

# Textbook for nature entrepreneurship

Product of the WURKS project Nature Entrepreneurship and Tourism within Green Education (NatureToGo)



Written by: Martijn Felder and Arjaan Pellis, Cultural Geography Group, Wageningen University, 2013. Made possible by: Judith Jobse and Daan van der Linde, Van Hall Larenstein; Karin van Beckhoven, Jenny Schrauwen-van der Geer and Adrienne Deelder, Inholland Delft; Harold Lammertink, Helicon Opleidingen; René van der Duim, Cultural Geography Group, Wageningen University. Editing and translation: Jean Tee, JT Redactie. Financial support: WURKS, Wageningen University.

## Preface

In recent years, government funding for nature conservation and development has declined. As a result, links between nature conservation and entrepreneurship are increasingly being made in both practice and education. This comes with many questions and challenges. In Green Secondary Vocational Education and Higher Professional Education, educators want to incorporate social, economic and ecological factors in their courses in nature entrepreneurship. There is also a demand for tools for developing new business models for nature conservation and development.

This textbook is meant to meet those demands, together with the other educational materials including a documentary and a number of PowerPoint presentations. The textbook is designed to support a module in nature entrepreneurship. Students can also use it when writing their thesis or for individual research. This collection of educational material is available at: <http://www.groenkennisnet.nl/dossiers/Pages/Nature-To-Go-En.aspx>.

Several parties were involved in the development of these educational materials. We would especially like to thank Judith Jobse, Daan van der Linde, Karin van Beckhoven, Jenny Schrauwen-van der Geer, Adrienne Deelder and Harold Lammertink for their active part in their development. We would also like to thank students of various pilot meetings (amongst others the Erasmus Intensive Programme European Wilderness Entrepreneurship) for pioneering in working with the programme drafts. Ilja Kok and Willem Timmers of *I Camera You productions*, thank you for your wonderful contribution to the production and development of the educational documentary *Rewilding Europe: the case of Western-Iberia*. Jean Tee, thank you for your time and efforts in translating this document into English. Last but not least, we would like to thank Meike Sauter and WURKS: without your (financial) involvement, this project would never have been realised.

## Definitions

**Actor:** person or (in)formal group of persons influencing an environment

**Factor:** material or immaterial process/element influencing an environment

**Nature entrepreneurship:** entrepreneurship contributing to the conservation/development of nature

**Prototype:** a first (undeveloped) idea, for example for a business model

**Business model:** the way in which money (or other earnings) is earned

## Illustrations

**Illustration 1:** A small-scaled landscape in Wageningen, the Netherlands

**Illustration 2:** European hamster

**Illustration 3:** PESTEL-analysis of the Western-Iberian landscape

**Illustration 4:** Actor-map of parties involved in the sinking of 'Le Serpent'

**Illustration 5:** Artificial reef in the Grevelingen

**Illustration 6:** The CANVAS-model in four sections

**Illustration 7:** Completed CANVAS posters

**Illustration 8:** Students look at a vision for the future of Western-Iberia

**Illustration 9:** Force field analysis translated into a CANVAS-model

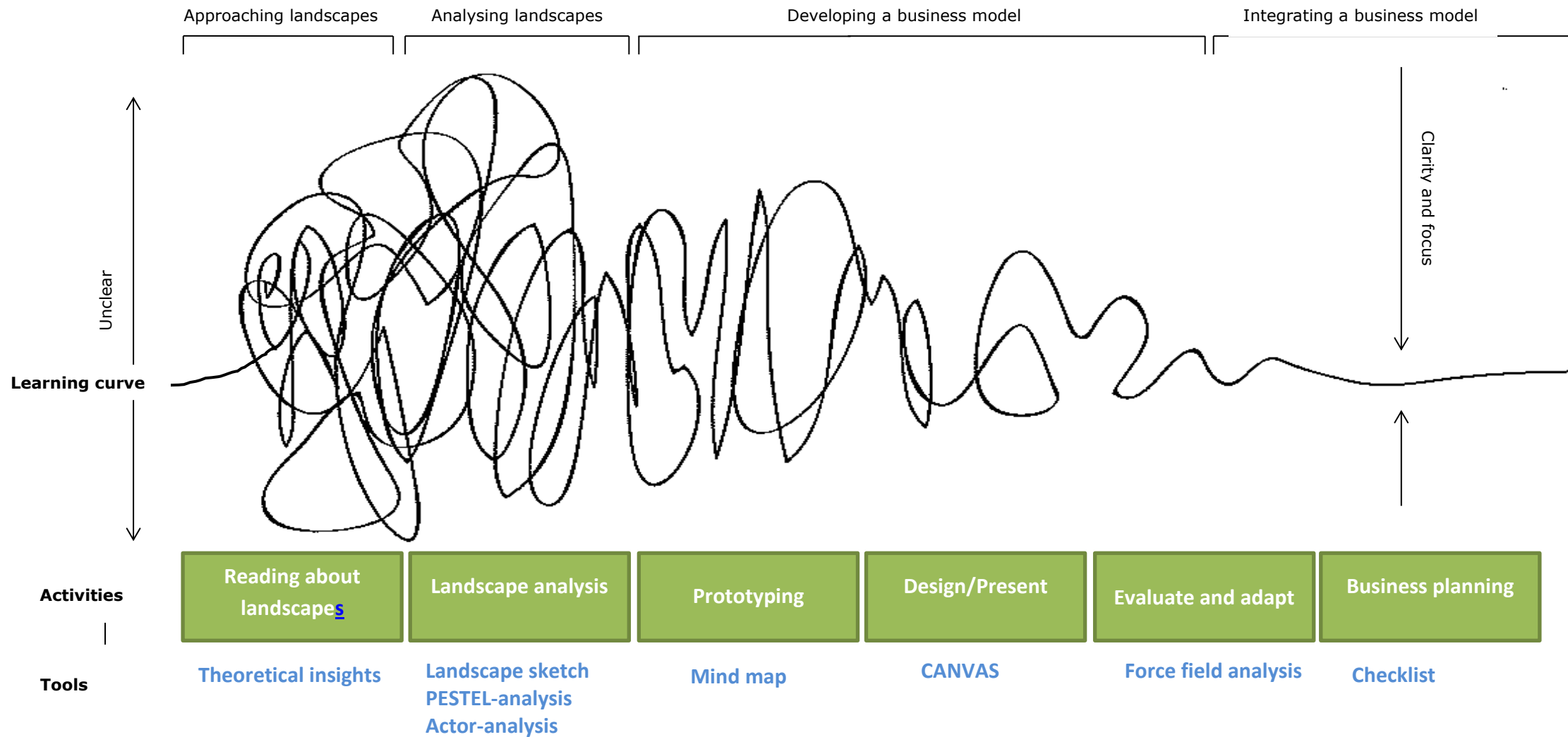
**Illustration 10:** Second force field analysis translated into a CANVAS-model

**Illustration 11:** Force field analysis of factors

## Tables

**Table 1:** Examples of questions and viewpoints for the PESTEL-analysis

# Study line



Based on the model "Design Attitude" by Damien Newman. Taken from Osterwalder and Pigneur (2009) Business Model Generation. Self Published.

## Contents

1. Business models for nature conservation and nature development	page 6
1.1 The reason for this textbook	page 6
1.2 Aim of this textbook	page 7
1.3 Textbook set-up	page 7
2. You can't do business on your own	page 9
2.1 Landscape is more than a physical and spatial environment	page 9
2.2 Assigning meaning to landscapes	page 10
2.3 Landscape and politics	page 11
2.4 The value of landscapes	page 12
2.5 Nature entrepreneurship	page 13
3. Research and understanding: environmental analysis	page 14
3.1 Methods for making environmental analyses	page 14
3.2 Making a sketch of the landscape	page 15
3.3 Analysis of landscape factors: the PESTEL-technique	page 16
3.4 Technique for actor-analysis	page 21
3.5 The environmental analysis	page 25
4. Developing a business model for nature	page 27
4.1 The building blocks of a business model	page 29
4.2 CANVAS is more than a design tool	page 35
5. Integrating your business model into the local context	page 37
5.1 The business model in the landscape	page 37
5.2 A force field analysis of actors	page 38
5.3 A force field analysis of factors	page 40
6. Reflection	page 43

Sources

Appendices

# 1. Business models for nature conservation and development

*People often feel developing a new business model is quite difficult. Some see “business as usual” as their safest bet. Others assume that you need a lot of knowledge and many (market) data to develop new business models (Osterwalder & Pigneur, 2009). In this textbook we think everybody is able to come up with a successful and innovative business model. By gaining insight in situations as they are, but also by not simply letting these circumstances dictate the whole process. In stead, we dare you to look for alternative, daring combinations between nature and markets that might seem impossible at first.*

## 1.1 The reason for this textbook

For a long time, nature conservation in many countries depended on public spending. Governments compensated landowners for protecting, maintaining and developing nature on their land. Over the last couple of years, different governments have decreased these funds. See, for example, these articles [lowit, 2010](#); [van Oosten 2011](#). Moreover, government funding often turns out to be insufficient for landowners to manage existing nature areas and developing new ones. The (inter)national governments’ role in nature conservation is not only a financial one. Governments also make laws and policies to protect biodiversity and vulnerable plant- and animal species. Think of the Natura 2000 guidelines, issued by the European Union and co-developed by national governments ([Habitats Directive, European Commission](#)).

Not everyone is of the opinion that government funding and legislation have led to the most efficient and effective organisation of nature conservation possible. Government funding also hasn’t stimulated many innovations in nature management. Furthermore, (inter)national agreements stand in the way of local initiatives, and in some areas have led to problems ([Stoll-Kleemann, 2001](#)). Two decades ago, [Anderson and Leal](#) (1998) already concluded local interest groups and entrepreneurs should play a role in nature conservation and development. Non-Governmental Organisations (NGOs), nature entrepreneurs and private landowners should get a greater say in the development, management and exploitation of nature in their direct environment. Nature conservation should thus regain its place in local society. For examples, see: ([Anderson and Leal, 1998: 12-17](#)).

Cutting public spending on nature conservation leads to the search for new strategies to keep preserving and developing nature. People don’t only look at the value of nature areas in terms of biodiversity and the appearance of vulnerable plant- and animal species. They’re also interested in the experiential qualities of nature. For instance, nature development is used as a ‘means’ to revalue abandoned and barren lands; to raise the prices for houses and land; to help people live more healthy lives; or to stimulate tourism and recreation. For example, see [Rewilding Europe, 2011](#).

More attention is also being paid to nature’s so-called ecosystem services, such as the protection from the sea that dunes offer, CO<sub>2</sub> retention in woods, or the cleaning of our drinking water by sands. Nature is then viewed as a basis for social and economic developments. “The Economics of Ecosystems and Biodiversity” ([TEEB, Ecosystems Services, 2013](#)) lists these ecosystem services.

To reinforce this approach to nature and its value, a number of scientists and organisations put a price on it ([Howarth and Farber, 2000](#); [Office of National Statistics, 2012](#)). Others question this

economic “revaluation” of nature. When and to whom is nature functional and marketable? And what happens to types of nature people find less functional, or of lesser economic value? For a short analysis of this discussion, see: [Connif, 2012](#).

So there is a difference of opinion on this “economic” approach to nature. However, this approach *does* open up possibilities (and responsibilities) for nature managers and entrepreneurs. Moreover, nature organisations, businesses and local residents are expected to play a more “enterprising” role in (local) nature management (see: [Lambooy and Levashova, 2011](#)). We are in need of business models for nature management incorporating the interests of different groups. This can lead to the development of new business models and/or the adjustment of existing value- and production chains in the landscape. Nature then becomes “business for all”. There will be many challenges along the way.

## 1.2 Aim of this textbook

This textbook has been developed with you, the future nature entrepreneurs, managers and policymakers, in mind. You can use the textbook to devise business models for nature conservation and development. You need *innovative market-nature combinations* and *alternative collaborations* to do so. To return nature management and development to their place in local society, local interest groups such as entrepreneurs and residents should be involved in these business models. It is important to not just use the viewpoint of *one* organisation/entrepreneur, but rather those of a network of interested parties, such as entrepreneurs, organisations, consumers, governments and suppliers.

## 1.3 Textbook set-up

To develop business models in a local context, you have to consider many aspects. As a nature entrepreneur, you really have to be an all-rounder. In this textbook, therefore, we will not limit ourselves to supplying tools for developing business models. We will also describe various insights regarding nature and landscape; and methods for research, analysis and evaluation. Together, these insights and methods offer the knowledge and skills you can use as a nature entrepreneur to work towards this aim. We do want to add that, as a nature entrepreneur, you need a certain attitude as well. Think of pro-activeness, leadership and team spirit, but also creativity and an enterprising outlook. Although these characteristics are important, we won’t specifically address them in this textbook.

The textbook consists of several phases. Each phase offers theoretical knowledge (text) and real-life examples (green box and hyperlinks in the text). Each phase ends with a number of key points (blue box). The phases *researching landscapes* and *developing a business model* feature integral assignments (red box). You can use these to practice with the tools.

These are the phases:

- Approaching landscapes: you’re introduced to different processes that play a part in the creation of nature and landscapes, their uses and the way we assign meaning to them. We offer several theoretical insights to this end. You can use these insights to approach the landscape you’re focussing on in a social-economic and ecological way.

- Analysing landscapes: you're introduced to different research methods and analysis techniques to gain more knowledge about landscapes. You learn to see the landscape in a different way. This is also called an environmental analysis.
- Developing a business model: you're offered a tool for the development of business models. You will also read about original market-nature combinations and alternative collaborations in nature conservation and development. You can use these to come up with creative ideas of your own.
- Integrating a business model into the local context: you learn how to gain insight into the way different partners and interest groups view the business model. You also learn how environmental factors influence the business model. These insights are important when you want to apply the model to a landscape. They can also be used to make adjustments to your business model. You are therefore expected to use these insights for your next steps. This is the first step to actually integrating your business model into the landscape.

On the next page, we will start with the first phase: *observing the landscape*. But first, we would like to express the following: the tools in this textbook will not create new business models for nature conservation and development. *Your* creativity and knowledge will eventually lead to innovative combinations between markets and nature. This textbook was developed to support you in this process. We would like to wish you all the best in developing original business models for nature conservation and development.



## 2. You can't do business on your own: approaching landscapes

People are connected to landscapes. They use physical and spatial elements from it and assign meaning to it. They do this together and alongside each other. As a nature entrepreneur, you have to take this into account. Especially when you start developing business models for nature conservation and development in a particular landscape. We will therefore start this textbook on nature entrepreneurship with a description of this relationship between people and landscapes. We'll use a regional beer as an example. The key points of this chapter are listed in the blue box on page 13.

**Aim:** at the end of this chapter you will understand that you, as a nature entrepreneur, are not the only one making use of a landscape. Therefore, it is important to keep different meanings and uses of that landscape in mind. Also when you're developing new business models for nature.

### 2.1 Landscape is more than a physical and spatial environment

As a nature entrepreneur, you make use of certain elements of a landscape. You make a product out of these elements by doing something with them. Imagine you want to introduce a regional beer. You will need water, barley malt and yeast. So in order to produce beer, you depend on various natural elements and processes taking place in the landscape, such as the water cycle, the growing of the barley, and even the yeasting process of sugars from that grain. To produce sufficient barley to make the beer, farmers will have to grow it on their fields. The farmers and brewers all need sufficient water. The brewery also needs things like special tanks.

You, the entrepreneur, are not the only one making use of natural elements and processes from and in the landscape. People using a landscape often influence it. Think of levelling fields,

ploughing soils, drilling for groundwater and diverting streams.

So on the one hand people influence the landscape and on the other hand they depend on its elements and processes. Whichever way, people cannot exist separately from the natural elements and processes that surround them. This is the physical space in which you will start working as a nature entrepreneur.



Illustration 1: A small-scaled landscape in Wageningen, the Netherlands

## 2.2 Assigning meaning to landscapes

For a regional beer, water, barley and yeast are not enough. A regional beer has a meaning and comes from a landscape, which also has a meaning. We as people assign these meanings. We do this based on:

1. The elements we know from and about the landscape (*for example illustration 1, a small-scale undulating landscape of fields, grasses and woods*);
2. The elements we bring together for a product (*for example: barley + water + yeast = beer*);
3. The elements we appreciate in that landscape (*for example: this is a region with characteristic, small-scale hills and thus a beautiful area for the production of a regional beer*).

Together, these combinations of elements form different meanings of landscape, assigned by people and thus “cultural”. Different, because there is a variety of combinations of landscape elements people know, relate to and appreciate. Besides the combinations we described above, some people might pay much more attention to old lanes, farms and churches in the landscape. Therefore, it is best to speak of *meanings* of landscape. People share these meanings of landscape in books and newspapers, in clubs, at work, and for example with friends and villagers. In this way networks arise within which shared meanings of landscape evolve, are known and combined. Shared meanings of landscape are thus forever changing.

An example of this emergence, combining and sharing of meaning is the development of a regional beer in the landscape of Southern Limburg. This regional beer was named ‘Gulpener Korenwolf’ (‘the European hamster of Gulpen’, the name sounds better in Dutch...). For decades, innovation and expansion resulted in more effective and efficient sowing and harvesting. Within the network of the agrarian sector, the meaning of landscape thus related to production, innovation and efficiency. New ploughs ruined the hamsters’ burrows (illustration 2). Also, the diet of the European hamster became very limited due to the crop-selection. Several organisations started working together to protect the hamster ([see: korenwolfwereld.nl](http://korenwolfwereld.nl)). Studies were also being conducted to find out what the best living environment would be for this



particular hamster. It turned out to be varied and small-scale arable land. In this way, this type of landscape became special to nature conservationists. They looked for ways to spread the meaning of this small-scale arable land to a larger network. In short, this specific landscape had to become more meaningful to more people.

Illustration 2: European hamster and his burrow (photographer: Gerard Muskens)

Nature conservationists asked the Gulpener brewery to make a donation for the protection of the European hamster (see the article [“Eigenwijs bier”](#) (in Dutch)). This request inspired the brewery to make a beer from the grains the hamster likes to eat (see the advertisement [“Gulpener Korenwolf: om te hamsteren”](#) (in Dutch)). The new beer, the ‘Gulpener Korenwolf’, brewed from local ingredients, had to contribute to the protection of the European hamster in Southern Limburg. It was also meant to make local residents aware of the natural landscape they lived in. By linking the European hamster to a beer, more was achieved than merely getting money for its protection. The beer, the hamster and its biotope also got more attention. These days, the number of inhabited burrows has risen to 500-600 due to the efforts of various organisations.

## 2.3 Landscape and politics

But why is it important for meanings of landscape to gain support? How do these meanings become part of policies? In other words: how do these meanings influence the decision-making process concerning the use of landscapes? To answer these questions, we have to look at the way the assignment of meaning to landscapes gains support in networks of people. We then have to look at the position these (groups of) people have in relation to other (groups of) people. In other words: the influence these (groups of) people have. For reasons of simplicity, we call these “(groups of) people” “actors”. From a certain network-position, some actors might be able to influence policy more than other actors. For example because an actor consists of a large number of people, or because an actor has many connections in his/her network. A network may also be (formally) organised, making some actors more influential than others. Whichever way, the meanings some actors assign to a landscape can carry a lot of weight in the eventual decision-making about that landscape, thus giving it a political character.

The national government doesn’t automatically have the last word when it comes to decisions about landscapes. Increasingly more often, local actors play an important role in the decision-making regarding landscapes. The European Union draws up guidelines for nature policy as well, as you can see in the case of the Hedwigepolder (see green box).

In practice, the decision-making network often consists of local, national and international actors. These actors can all have their own opinions about landscapes. In the case of the Hedwigepolder, the position of Flanders and the EU seems decisive. In spite of the local opposition, nature will be compensated. This at the cost of the value local residents assign to their polder-landscape.

### **'Hedwigepolder inundated after all'**

The Hedwigepolder in the Dutch province of Zeeland will be inundated. The political parties VVD and PvdA have come to an agreement, according to sources in The Hague.

The Hedwigepolder has been the subject of discussion for years. With the Belgian county of Flanders, it was agreed that the River Schelde will be deepened to make the Antwerp’ harbour more accessible to large vessels. Natural areas will be lost because of this. To replace these, the Hedwigepolder would be inundated.

In Zeeland, this inundation was protested: the first cabinet of prime minister Rutte then blew it off, infuriating Flanders and the European Union. They thought the Netherlands had to keep its promise. They threatened to file huge claims if the polder wasn’t inundated.

This fight seems to have been resolved now. It isn’t clear yet when the polder will be inundated.

***Article of the NOS on Sunday 28 October 2012.***

When you start working in a certain landscape, you will have to deal with the decision-making networks in that landscape. Hence, it is important to have insight into the organisation of these networks. And to know the meanings and uses of the landscape of the different actors in these networks. For another example, see: [Barriers to nature conservation in Germany](#) (Stoll-Kleemann, 2001).

## 2.4 The value of landscapes

Our economy is very important to the way we use landscapes and assign meanings to them. This partly depends on things that are *appropriated, controlled, processed, developed, demanded* and *marketed* in our economy. Economic developments thus play an important part in the decision-making concerning landscapes. Remember for instance the expansion in Southern Limburg. The landscape was all about efficient and effective production of a few crops. However, when more ‘Gulpener Korenwolf’ beers are sold, more support can be gained for the preservation of small-scale arable farming. And more money might well go to preserving this landscape. When using and evaluating landscapes, it is therefore important to know:

- Which natural, material and human elements are considered to be valuable (have meaning);
- Who regard these elements to be valuable;
- Who have access to these elements;
- Who can make a certain product from these elements;
- What the value of this product is compared to a competing product;
- How all of this is regulated;
- What the network of all actors involved in this process (from producer and legislative institutions to the customer) looks like;
- How the value of the landscape is communicated.

This is a whole list of things to consider. A network of values, appropriation, processing, regulating and marketing is thus part of the environment in which a nature entrepreneur operates.

### **Landscape according to Bruno Latour**

Among other things, landscape is characterised by its natural elements. It is also characterised by the natural processes that take place inside it. According to Bruno Latour, the way we *know, use, influence, plan* and *value* and *withstand* the landscape, is “defined” by combinations of *natural, material* and *human* elements evolving in networks of “people” and the way these networks are politically organised. Every landscape in which and with which business is done, or which is assigned meaning (we wouldn’t call it a landscape otherwise) can thus be best described as a social-natural landscape.

## 2.5 Nature entrepreneurship

As a nature entrepreneur you make use of a landscape and you're not alone in this. You do this alongside or together with other people (and production chains). For your product you might need knowledge and/or resources from other entrepreneurs. In that case, you can enter into collaborations, like those between farmers and breweries. You might also benefit from the promotion of a certain meaning of the landscape you do business in. You can then decide to work with other interested parties sharing this meaning. You may also need permission from for instance landowners. Or you will have to follow certain rules. In any case, nature entrepreneurship is always done within networks of people. People that all assign (different) meaning(s) to, make use of and make decisions about the landscape. Your position within these networks partly determines the way you can make use of the landscape. A business does not stand apart from other factors and actors in the landscape.

### Key points of this chapter:

1. Landscape is more than a physical and spatial environment.
2. Landscape is also defined by cultural and political assignment of meaning.
3. This assignment of meaning is co-dependent on landscape elements, which are used, valued, appropriated and marketed.
4. These insights have consequences for the way an entrepreneur looks at the landscape and other interest groups in that landscape.



### 3. Research and understanding: environmental analysis

In the last chapter, we saw that landscapes are formed by social, economic and ecological factors. Different actors are active in a landscape, and assign value and meaning to it. As a nature entrepreneur, you are directly dependent on these factors and actors. The goal of an environmental analysis thus is to identify these factors and actors. In this phase, we offer various techniques for analysis. But first we will discuss methods for gathering information about factors and actors in the landscape.

**Aim:** By the end of this chapter, you, as a nature entrepreneur, will be able to make an environmental analysis of a landscape for which you are developing a business model.

#### 3.1 Methods for making environmental analyses

To find information about factors and actors, you can use different methods. Which method you choose depends on the aim of your study. If the aim is to explore a certain theme, qualitative research methods are often chosen. When developing a business model for nature, we have to explore the local situation. To this end, we highlight three qualitative methods you can use for this purpose. For an interesting description of qualitative research methods, see for instance [qualitative research methodology](#) (Quinn-Patton, 2002, used in a field work toolkit for Doctors Without Borders).

- **Observation**

As a researcher, you gather information by paying attention to *what there is* and *what happens* in the landscape. Think of natural and cultural elements, human activity and natural phenomena. Researchers often choose observation as their research method when they want to see what is present in a certain landscape and what is happening. You can make notes, photographs and record information in other ways. In a research report, the observations are usually described first (time, place, how many people, activities, surroundings, et cetera). Then they are interpreted (what exactly happened and what does that mean?).

- **Interviews**

As a researcher, you gather information from the stories of other people. You do this by asking questions. You can make a list of questions beforehand. You can also enter into conversations with a more open approach. The aim of a structured interview is to see how people answer a number of pre-formulated questions. The aim of an open interview is to find out how people experience, think and act on a more explorative basis and without bracketing these through certain questions beforehand. With a structured interview, you risk working from your own perspective too much. With an open interview, you might forget certain subjects interesting to your research. Therefore, interviewers often make a list of subjects they want to cover in the interview. This is why these are called “semi-structured interviews”. You can use the same order as with the observations in a research report based on interviews. First you can describe the results of the interviews. Then you can interpret and connect these, and place them in the context of the study.

### **The influence of a researcher**

Increasingly more often, people come up with ideas to use barren lands for nature development. There are various organisations engaged in 'rewilding' the landscape. How landscapes should be 'rewilded', though, is subject of discussions. Not only between the various nature organisations, but also between these organisations and local parties interested. Therefore, it's important to know how different parties view the 'rewilding' of the landscape. And what they think it should entail. The opinions on 'rewilding' are thus often studied. During one of these studies, local farmers didn't really understand what the researcher meant by 'rewilding'. The researcher then illustrated his story with an example about the reintroduction of wolves. In an environment with many shepherders this meant an immediate dislike of any form of 'rewilding'. Without him knowing, the researcher had not only defined what the 'rewilding' should entail. He had also created a possible gap between local farmers and nature organisations developing plans for rewilding.

### **Desk study**

Aside from observations and interviews, you can get a lot of information by studying policy documents, films, articles, news items and maps. Researchers often do this before they start interviewing people, so they already know some things about the subject and/or the landscape and/or the person they're about to interview. This enables them to ask more specific questions.

There are many possible variations on these three methods. You should always ask yourself what the consequences are of using a certain research method. For this could influence the people you observe/interview in your study. You yourself also decide how the results of a certain observation are presented. On top

of that, you become one of the actors in the landscape by doing research in it, as you can see from the example in the green box. Different studies can lead to different results as well. For instance because different people were interviewed, different questions were asked, other locations were visited, or because the researchers paid attention to different things. This is why it is vital to properly record and describe the whole process of the study.

**Examples** of points of attention are: the number of interviews, the location of the interviews, the way the questions were asked and the techniques used for observation. In this description you should also take the validity of the method into account: *what exactly am I observing and studying?* As well as the reliability of the research: *how representative is the observation?*

After you have gathered the information, you can start analysing the results. We will elaborate on that in the following paragraphs.

## **3.2 Making a sketch of the landscape**

Before you start developing a business model in a certain landscape, you need to have a good idea of its physical and spatial characteristics. Think of characteristics like the types of soil, waterways, hills and valleys. But also of the ways the landscape is used, such as infrastructure, agriculture and forestry or recreation. Or think of processes in the landscape, such as climate, seasons and different cycles. We could also count biodiversity and biomass as characteristics of landscapes.

Knowledge of the physical and spatial landscape is used in many ways. Landscape architects, for instance, use it when they make a design for a certain area. Nature managers use this knowledge to get a better idea of how to manage a certain area. Of course, you can also use this knowledge to develop business models in connection to the landscape. You can see why there are so many methods for mapping the landscape.

In this textbook, it is important for you to get a first impression of the landscape you will do business in by making a sketch of the landscape. When you make the sketch, you can take the following points into account:

1. The main physical characteristics of the landscape (*such as mountains, plains, canyons, rivers, lakes, types of soil and physical human elements*)
2. The different uses of the landscape (*such as agriculture, cattle-farming, buildings, infrastructure*)
3. Important processes in the landscape (*such as seasons and cycles*)
4. Interesting qualities of the landscape (*such as high biodiversity, large biomass, cultural heritage, infrastructure/accessibility*)

There are many ways to make a sketch of the landscape. For example, you can make a drawing, a collage or a map. For your sketch, be sure to include what you consider to be *key landscape elements* and *processes*. Be prepared to argue why you have chosen these specific elements in your written environmental analysis. You can also work with other researchers specialised in analysing the physical landscape. They can inform/advise you on your business plan.

**Note:** In the following paragraphs we will describe a factor-analysis and an actor-analysis. The analysis methods can be used to gather more knowledge about the landscape. The aforementioned landscape sketch can therefore be seen as a first representation of the landscape. You can then use the factor-analysis and the actor-analysis to gain a better understanding of that landscape.

### 3.3 Analysis of landscape factors: the PESTEL-technique

Natural, social and economic factors play a role in every landscape. These factors influence business models for nature in a certain landscape. So when you're developing such a business model, it is important to gain insight in these natural, social and economic factors. PESTEL (Johnson et al., 2006) is a much-used method for analysing these factors.

PESTEL stands for: (P)olitical, (E)conomic, (S)ocial/cultural, (T)echnological, (E)nvironmental and (L)egal factors (Johnson et al., 2006:68). In this model, factors refer to influences such as climate and soil. The factors also refer to trends and developments. Think of changing opinions and insights on the use of genetic modification, or the technological developments of genetic modification in agriculture. In the chart below you'll find a number of questions and frames you can use to find PESTEL-factors.

**Table 1: Examples of questions and viewpoints for the PESTEL-analysis**

<b><u>Political</u></b>	<b>Who decides what happens in the landscape?</b> (for example EU, national government or local residents) <b>How are these decisions made?</b> (for example democratically or by one person/party) <b>Between whom are decisions made?</b> (for example the EU and the national government or a number of parties) <b>What role do different interest groups play in this?</b> (for example action groups, NGOs, residents)
<b><u>Economical</u></b>	<b>What is the market value of products coming of the land?</b> (for example corn, milk, wood) <b>Who owns what?</b> (for example land, a service or a factory)



	<p><b>How much employment is there?</b> (for example in agriculture, services or a factory)</p> <p><b>In what sector are most people employed?</b> (for example in agriculture)</p> <p><b>What sectors are being invested in?</b> (for example in servicing)</p> <p><b>What sectors aren't doing so well?</b> (for example agriculture)</p> <p><b>What are people able to spend each month?</b> (for example €200 after they have paid all recurring expenses)</p>
<b><u>Social/cultural</u></b>	<p><b>How many people live in a certain area?</b> (for example in the municipality of Exeter)</p> <p><b>Are more people coming to the area or are they leaving it?</b> (for example decreasing populations in the countryside)</p> <p><b>What is the percentage of men and women?</b> (for example 50-50 or 40-60)</p> <p><b>What is the average age?</b> (indicating for example an ageing population)</p> <p><b>What lifestyles do these people have?</b> (for example values or opinions)</p> <p><b>Are people willing to cooperate?</b> (for example existing collaborations)</p> <p><b>What landscape elements are appreciated?</b> (for example when it comes to heritage or nature)</p>
<b><u>Technological</u></b>	<p><b>What new inventions have been made lately?</b> (for example Google glasses)</p> <p><b>What new applications are used increasingly more often?</b> (for example apps for mobile phones)</p> <p><b>What types of research are invested in most?</b> (for example IT)</p> <p><b>Do inventions become quickly out-dated?</b> (for example sat nav and telephones)</p> <p><b>Which knowledge institutes are actively involved in the area?</b> (for example universities)</p>
<b><u>Environmental</u></b>	<p><b>What is the effect of climate change?</b> (for example less rain and thus insufficient water for certain crops)</p> <p><b>Is the biodiversity increasing?</b> (for example reintroduction of a certain animal species, but also invasive species)</p> <p><b>Is the ecosystem under threat?</b> (for example because of hunting, agriculture or forestry, pollution)</p>
<b><u>Legal</u></b>	<p><b>Which laws and regulations do you need to keep in mind?</b> (for example on nature and the environment, safety, employment)</p> <p><b>Which limitations apply to ownership?</b> (for example: are you allowed to build on your own land?)</p> <p><b>What changes are being made?</b> (for example new laws)</p>

**Note:**

- The PESTEL-categories can be of help when you're studying environmental factors in a landscape. In specific landscapes factors might play a role that are not part of the PESTEL-analysis above. Some factors may also be more important than others.
- The PESTEL-analysis doesn't explain how the landscape functions and/or how the different factors relate to each other. It doesn't tell you why it is like it is. It simply indicates what factors can be identified.
- The PESTEL-categories are not complete. Besides, some factors can be difficult to place into one specific category. Sometimes it is hard to distinguish between two categories, such as *political* and *legal*.

- Occasionally, it can be difficult to distinguish between *factors* and the *actors* described in the following paragraph. In general, factors indicate broader influences on elements and processes in the landscape. Think of a decrease in population or an economic crisis. Actors often indicate certain (specific) groups of people, their views and their activities in the landscape.

**Critical factors:** You can identify a large number of factors in the landscape. They will probably not all be equally important. Try to find “critical factors”, which are most likely to be of influence on a business model for nature (Johnson et al., 2006: 68). You should take these factors into account in a later phase, when you’ll develop business models. Here are some examples of critical factors in nature conservation and tourism:

- [Climate change and its impact on tourism](#) (Viner and Agnew, 1999)
- [Impacts of the world recession Economic crisis](#) (Larsen, 2012)
- [Debates on Agricultural policy in the European Union](#) (Debating Europe, 2014)
- [Nature conservation versus green energy](#) (Dale-Harris, 2013)

## Integral assignment: Environmental analysis of Western-Iberia

**Requirements:** beamer, computers, large sheets of paper, some A4-sized sheets of paper, felt-tips and post-its in two colours

**Duration:** one day

### Morning

Watch the documentary (together): *Rewilding Europe: the case of Western-Iberia*. You can find it here: <http://www.groenkennisnet.nl/dossiers/Pages/Nature-To-Go-En.aspx>. Then take the time to watch one or two individual interviews (you can use the same link for these interviews). Try to find out more about this region on the Internet.

Watch the introductory documentary and try to identify a number of natural and cultural elements, processes and uses in the Western-Iberian landscape. Write these down or sketch them on an A4.

Then take six large sheets of paper and hang these on a wall. Write one of the PESTEL-categories on each of them. Subsequently, use post-its to assign the factors, trends and developments you found to one or more of the PESTEL-categories. See illustration 3 for a set-up. With this way of displaying your results, you can discuss which factors play a role in the landscape. You can also switch the factors to other categories. In a later stage, it will be easier to translate these results into a CANVAS (see chapter 5).

Political	Economic	Social	Technological	Environmental	Legal
border region	economic crisis	aging of populatio	agricultural mechanisatio	little biomass	property rights
				forest fires	

Illustration 3: PESTEL-analysis of the Western-Iberian landscape

You can identify a large number of factors in the landscape. They will probably not all be equally important. Try to find “critical factors”. These will be the factors you really have to take into account when you’re developing a business model. Add these “critical factors” to your charts by using a different colour of post-its.

To elaborate on the landscape elements and factors, you have to give a short (1 or 2 A4s) description of the landscape sketch and the PESTEL-analysis. Make sure you explain the key elements and “critical factors” you’ve identified. Describe:

1. Why you assigned a factor to a certain category;
2. Why you consider these factors to be critical ones.

Assign a code to each element, so it is easy for you to bring these into the CANVAS-model in chapter 4.

### **Afternoon**

Watch the documentary and the interviews with actors in the landscape of Western-Iberia again. Then try to make an actor-map like the one that was made of the case of 'Le Serpent' (chapter 3.4). Indicate which actors are present in the landscape, how they relate to each other, and between which actors decisions are being made. Also indicate possible conflicting uses or meanings of the landscape.

### **Suggestions:**

Use another large sheet of paper and post-its again to make the actor-map, so you can switch them to get the relationships right.

Select the two or three actors you think are most important and answer the eight questions of chapter 3.4.

Use one A4 for each actor and code the answers to the eight questions for each of them. For example: actor A and the answers to the questions A1-A8; and actor B and the answers B1-B8. This will make it easier to translate these answers into the CANVAS later.

### 3.4 Actor-analysis technique

In chapter 2 we concluded that all entrepreneurs have to interact with other actors in the landscape. You produce for others, do business with others and compete with others. Many of these actors are connected through networks. So when you develop a business model, it is important to have insight into the different actors in a landscape. It is also important to determine how these actors relate to each other and how they are organised. In this paragraph we will show you how you can get a better idea of these actors and their networks.

For a good overview of the actors in a landscape, an actor-map is often made, indicating the different actors. Lines are drawn between these actors, indicating how the actors relate to each other. So an actor-map shows which actors play a role in the landscape and how they are organised. You can find a simple example of an actor-map in illustration 4. This actor-map is based on this article (in Dutch): [Duikvrije zone achter Le Serpent](#) (Aarsen, 2011). For an English summary of that article and additional background information, read the green boxes about 'Le Serpent' two pages down. This article offers a short description of the discussions some parties had about creating an artificial reef in the Dutch province of Zeeland. They wanted to sink a concrete ship 'Le Serpent' for diving purposes. Read this article and compare it to the actor-map below. Obviously, reality is more complex. For a more detailed actor-map you would thus need more sources of information. When you make an actor-map, the manner in which you can indicate relationships is important. In the box on page 21, you will find some useful tips.

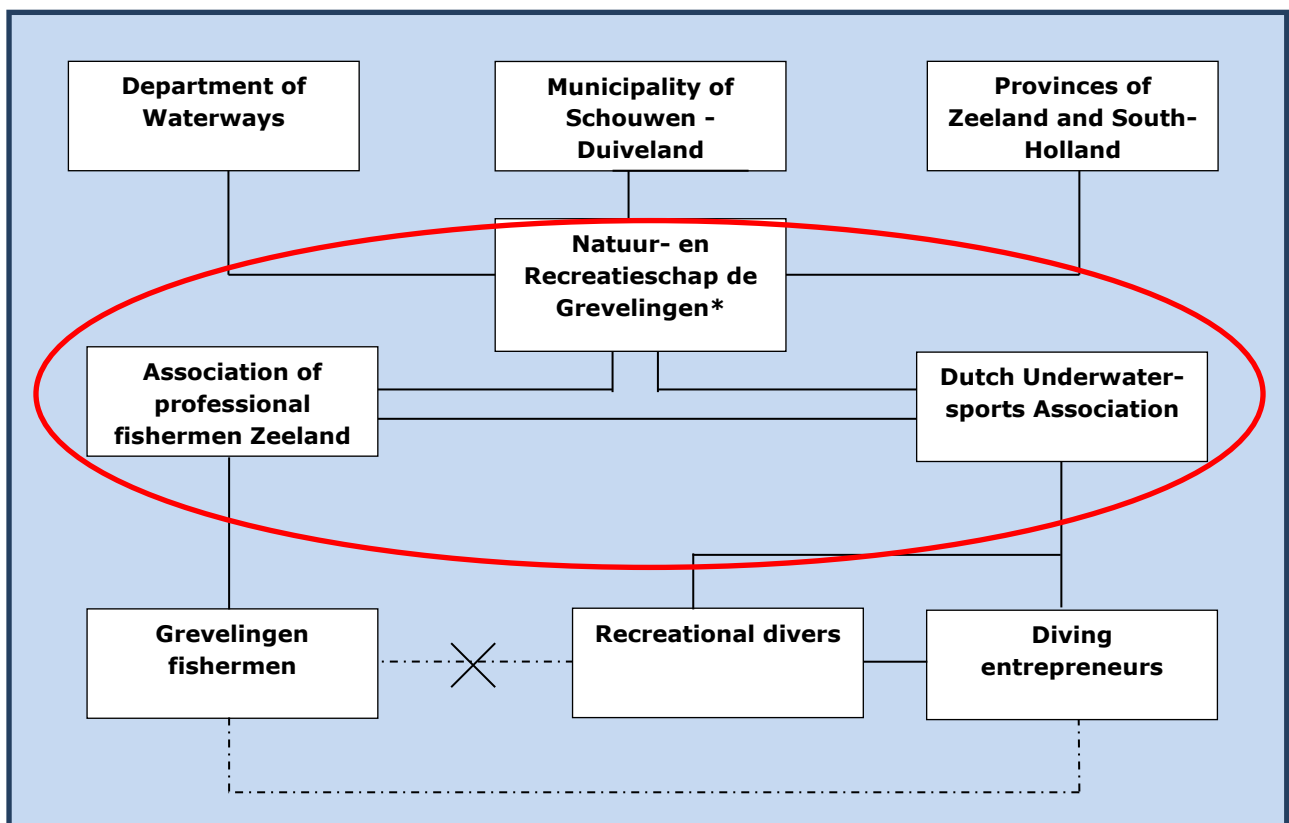


Illustration 4: Actor-map of the parties involved in the sinking of 'Le Serpent'

\* Collaboration between municipalities, provinces and the Department of Waterways



Illustration 5: Artificial reef in the Grevelingen

How actors view ‘their’ landscape and make use of it is harder to depict. Besides making an actor-map, it is therefore important to make a more detailed description of the actors during the actor-analysis. You can do this using these points of interest:

1. How these actors view the landscape;
2. What their mission, vision and strategy is (in case of for instance entrepreneurs);
3. How these actors make use of the landscape;
4. What impact the actors have on the landscape through this use;
5. What means these actors have at their disposal;
6. What rights and obligations the actors have;
7. How these actors relate to each other and how they are organised;
8. Between which actors decisions are being made regarding the landscape (see the box below and the red circle in the actor-map).

So on the one hand you’re trying to list as many actors as you can find, and trying to indicate their relationships. On the other hand, you try to understand the different actors, and describe how they think, act, and organise themselves in the landscape. All these insights could be useful in a later stage, when you decide to involve some of the actors in your business model for nature (chapter 5).

## Dive-free zone behind 'Le Serpent'

*Based on and translated from an article by Aarsen, 2011*

A day at work sometimes leads to strange encounters for professional fishermen in Zeeland, a province of the Netherlands. At one moment a fisherman is working on its nets, the next moment a diver emerges and starts shouting. Whether he knows what he's doing, that there are divers below and if he realises how dangerous it is to place nets where people are diving. Martin Bout, secretary of the association of Grevelingen Fishermen can, luckily, laugh about it. In his words and in contrast to the comments of some divers: "in fact it is the opposite, the whole Grevelingen is fishing area, neatly divided into sections. And since the time of our grandfathers, these sections are leased to professional fishermen. Recreational divers came much later as co-users of the area". Seven professional fishermen are using the fishing grounds of the Grevelingen. The different sections into which these fishing grounds are divided, are rotated each year between the different fishermen. This way good and less abundant fishing grounds are evenly distributed. (...).

Lobster and eel feel most at home among the boulders at the foot of the dikes, the hard substrate that is also most interesting for divers. In the words Martin Bout: "fishermen and divers therefore make use of the same area for about twelve weeks a year. There's nothing wrong with that, in a small country like ours you have to give each other space. But in order to do so, you have to take into account each other's interests. The fishermen have agreed not to place nets on busy diving days like the Easter and Pentecost weekends. Besides that, the larger and most dangerous nets we only place a hundred meters away from the main dive entrances to the Grevelingen. This way a two hundred meter net-free corridor is created around these entrances. Moreover, if there is a smaller net placed close to one of the reef balls, there is no harmful intent to that. It is very hard for us fishermen to know where these reef balls are located because they are not marked at the surface". This year sport divers will therefore places buoys fishermen know what locations they need to stay away from when placing their nets.

In return, the fishermen ask for one thing: that divers stay away from their gear. In Martin Bout's words: "Diving is a great sport and I understand that people come to the Grevelingen for it. But they need to keep their hands off our stuff!" Damaged nets lead to a lot of costs and frustration amongst the fishermen. "It's difficult, most of the divers just come to dive, but amongst the thousands of recreational divers, there are always a few molesters. Out of pity, they cut open the nets and free the entangled cuttlefish, eels and lobsters. One of my colleagues has had a lot of damage last year. Preventing underwater demolitions is however almost impossible to do. Because of that, we really need to build on the good intentions between divers and fishermen".

## Wreck in my fishing section

So when recreational scuba divers then came up with the idea to sink 'Le Serpent' in order to create a wreck in one of the fishing sections, attracting only more scuba divers to the location, the fishermen are of course not directly enthusiastic about it. "We cooperate in this project because we think that the area should be open for different users and because the province of Zeeland, the involved municipalities and conservation agencies (together organised in Natuur- en Recreatieschap de Grevelingen) wants to ensure that new facilities are developed for divers. That is seen as a general interest". (...) "Scharendijke was designated as the new location to sink 'Le Serpent'". This was however in the middle of one of the fishing sections. "Then good consultancy and cooperation between the different parties involved becomes very important," says Martin Bout. "We are very satisfied with that. The [Dutch Underwater-sports Association](#) (NOB) involved us at an early stage in the plan, though the choice of the final location was not received wholeheartedly by the fishermen".

That it did happen, it is the result of creative thinking from both sides. A process of give and take. The fishermen gave up part of their fishing grounds. Where the wreck is located and in a zone of a few meters around it, nets cannot be placed. On the other hand, a diving-free zone has been installed between the wreck and the dikes. This free zone has been marked by buoys. Under water, the route to the wreck is indicated with a thick anchor chain. It is intended that divers in Scharendijke only go into the water and get out of the water from the nearby peer. (...).



### Some more background information on sinking 'Le Serpent'

In the article (Aarsen, 2011), divers' and fishermen's different views on and uses of the Grevelingen-lake are described. Aarsen furthermore hints at the different tools and means that are used by the two different actors. Netting and boats versus diving equipment and knives. Through the article of Aarsen but also in a lot of news articles it becomes clear that the fishermen and the divers have had several conflicts before. Divers say that the fishermen fish too close to the diving spots, and that their nets are dangerous for the divers. Fishermen say the divers cut their fishnets deliberately.

The article then offers a short description of the respective rights and obligations of both the fishermen and the divers. Usufruct of the dikes is for the fishermen. They get assigned fisheries yearly. Depending on the season, they're allowed to catch certain species of fish there. Other actors, like divers, also have the right to use these locations. This construction sometimes results in conflict. Divers cut the fishnets and fishermen threaten the divers.

For the sinking of 'Le Serpent' the [Natuur- en Recreatieschap de Grevelingen](#) (a collaboration between municipalities, provinces and the Department of Waterways) has to give out permits. They will only do so if the fishermen and the divers can come to an agreement on the use of the dikes and a possible location for the wreckage. We could call this a decision arena. The [Nederlandse Onderwatersportbond](#) (Dutch Underwater-sports Association), in that case, represents the divers. These three parties are therefore encircled in red in the actor-map (illustration 4).

Behind these three parties, however, there is a whole world of other actor-groups, organisational structures and decision-making arena's. For instance, the sinking of 'Le Serpent' is part of the [Masterplan Zeeland](#) (Nederlandse Onderwatersportbond, 2009), part of the socio-economic policy plan for the province of Zeeland 2009-2012. It furthermore difficult to find a contractor willing to dredge up the ship Le Serpent and relocate it. So it is quite a challenge to find out how different actors in an area are organised. How they relate to each other. And based on what customs and meanings decisions are made between which parties.

#### Note:

- Make sure you don't miss any actors. You can ask people you interview if they know other parties interested.
- Not all actors in one category share the same views. For example, hunters from one local hunting association might have very different opinions on the reintroduction of large predators.

**Key actors:** It is important to identify which actors you could or would want to incorporate in a business model as partners or customers. Think, for instance, of entrepreneurs interested in developing a business model for nature conservation. Or think of landowners, policymakers, and/or customer segments.

If you are doing research for an entrepreneur, you should also identify other actors for the entrepreneur to work with (see box on the right).

We have seen that various actor-groups had to cooperate to sink 'Le Serpent'. First, this meant the Dutch Underwater-sports Association and the fishermen's association of Zeeland. Together, they had to find a good location. Based on this agreement, "Natuur- en Recreatieschap Grevelingen" was willing to give out a permit. The fishermen can thus be considered the main



partner of the divers' association in this case. Only with insight in the other group's vision, could they come to an agreement. This also shows that you can look for collaborations between users of the landscape that seem to have conflicting interests at first. Such collaborations are directly related to your business model, so we will give you some examples in the next chapter. You can also find examples of collaborations on this webpage: [partners in conservation](#) (the nature conservancy, 2014).

#### Connecting existing entrepreneurs and/or production chains

In the introduction, we described that you can adjust and link existing production chains, and/or that you can use them for nature conservation.

When you made your environmental analysis, you have probably identified some dominant uses of the landscape in the landscape biography. With the PESTEL-analysis, you have gained insight into factors influencing existing production chains. Finally, you may have found out which actors are part of these chains and how they are organised in the actor-analysis.

Sinking 'Le Serpent' for diving purposes is an example of a link between two production chains: the professional fishing chain and the recreational sector.

### 3.5 The environmental analysis

Together, the landscape biography, PESTEL-analysis and actor-analysis form the environmental analysis. The environmental analysis is an important source of information when you want to develop a business model for nature. By researching and analysing a landscape, you have gotten an overview of the physical elements, factors, trends and developments playing a role in that landscape. You have also found out which actors are active in the landscape. You know how these actors view the landscape and how they are organised. From these insights, you have subsequently identified a number of *key landscape elements*, *critical success factors* and *key actors* (*possible partners and customers*). Based on this knowledge you can develop business models for nature for this particular landscape. You can also argue why you made certain choices in the business model.

#### Key points of this chapter:

- 1: Introducing research methods for making an environmental analysis.
- 2: Identifying critical factors for your business model for nature.
- 3: Identifying key actors and networks for your business model for nature.

## **“Prototyping” potential business models**

When you made the environmental analysis, you found out all kinds of things about a landscape and the people living, working and/or recreating in it. You might see several opportunities, such as nice combinations between the mission, vision and strategy of different entrepreneurs. Or even solutions to keep preserving and developing nature in that landscape. