Evaluation of sustainability performance of Transforum projects - Regionale Voedselketen/ Mijn Boer -

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June 2010

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giving shape to sustainability

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Contents

1. Introduction

1.1 Sustainability mapping approach

This document evaluates the sustainability performance of the Transforum project "Regionale Voedselketen/ Mijn Boer" according to the approach that is described by Blonk et al. (2010).

A full description of the approach that is used to evaluate the sustainability performance of Transforum projects can be found in the methodology report Blonk et al. (2010). A short introduction to the applied methodology is described in chapter 2.

Paragraph 1.2 gives a short description of the Transforum project "Regionale Voedselketen/ Mijn Boer" (hereafter called Mijn Boer). Chapter 3 describes which baseline scenario is used to determine the sustainability performance of Mijn Boer. Chapter 4 evaluates the total sustainability performance of Mijn Boer and in paragraphs 4.1 to 4.5 describes in detail all considerations of each sustainability indicator. Chapter 5 closes with a short impact analysis. This impact analysis shows in which manner the sustainability will change if certain sensitive aspects alter.

1.2 The project: Regionale Voedselketen/ Mijn Boer

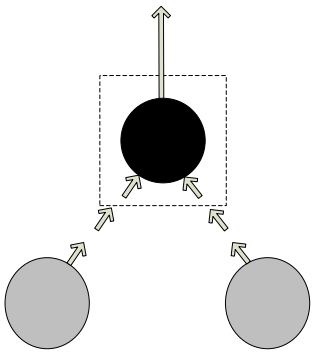
The main vision of Mijn Boer is to make good foods available again for everybody. Mijn Boer will establish a supply chain and will provide supermarkets and caterers like Marqt and La Place with regionally produced vegetables en fruits. The focus is on organically produced fruits and vegetables from the region, although it is not always possible to contract organic farmers. Mijn Boer strives to give the farmer a fair price so the farmer will be able to earn a living.

During this evaluation there were circumstances that led to lack of time in order to speak with the initiators of Mijn Boer about their initiative. This is why Mijn Boer has been evaluated without the latest information, vision and prospects of Mijn Boer.

The first sustainability ambitions
Mijn Boer strives for better production circumstances and a better income for all connected farmers. An important starting point is regionality and purity (what the initiators intend with purity has not been determined due to lack of communication). Not only does Mijn Boer intend to reduce food miles, but also give a fresh impulse to organic farming in the region. To create a better income for the farmer the producer will be encouraged to engage in product development or other value creating activities.

1.3 System definition: New product concepts developed with (exchangeable) suppliers

The initiator, Mijn Boer, performs the innovation himself by defining the innovative product concept, in this case a supply chain regarding a new formula. In order to do so, he will need multiple suppliers, the farmers, that will have to be able to meet his demands for the product(s) that he wants to make available. The initiator will make a selection of possible suppliers. The combination of the products is part of a bigger marketing concept. The link between initiator and supplier is not necessarily continuous, which means the suppliers are exchangeable, although the intention of Mijn Boer is to form an ongoing relationship with their suppliers.



System definition 2:
exchangable suppliers

2. Methodology

This chapter gives a brief overview of the methodology used to evaluate the sustainability performance of initiatives. More information about this methodology can be found in Blonk et al. (2010).

2.1 Evaluating initiatives on sustainable performance

Sustainability is a very broad concept dealing with ecological, social and economic consequences of our actions. Absolute sustainability doesn't exist or at least very hard to define. A more workable concept is sustainable development which implies that we are able to define more sustainable directions and thus be able to measure a more sustainable performance. Sustainable development includes nature and environmental aspects (planet), social aspects (people) and economic aspects (profit). It refers to a an ongoing process of finding balance between these aspects.

It is often not easy to evaluate the performance at a glance because the implications of an initiative do often not result in an improvement on all different sustainability aspects. Moreover there are many effects and actors involved on different locations and with different timeframes.

