get in their way, and vice versa
- there is no residential area close by that could be affected by and thus be opposed to future expansion
- there is no possibility that the location could be designated for other or additional uses in the future (i.e. potential changes in zoning or regional planning schemes)
- there are no protected elements in the area that could be seen as a sufficient cause to prevent the future expansion of the entrepreneur's business activities

2. Technological possibilities

- Technological advancements are transforming many aspects of agricultural production (biotechnology, new mechanisation systems, new housing systems involving very compact high-rise buildings, advanced information systems using computers and the Internet etc.).
- The question is whether the entrepreneur views these developments as an opportunity or a threat.

3. Type of colleagues

The entrepreneur's colleagues are:

- potential partners
- people from whom a lot can be learned
- potentially strong competitors
- innovators in the field of socially responsible production from whom a lot can be learned
- people with a completely different perspective

Here the question is again whether the entrepreneur views his colleagues as an opportunity or a threat.

4. Input prices

- Is it expected that the costs of important production inputs (land, capital, labour, knowledge and natural resources) increase or decrease in the future in response to government policies or other developments?
- Does the entrepreneur view this as an opportunity or a threat?

5. Product prices

- Is it expected that the prices of the entrepreneur's own products will increase or decrease?

6. Legal/financial aspects

- Are flexible opportunities available to design the business organisation in such a way that it fits the needs of the entrepreneur? Are there formal legal obstacles in the way (such as when an entrepreneur wants to formally separate business units but keeps them within one holding company, or when businesses want to cooperate but with 'closed wallets')?
- Is it possible for businesses and business units to cooperate without running into formal fiscal obstacles?
- Are there sufficient possibilities for creative financing to meet the entrepreneur's needs?
- Does the entrepreneur receive sufficient support from the government in planning his business development?

The current future development possibilities can be viewed as stifling and discouraging (threatening) or as an opportunity.

7. Supply chain

The quality of the chain is determined by:

- the organisation (length, internal cohesion and coordination)
- efficiency (flow rate of the product and costs)
- distribution of the benefits among the chain partners: Does the primary producer receive much or is more money earned further upstream in the chain?
- transparency: Is it clear to both producers and consumers what happens to the product as it moves through the chain?
- are good product guarantees given? Is it possible to show potential customers the product that will be delivered?

Does the entrepreneur view developments in the chain as an opportunity or a threat?

8. Social groups

Consumer and social interest groups make demands on product quality related to hygiene, content and appearance, but also on the manner of production. These can be demands shared by a large part of society or demands shared by a certain segment of consumers or groups who are willing to pay extra for particular product attributes. These demands can be viewed as an opportunity or as a threat.

9. Employment market

Labour is expensive and difficult to find. This can lead to a trend of decreasing labour intensity, sometimes accompanied by rapid business expansion. Alternatively, an entrepreneur can look for creative ways to utilise his own network to satisfy the firm's labour requirements. The entrepreneur can view future developments in the employment market as an opportunity or a threat.

Business performance

This factor calls for a general strength-weakness analysis of the current situation with respect to profit, planet and people. How does the business score compared to others on the following factors?

1. Profit

Profit is the difference between the returns and all costs (including calculated costs such as depreciation, interest, and one's own capital and labour).

2. Financial strength

The degree of financial strength indicates how well a business can deal with financial setbacks: Can the business take a hit or not? Among other things, this can be indicated by the relationship between the entrepreneur's own capital and the total assets of the business, and by the growth of liquid assets (annual increase in available capital on hand and in the bank).

3. Degree of sustainability

“Sustainability” is a catch-all word that can refer to many different things. In this context, we mean the sustainability of the production process in ecological, societal and social terms (i.e. preserving or improving the environment, the soil, nature, resources and animal welfare, and fulfilling more functions than just the production of food). The focus is on ecological and social returns.

4. Working conditions and social circumstances

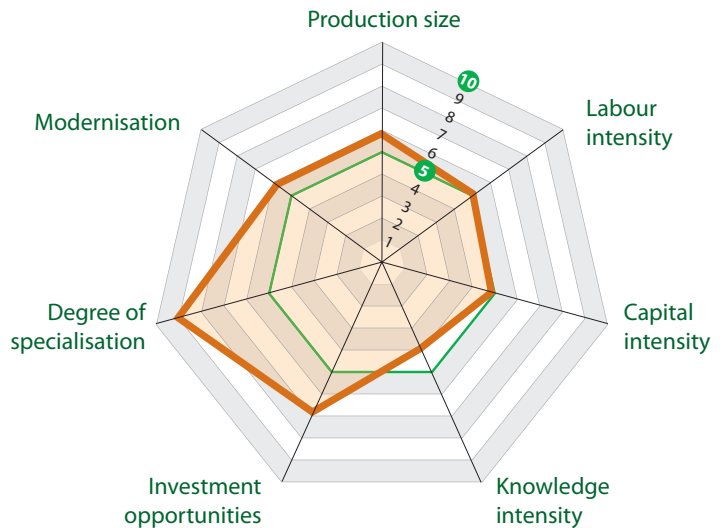
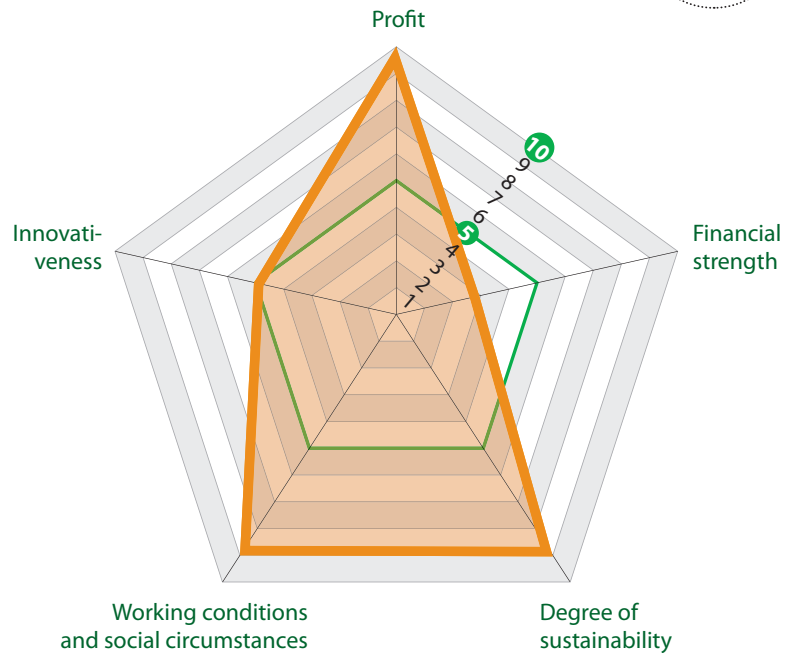
These refer to the circumstances in which co-workers work and live (enjoyable work, a pleasant working environment).

5. Innovativeness

The innovativeness of the business indicates how flexible the entrepreneur is in taking strategic advantage of changes in the environment (new opportunities and threats), such as changes in public opinion and changes in governmental policies (international, national, regional or local). This provides a general indication of the continuity of the business: its potential to continue operating under ‘any’ circumstances.

Internal business factors

This factor relates to a description of the historical situation of the firm or farm. How does the entrepreneur view his own business situation compared to that of his colleagues with respect to the following factors?



1. Production size

Production volume of the business (as expressed in gross annual income per year). Does the entrepreneur view this as large or small?

2. Labour intensity

Are the labour requirements of the business high or low in relation to the labour supply? High labour intensity means that limited space is available in the labour diagram.

3. Capital intensity

Capital intensity refers to the amount of capital invested in the firm. Is much capital invested or only a little?

4. Knowledge intensity

Knowledge intensity is the amount and diversity of high-level knowledge needed and available for the production process. Is this knowledge available or not?

5. Investment opportunities

Indicators for potential (large or small) investment opportunities include the surplus value (liquidation value minus outstanding loans) and the business results (the better they are the more room there is to invest). Are the opportunities extensive or limited?

6. Degree of specialisation

A highly specialised business focuses on as few products or production processes as possible (and often just one). This product or process represents the firm's core business. Is the firm specialised?

7. Modernisation

The degree of modernisation can be calculated by dividing the book value by the replacement value and multiplying the result by 100. Is the business modernised, or has the entrepreneur neglected to make periodic and necessary investments in recent years? If the latter is the case, the business is not sufficiently modernised.

B. Description of strategies

The graph shows the score for each strategy by the farmer (input) and the calculated score by the

ISM-tool (calculated). Throughout the report the input scores in the spiderweb diagrams are self-reported scores by the entrepreneurs participating in the ISM training programme. Also, throughout the report the calculated scores in the spiderweb diagrams are calculated by the ISM tool based on expert knowledge on the relation between the different business and personal factors and strategies.

1. Value-added production

The entrepreneur focuses on producing products that have a specific added value for a certain segment of consumers. The added value can be based on how the product is produced or the image consumers have of the type of business that produces it. The product is thus considered to be exclusive: Rolls Royce cars, for example, or a Hilton hotel.

2. Bulk production

The entrepreneur focuses on the production of one product, usually with little or no variation, which satisfies general quality requirements but is not considered by consumers to be exclusive or of particularly high quality: products sold by McDonald's or the Aldi supermarket chain, for example.

3. Economically efficient

The entrepreneur focuses on a production method that requires the investment of as little means as possible per product unit (both expressed in monetary terms). This approach relates not only to specific costs, but to the whole production process and the manner of doing business.

4. Specialisation

The entrepreneur focuses on what he is good at: his core business. One example would be an entrepreneur who offers administrative services, not to all types of businesses but only to the automobile branch.

5. Modernising

The entrepreneur focuses on modernising production, and is keen on adopting new technologies: a producer of electric razors, for example, who develops a new product line or modernises the mechanisation of the production process.

6. Scale of production factors

The entrepreneur focuses on changing the scope of the business. By scope we mean the combination of the required production

factors. The change (in either direction) can affect each of the production factors: for example, it may require more capital, less land, more labour, or an increase in the available knowledge.

7. Diversification

The entrepreneur focuses on the diversification of production with the objective of serving various markets or market segments. The main product is then split into a number of sub-products, which all have specific production requirements. If the main product is soap, for example, the variations may include inexpensive nearly odourless soap as well as expensively packaged and 'exclusively' scented soap. Alternatively, an entrepreneur who has specific or unique knowledge of a specific subject or is particularly good at presenting his knowledge may want to apply this knowledge or talent beyond the limits of his own business: a real estate agent, for example, may want to conduct applied research, or an entrepreneur may want to also work as a salaried employee in another business.

8. Choice of location

The location of production is very important. A

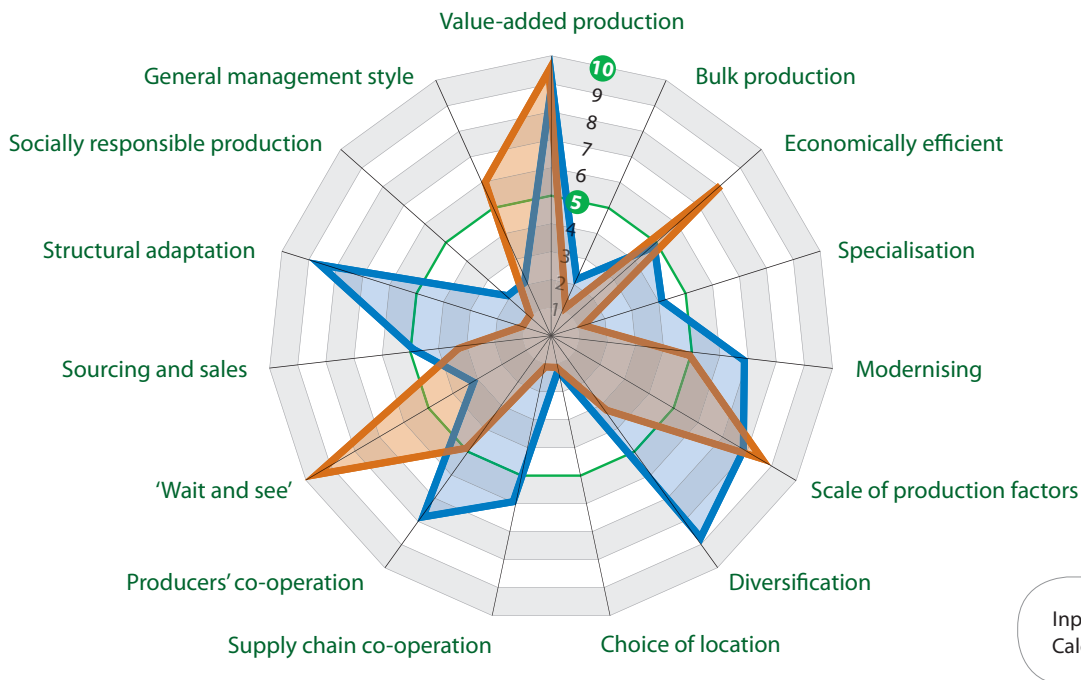
location can offer opportunities, but it can also pose a threat. Is expansion possible at the current location? Or will it have to take place elsewhere? Will the entrepreneur then choose to operate in various locations, or will he move the entire business to a different location? The latter option may require emigration if expansion within the entrepreneur's own country would be too expensive or subject to too many restrictions (high transport costs, governmental regulations etc.). Alternatively, the current location may offer opportunities for a different product or production process: tourism, for example.

9. Supply chain co-operation

The entrepreneur focuses on combining various steps in the production chain within his own business. He wants to take full advantage of the possibilities offered by higher prices further on in the chain, such as consumer prices. This can only be achieved through the concerted efforts of his co-workers, but also in co-operation with other entrepreneurs or participants elsewhere in the chain.

10. Producers' co-operation

The entrepreneur focuses on working together with a network of colleagues to offer a more unified entity of products or production processes in the market, or to make collective use of resources and thereby reduce the costs of production: examples include joint purchasing, branch marketing and joint sales.



11. 'Wait and see'

The entrepreneur keeps a critical eye on new developments and is aware of what is going on around him, but hesitates to make any decisions.

12. Sourcing and sales

The entrepreneur focuses on the purchasing policy of inputs and/or the merchandising of products with the objective of reducing costs or increasing the selling price.

13. Structural adaptation

The entrepreneur focuses on adjusting the organisational structure of the business. Examples include introducing alternative forms of employment whereby workers take on part of the financial responsibility themselves (making use of freelancers or exchanging services with other businesses). It may be advantageous to change the legal structure of the business (into a partnership, corporation or a holding company with independent subsidiaries) or to utilise a network of clients. The financial structure can also be adjusted to facilitate network integration or cooperation among producers or promote customer retention (co-financing). These adjustments can also be made to reduce risks or to benefit from financial advantages.

14. Socially responsible production

The entrepreneur chooses, in consultation with his environment, to adhere to the principles of ecologically and socially responsible production. This means maximising the output generated with a minimum of inputs (e.g. energy and minerals), as well as maximising animal welfare and preserving or increasing the aesthetic value of the landscape. Stakeholders are asked to participate in the formulation and pursuit of these objectives.

15. General management style

The entrepreneur prefers a general managerial style. This means that he pays attention to more than just the technical and economic aspects of the business. Integration of the changing wishes of society in business management is a necessary part of socially responsible entrepreneurship. It

may also involve making required changes in the organisation of the business and improvements in the working conditions and social circumstances of the employees. These tasks demand certain competencies from the entrepreneur, who will have to improve his skills in areas where they are lacking.



Appendix 2: Description of the SMT tool

The Strategic Management Tool (SMT tool) is an Internet tool to support the ISM (Figure A1). The SMT tool is properly used when treated as a guide in the ISM process since it is not intended to be leading. The results should also be interpreted as guidelines.

A participant uses the tool to make an inventory of aspects of their competencies, the enterprise and the environment (Figure A2). Based on the results of the inventory, the tool calculates strategies that fit with the input. The tool also asks a participant to score themselves for all the strategies. So the input scores in the spiderweb diagrams are self-reported scores by the entrepreneurs participating in the ISM training. The calculated scores in the strategy-spiderweb are calculated by the tool. The calculation is based on expert knowledge on relations between aspects and strategies. Both the calculated and filled in strategies will be displayed in one radar plot as shown below (Figure A3). Further, the inventory of the competencies, the enterprise (Figure A4), and the environment can be displayed as a radar plot. These results will support the interaction and discussion about the strategies the participants want to follow. Prefer-

ably, the participant with his/her colleagues, supported by the facilitator, discuss especially the background to the gap between the calculated and the input strategy. These results can be printed out or copied into other documents.

The Internet tool is available in different languages (English, Polish, Slovenian, Lithuanian and Dutch) and is secured by a user account.

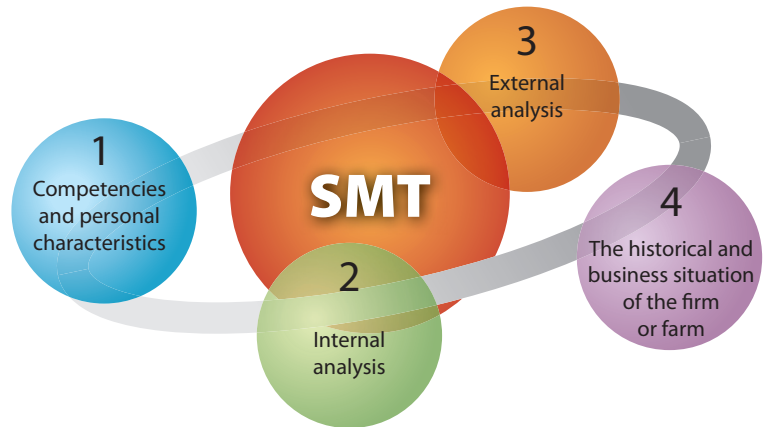


Figure A2: SMT projection





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Figure A1: Welcome screen

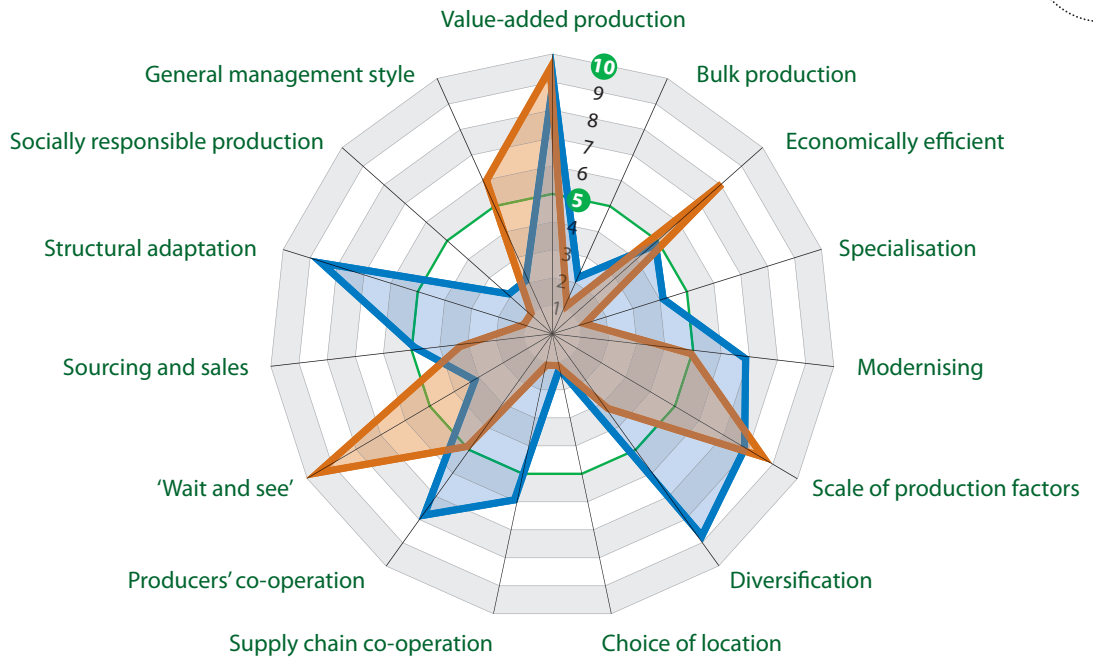
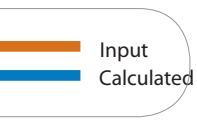


Figure A3: Strategy spider web

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Chapter 2 SMT Internal Business Factors

- Introduction
- 1) Productio
- 2) Labor int
- 3) Capital in
- 4) Knowledge intensity
- 5) Investm
- 6) Specializ
- 7) Modernit

Input Internal Business Factors

4) Knowledge intensity

The amount and diversity of notable knowledge that is needed for the production process and to keep the business up-to-date.

Answer

0 = little 1 2 3 4 5 6 7 8 9 10 = much

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Figure A4: Question page

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