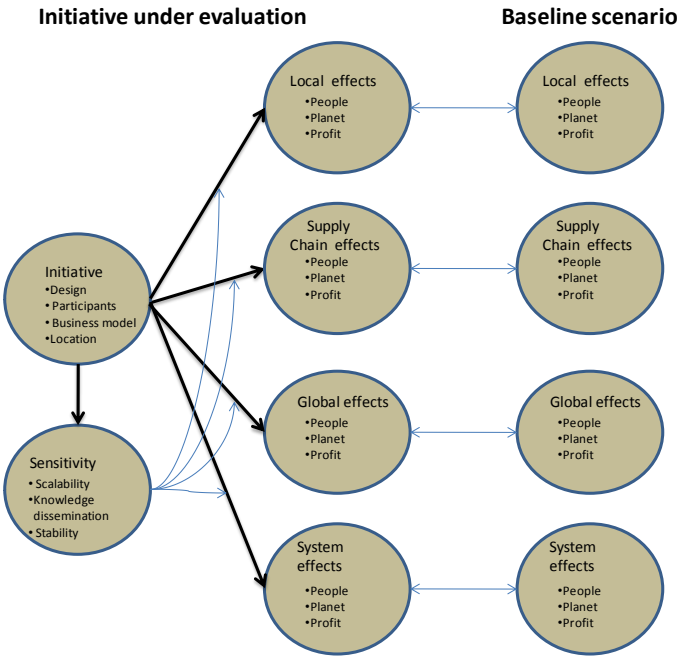


Figure 2.1. Outline of applied evaluation methodology

For evaluating the TransForum initiatives a specific evaluation methodology needed to be developed because existing methods do not cover the total spectrum of effects related to a new initiative. Each initiative generates people, planet and profit effects for different actors and different scales These effects are divided in this methodology in local effects at the initiative, local effects in the supply chain, global effects, and system effects. The ultimate impact of an initiative is also the result of the resilience of the deigns, the potential for upscaling and the knowledge spreading mechanisms involved. Scoring the sustainability performance is only possible in relation to a baseline scenario (figure 2.1).

Our method for measuring sustainable development performance of initiatives is based on a combination of three existing approaches of :

- Lifecycle assessment (Guinee, 2002)(ISO14040, 2006)(ISO 14044, 2006) (ILCD 2010) (SLCA guide 2009)
- Environmental Impact Assessment *(a.o. EU directive 85/337/EEC amended in 1997)*
- Supply chain and company Reporting of Sustainability (Global Reporting Initiative)(ISO 14064, 2006) (Poverty footprint of Oxfam Novib draft 2010)

LCA methodology gives the framework for making a sound evaluation of environmental and (partly) societal impacts over a production chain of products and gives directions how to evaluate the consequences of changes or improvements in lifecycles. EIA methodology is primarily involved with local effects and provides different working methods for evaluating a combination of qualitative and

quantitative information. Furthermore a sound definition of the baseline and alternative scenario's is one of the most important aspects of EIA. A third approach can be qualified as reporting sustainable performance of companies and their supply chain. The Global Reporting Initiative and the poverty footprint methodology of Oxfam Novib set the framework. All these basic methodologies are under continuous development which means that our sustainability mapping methodology is also

The evaluation is preferable carried out in a iterative and interactive way, using a sequence of five steps per round:

1. Define the initiative.
2. Define the baseline scenario.
3. Score local, supply chain, global and system effects.
4. Visualize the scores within the sustainability map *(for an example see figure 4.1)*.
5. Evaluate the results of the evaluation with the main stakeholders.

These steps are explained in the next paragraphs.

2.2 Defining the initiative

Before an initiative can be evaluated on sustainability a clear understanding of the initiative is needed. Which parties are involved? What are the boundaries of the initiative? What are the sustainability propositions (aims)? What's the location of the initiative? Some initiatives must be defined further to come to a business case that can be evaluated. This can be the case when an initiative is still in a preliminary stage of design.

2.3 Defining the baseline scenario

To evaluate the sustainability of an initiative it is necessary to define a baseline scenario. The baseline scenario differs for each initiative and is based on the business as usual for the initiative and the participants. Leading question is what would have been the situation, in a couple of years, if the initiative does not take place?

There are several types of developments relevant for defining the baseline scenario:

- What would the entrepreneurs do if the initiative does not take place?
- What would happen at the location if the initiative does not take place?
- What happens to other locations because of the initiative?
- How would the (environmental) performance of the product autonomous develop if the initiative does not take place?

Which developments are important to include and to what extent depends on the initiative. Sometimes the local aspects are very important and sometimes it is a minor issue.

2.4 Definition of effect categories

This paragraph briefly describes the different sustainability aspects (3P's) with the corresponding sustainability indicators of local, supply chain, global and system effects. A description of all sustainability indicators, and how these indicators are scored, can be found in Blonk et al. (2010).

2.4.1 Local effects of the initiative

Local effects are divided into scales: The first scale is the initiative. The second scale is a regional scale, referring to the surroundings of the initiative. Sometimes a third scale is involved, for instance a national scale when specific themes are interrelated with national governance. Regional and national scales are

relative terms and depends on the type and extension of each specific initiative. These scales have to be defined for each individual initiative.

Initiative
A part of the effects of the initiative are located within the physical borders of the initiative. On the initiative scale there are people, planet and profit effects defined:

- People effects for employees, entrepreneurs and animals (e.g. work conditions and animal welfare).
- Planet effects at the initiative site (e.g. landscape, physical environmental quality and biodiversity)
- Profit effects of the initiative (e.g. balance, investment costs and value creation).

Regional
An initiative also influences the direct surroundings and can have people, planet and profit effects on a regional scale. It can affect residents, companies or employees nearby the initiative. People effects are for example changes in opportunities for recreation and community involvement towards the initiative. Planet effects are related to physical or chemical emissions to the surroundings and changes in landscape and biodiversity. Profit effects on a regional scale are considered as a positive contribution to the community.

National (when appropriate)
For some of the local effects it is necessary to take the national perspective into account. On national scale planet effects are important because they have a strong national dimension based on regulations (e.g. regulations on eutrophication). People and profit effects are not evaluated on a national scale because of difficulties in making these effects operational unambiguously.

2.4.2 Local supply chain effects

Besides local effects at the site of the initiative an initiative can also have comparable local effects at the supplying companies. This can be initiated by selective sourcing, setting sustainability criteria for suppliers, developing sustainability improvements with suppliers, etc. The same thematic framework is used as a starting point for evaluating local effects in the supply chain.

In some cases local effects of downstream business (customers) need to be included in the evaluation, for instance in case of forwarded chain integrations.

2.4.3 Global effects of the product(s) of the initiative

A specific category of effects are those effects not depending on the location of operation and/or emissions. These effects include some specific planet effects and major environmental themes like global warming and land use.

The global effects which are scored are:

- Land use. This indicator is related to land conversion, loss of biodiversity, increasing greenhouse gas emissions, increasing competition between agro functions such as food, bio-based materials and biofuels.
- Climate change.
- Depletion of fossil resources, such as use of fossil fuels and phosphate rock.

These global effects are determined on product level so upstream and downstream processes are also included in the calculations. It must be noted that changes in quality or quantity of land do also have an impact on social or economic viability. The effects on local changes in land quality are evaluated under local people effects of the initiative or the supply chain.

2.4.4 System effects

An initiative ultimately generates products or services that may have an impact on other systems related to the usage of the product. For instance the usage of LED lamps reduces costs of energy of the consumer while at the same time it will reduce the environmental impact per unit light and per unit money.

A change in environmental impact (planet effect) per expended unit money (eco-efficiency) is relevant from a sustainable consumption perspective. A consumer can only use its money once and it is assumed that a lower impact per euro is better. A change in the amount of money expended per function is relevant for determining rebound effects related to the change in costs and behavioural adaptations. System effects of products related to health and improving knowledge of agricultural and/or sustainable production are also scored.

2.4.5 Potential of the initiative

The potential of an initiative refers to the scalability, stability and spreading of knowledge of an initiative. A first question to be answered is whether it is possible for an initiative to be copied at other locations and by other entrepreneurs or is it a one time operation or a specific niche market? The main question to be answered for evaluating "*Spreading of knowledge*" is whether the initiative aims to spread knowledge and/or includes mechanisms to do so?

2.4.6 Critical success factors

Finally, the evaluation gives information on specific parameters in the design or the surroundings of the initiative which are determinant for the realization and up scaling potential. These critical success factors give the actor(s) involved with the initiative essential information on risks and opportunities and can be used for strengthening the design or defining the conditions for (further) investments and making the initiative operational.

2.5 Visualizing the effect scores: "mapping of sustainability performance"

To make interpretation of the results easier we developed two visualizations.

1. A dashboard where the effects are categorized along the following qualification:
    - positive in relation to the baseline scenario
    - neutral in relation to the baseline scenario
    - negative in relation to the baseline scenario
    - not relevant for this initiative
    - relevant, but lack of data

2. A circle diagram which shows the relative amount of scoring positive, neutral, negative or relevant but lack of data.

3. Description of the baseline scenario

The baseline scenario used to evaluate the sustainability performance for Mijn Boer is based on the average environmental performance of three conventionally produced products sold by ordinary retail. Because of circumstances the products used for the baseline have been selected from the website of Mijn Boer, in stead of in dialogue with the initiators of Mijn Boer. The assumption has been made that products sold by Mijn Boer and put on their website are products that meat the vision of Mijn Boer.

The selected products are Cauliflower, Dried fruits and Apples, which are sold by Mijn Boer:

- Cauliflower – This product is produced in Noord-Holland and West-Friesland and is available from March to November. The winter cauliflower is produced on Texel because of the mild climate.
- Dried Fruits – This product is produced in the Ceres Vallei in South Africa and dried on wooden boards under the sun.
- Apples – This product is produced Noord Holland in Westwoud.

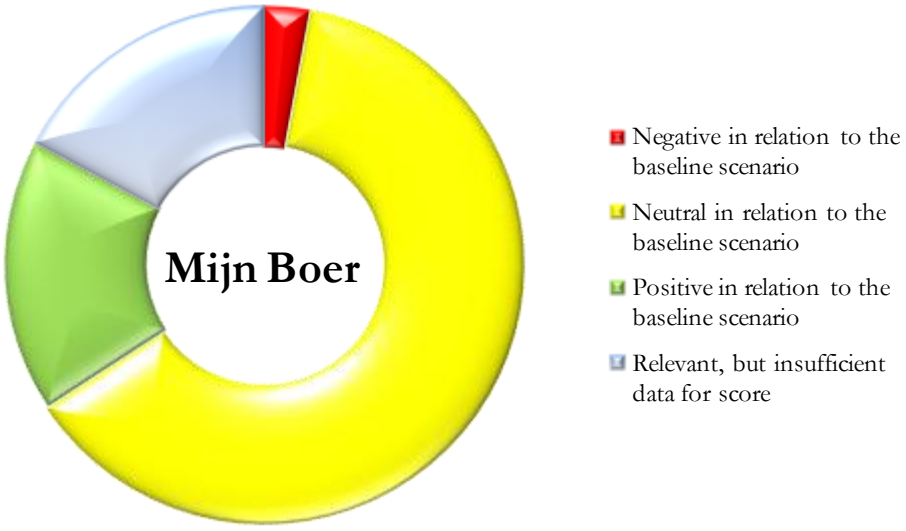
The baseline will be the same products, sold by ordinary retail.

4. Sustainability of Mijn Boer

In this chapter the sustainability of Mijn Boer is evaluated through a top-down design. In paragraph 4.1 an overall figure, the sustainability map, is shown which is assembled out of a more comprehensive table, the sustainability table, from paragraph 4.2. This sustainability table contains 50 scored sustainability indicators and the critical success factors. The arguing of the scored sustainability indicators is described in paragraphs 4.3 till 4.7. The critical success factors are described in paragraph 4.8.

4.1 Sustainability map

Figure 4.1 shows the sustainability map and figure 4.2 shows the sustainability profile of Mijn Boer compared to the baseline scenario as described in chapter 3. A comprehensive description of all scored sustainability indicators can be found in the following paragraph of this chapter.



Critical succes factors
- Availability of local products
- Product prices in store
- Growing pains: Stability of the supply chain

Figure 4.1. Sustainability map of Mijn Boer

Figure 4.1 is assembled out of the relevant sustainability indicators from table 4.1. A weighting of importance of each indicator has not been applied.

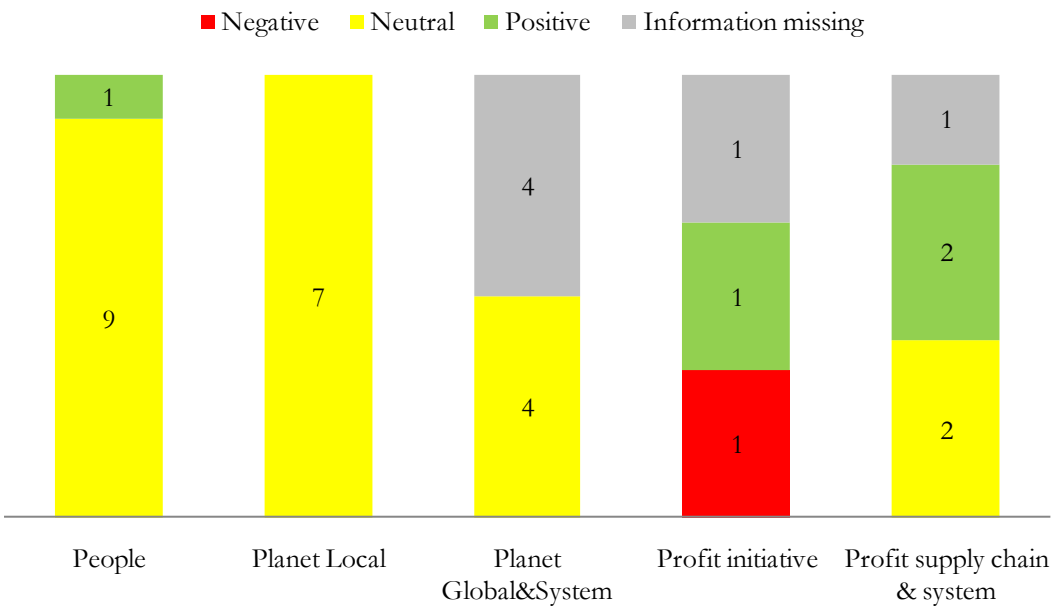


Figure 4.2. Sustainability profile of Mijn Boer

Figure 4.2 is assembled out of the relevant sustainability indicators from table 4.1. A weighting of importance of each indicator has not been applied.

A red score can refer to many different situations of which three are of special importance:

- Red (negative) for economic indicators of the initiative (column 4)
- Red for global planet indicators (column 3)
- Red for system effects (column 3)

If the green scored area in the donut is relatively low, one may wonder if the initiative must be qualified as a sustainability initiative. It depends, however, greatly on what the relative weight of the green area is. A well thought initiative is aware of these hot spots of sensitive sustainability issues. The relative contribution of the "grey area" (relevant, but not enough information) gives information about the extent of issues that could not be evaluated. In this area there may be possible threats as well as opportunities. (For further explanation see Blonk et al. 2010)

4.2 Sustainability table

Table 4.1 shows the sustainability map of Mijn Boer compared to the baseline scenario as described in chapter 3. A detailed explanation about this format and why these sustainability indicators were chosen can be found in the methodology report (Blonk et al., 2010). The arguing of the scored sustainability indicators is described in paragraphs 4.3 till 4.7. The critical success factors are described in paragraph 4.8.

Table 4.1Sustainability table of Mijn Boer.

1 .Local impacts of the production system

	Indicator	Initiative	Supply chain
People	1.01 Human rights		
	1.02 Labour conditions		
	1.03 Animal welfare & health		
	1.04 Human health (other than emissions)		
	1.05 Animal disease risks		
	1.06 Development		
	1.07 Involvement		
Planet	1.08 Environmental quality		
	1.09 Biodiversity		
	1.10 Landscape		
	1.11 Emissions affecting ecosystems and human health		
	1.12 Environmental quality		
	1.13 Biodiversity		
	1.14 Landscape		
Profit	1.15 Balance sheet		
	1.16 Investment		
	1.17 Value creation		

2. Global (non local) impacts of the product per functional unit

Planet	2.01 Land use
	2.02 Greenhouse gas effect
	2.03 Depletion: fossil energy use
	2.04 Depletion: phosphate rock

3. Functional (system) effects related to product consumption and use

People	3.01 Health
	3.02 Other welfare aspects (individual)
	3.03 Welfare of the community
Planet	3.04 Land use
	3.05 Greenhouse gas effect
	3.06 Depletion: fossil energy use
	3.07 Depletion: phosphate rock
Profit	3.08 Money budget
	3.09 Time budget
	3.10 Prosperity community

Legend

Positive in relation to the baseline scenario

Neutral in relation to the baseline scenario

Negative in relation to the baseline scenario

Not relevant to the initiative

Relevant, but **insufficient data** to score

4. Potential of initiative

Upscaling potential	Knowledge dissemination

5. Critical succes factors

1. Local production available
2. Product price in store

4.3 Local impacts of production chain - Initiative

This paragraph describes the local sustainability indicators 1.01 till 1.17 of the initiative which are scored in table 4.1. Sustainability indicators which are not relevant (blanc in table 4.1) are not addressed.

1.06 Development

When asked, the consumer appreciates the regional products because they are considered to be fresher than products that come from large distances and not because they are grown in the region where they live. Consumers value tasty food and relate freshness to a better taste. Mijn Boer is scored positively compared to the baseline because it fulfils the need for consumers to have tastier and fresher food (from the consumers point of view) (Grijseels F., 2010).

1.07 Involvement

Mijn Boer does not have a sustainability proposition for involvement of the community for instance by making consumers part of their region. Research on environmental psychology shows that knowledge of agricultural production does not simply lead to adjusted (more sustainable) consumption patterns (Hoogland, 2006). This means that making knowledge available to consumers does not contribute to consumers making other choices. Because Mijn Boer does not have a program in which a variety of (potential) consumers is being involved in agricultural production. Mijn Boer scores equally to the baseline.

1.15 Balance sheet

There is not enough information to comment on this subject.

1.16 Investment

The investment costs for Mijn Boer are scored negatively according to the baseline. There is a higher investment needed to set up the supply chain as required by Mijn Boer than it is to set up conventional retail. Knowledge is not readily available and research is needed.

1.17 Value creation

Mijn Boer is intended to be special compared to the baseline because the products are originated from the region and are intended to be of organic origin. Besides this local aspect, which has the potential to add value, a main point in selection criteria is taste. The breeds of produce are selected for the taste of the crop, which enhances value. Farmers are also encouraged to engage in product development, meaning they are encouraged to add value to their product by developing it into another product. For instance making cheese out of milk or making pea soup out of peas. This is why Mijn Boer is scored positively compared to the baseline, in which there is no focus on local product, taste or on farmers adding value to their product.

4.4 Local impacts of production chain - Supply chain

1.02 Labour conditions

An extra health risk can for instance be working with chemical plant protection products. Since organic farming does not include the use of chemical plant protection, this health risk is not present in organic farming. On the other hand organic farmers usually have to remove weeds with bare hands in stead of mechanically or chemically. The suppliers of Mijn Boer are not necessarily organic farmers, so Mijn Boer is scored equally compared to the baseline.

1.04 Human health (other than emissions), 1.05 Animal disease risk, 1.06 Development and 1.07 Involvement

No differences compared to the baseline

1.08 Environmental quality

In organic farming we can assume that the soil is more vital compared to the conventional baseline. The carbon loss is lower in organic farming (table 4.2). Mijn Boer prefers their suppliers to produce organic but the evaluated products are not produced organically, so environmental quality is scored equally compared to the baseline.

Table 4.2: Greenhouse gas emission due to carbon loss in the Netherlands (Bos et al, 2007) [1].

	Carbon Loss (C-ha*year)
Conventional Dutch clay	450
Conventional Dutch sand	450
Organic Dutch clay	300
Organic Dutch sand	300
Grassland	0

1.09 Biodiversity

Mijn Boer is scored equally compared to the baseline.

Mijn Boer can introduce a policy for suppliers to apply crop rotation more frequently in order to stimulate biodiversity. Furthermore they can asking suppliers to apply meadow bird conservation and ditch management.

1.10 Landscape

Mijn Boer does not have a sustainability proposition in order to conserve and develop landscape. Because Mijn Boer does not have a policy for producers when it comes to landscape conservation and development Mijn Boer is scored equally to the baseline.

Landscape development is a subjective concept so it is complex to determine what Mijn Boer will be able to include in policy in order to stimulate landscape development. Research might have to be done to determine what inhabitants, scientists and landscapers appreciate agricultural landscape.

1.11 Emissions affecting ecosystems and health and 1.12 Environmental quality

No differences compared to the baseline

1.13 Biodiversity

Mijn Boer is scored equally compared to the baseline.

Mijn Boer can introduce a policy for suppliers to apply crop rotation more frequently in order to stimulate biodiversity. Furthermore they can asking suppliers to apply meadow bird conservation and ditch management.

[1] Bos et al. 2007 Bos, J.F.F.P., J.J. de Haan en W. Sukkel, 2007. Energieverbruik, broeikasgasemissies en koolstofopslag; de biologische en de gangbare landbouw vergeleken. PRI Wageningen UR. Rapport 140.

1.14 Landscape

Mijn Boer does not have a sustainability proposition in order to conserve and develop landscape. Because Mijn Boer does not have a policy for producers when it comes to landscape conservation and development Mijn Boer is scored equally to the baseline.

Landscape development is a subjective concept so it is complex to determine what Mijn Boer will be able to include in policy in order to stimulate landscape development. Research might have to be done to determine what inhabitants, scientists and landscapers appreciate agricultural landscape.

1.15 Balance sheet

Mijn Boer strives to give suppliers/ farmers a fair price and because organic products have a higher return the balance of the supplier will turn out positively.

1.16 Investment

Investment costs for suppliers of Mijn Boer will not be any different from investment costs of suppliers of regular supermarkets.

1.17 Value creation

Products sold by Mijn Boer have an enhanced value because they were produced in the region, have a better taste and are fresh due to short transport distances, which is why suppliers of Mijn Boer are scored positively compared to the baseline.

4.5 Global Effects

This paragraph describes the global sustainability indicators 2.01 till 2.04 which are scored in table 4.1.
The global environmental themes (greenhouse gasses, land use and fossil energy) are calculated from feed production until retail.

The cauliflower, dried fruits and apples from Mijn Boer are produced in the same regions as these products would have been produced in for ordinary retail. There is also no difference in type of products, since these products have not been produced organically. The only difference that can be expected is a difference in transport.

Mijn Boer might save energy and emission of greenhouse gasses by only selling products that are in season, so these products do not have to be shipped from abroad. This assumption can however not be made because there is no knowledge on consumers making the choice not to buy these products if Mijn Boer does not sell them. They might just go to another store to buy these products out of season.

2.01 Land use

Land use is not expected to be different from the baseline.

2.02 Greenhouse gas effect

Mijn Boer is scored equally to the baseline. Mijn Boer uses hubs in which local farmers can store the product. Mijn Boer will collect the products from the hubs and transport them to the clients. Ordinary retail will transport to a packing station and a distribution centre before transporting to the supermarket. The assumption has been made that transport by Mijn Boer will be done with delivery vans. In regular retail transport will be done with trucks.

Luske (2009) found that transport with delivery vans from the farmer to a packing station and subsequently to retail/ consumer was not necessarily more efficient than transport with trucks, even though transport for ordinary retail did cover more kilometres. A big factor in this was the load factor of the delivery vans (figure 4.3).

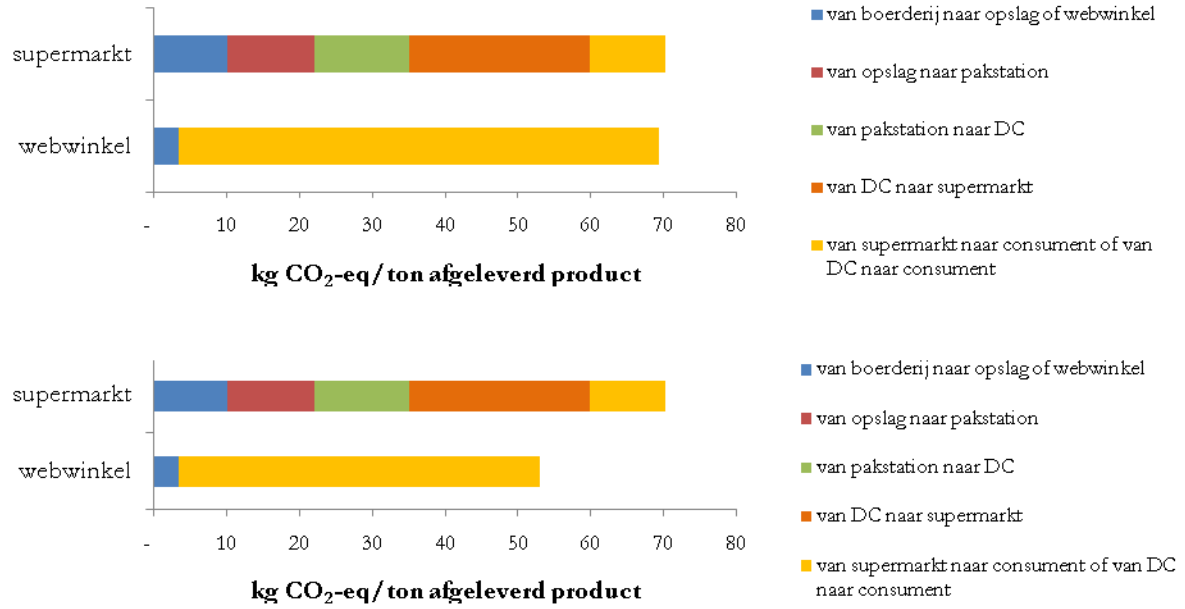


Figure 4.3: Emission of greenhouse gasses per ton of delivered product for the supermarket chain and the web store chain with an averge load factor of 0,9 ton / trip (above) en 1,2 ton/ trip (below).

2.03 Depletion: fossil energy use

Mijn Boer is scored equal to the baseline (see 2.02)

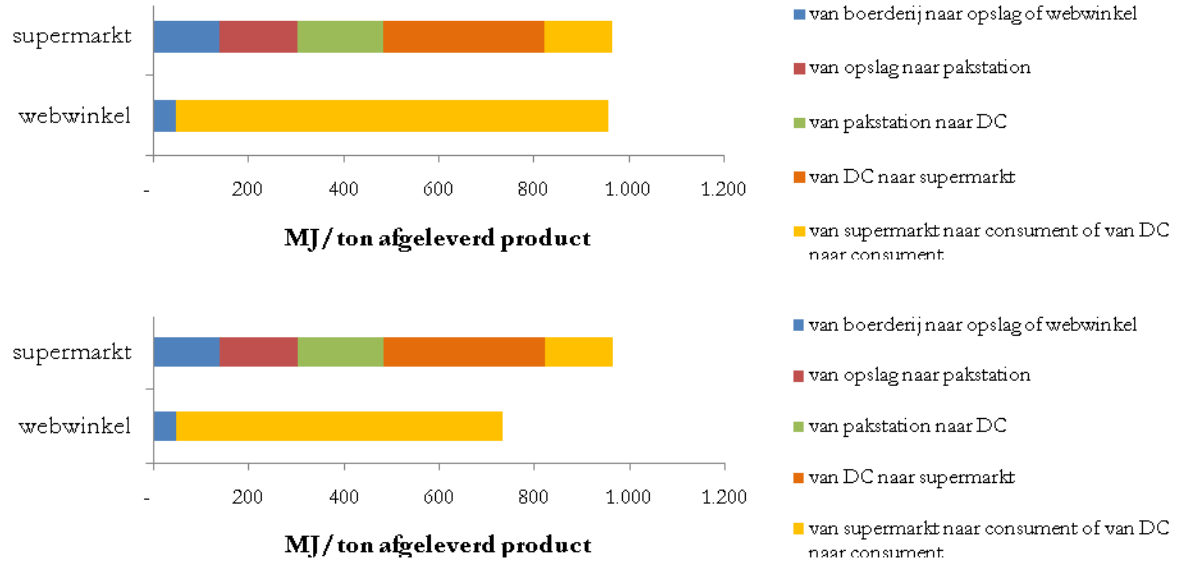


Figure 4.4: Energy use per ton of delivered product for the supermarket chain and the web store chain with an average load factor of 0,9 ton / trip (above) en 1,2 ton/ trip (below).

Dried fruits are originated from South Africa in ordinary retail but in regular retail often come from Iran or California. They will be transported by ship. There is not a big difference between the nautical miles from South Africa (6150), Iran (6100) or California (7750).

2.04 Depletion: phosphate rock
Depletion of phosphate rock is not expected to be different from the baseline.

4.6 System effects

This paragraph describes the sustainability indicators (the system effects) 3.04 till 3.07 which are scored in table 4.1. Sustainability indicators which are not relevant (blanc in table 4.1)are not addressed.

3.01 Health
Mijn Boer does not aim to focus on health effects of food choices. For this reason Mijn Boer is scored equally compared to the baseline.

3.02 Other welfare aspects (individual) and 3.03 Welfare community
No differences compared to the baseline

3.04 Land use, 3.05 Greenhouse gas effect, 3.06 Depletion: fossil energy use, 3.07 Depletion: phosphate rock and 3.08 Money budget
There is not enough information to comment on these subjects.

3.09 Time budget
Mijn Boer products will be sold in the city. Time wise, consumers are not expected to spend more time doing their groceries at stores that sell Mijn Boer products than they will be at the baseline supermarket.

4.7 Potential

Upscaling potential
It will be possible to upscale the concept of Mijn Boer to other regions, although different fruits, vegetables and other products will be available in different regions. Marketing local produce will differ per region depending on the availability of produts and the selection criteria used.

Knowledge dissemination
There is an active policy in the dissemination of knowledge or in making the gained experiences available for other entrepreneurs. This involves research being done by the WUR, LEI and Erasmus University.

4.8 Critical success factors

Local production available
Primary stability will depend on the scale of Mijn Boer and the availability of local products. In order to achieve a healthy turnover with a broad enough assortment, the step outside of the region will have to be taken. The question is to which extent this will be acceptable and what other selection criteria will be taken into account.

Product price in store

Stability will also depend on the product prices in store that will be needed to achieve a healthy turnover and a fair price for suppliers. The price in store will have to be managed. While giving suppliers a fair price, the consumer price can get so high that consumers will hesitate to buy the products.

Mijn Boer might experience the growing pains of setting up a company which is dependant on small scale suppliers. It might take some time before stable relationships with suppliers establish, which might effect stability of delivery to customers.

5. Discussion and conclusions

To interpret the conclusions on the sustainability performance of Mijn Boer in this study the following has to be taken into account. This study evaluates the sustainability performance of the initiative Mijn Boer divided in four effects (local, global, supply chain, system), based on the methodology that is described in Blonk et al. (2010). Within this differentiation different sustainability indicators, which are ordered in the three categories people planet and profit, are evaluated. The total evaluation of the sustainability performance depends on each sustainability indicator and the importance (relative weight) of each indicator. A weighting of importance of each indicator has not been applied in this study.

The results of this study are based on the intentions and plans of Mijn Boer. If the implementation deviates from those intentions, this could have consequences for the sustainability performance evaluation. This can have either positive or negative effects on the final evaluation. If such deviations from the original plan and intentions occur, this needs to be evaluated before conclusions can be drawn about sustainability.

Strengths

From the sustainability evaluation the conclusions can be drawn that the sustainability indicators in which Mijn Boer can distinguish itself in a positive way, in comparison to baseline farmers, are:

- A positive effect on the balance of the supplying farmers.
- Value creation of agricultural products by incorporating them from the region.

The potential of Mijn Boer is seen as positive because of the scalability of the project and the fact that knowledge and experiences are spread.

Weaknesses

It can be concluded from the sustainability evaluation that the weak sustainability indicators of Mijn Boer are:

- The investment that will have to be made in order to set up retail as defined by Mijn Boer, compared to regular retail.

Opportunities

Some opportunities for Mijn Boer to develop more sustainability are:

- Stimulating suppliers to engage in meadow bird conservation, more frequent crop rotation and other nature conservation aspects.
- Enrolling school programs, for instance for students of primary schools to visit and learn about farming and agriculture.

Threats

There are three main threats for Mijn Boer:

- The availability of agricultural products in the region.
  If Mijn Boer only offers products when they are in season, the positive effect might of this might be reduced by consumers off season because they might just by these products of season in another supermarket. The client of Mijn Boer, the supermarket, might also contract other suppliers than Mijn Boer, in order to be able to sell products off season. Mijn Boer might have to look for options to sell products off season, while maintaining their vision of what retail should be like.
- The balance between giving a fair price to suppliers and charging consumers a higher price.
- Growing pains of setting up a company which is dependant on small scale suppliers

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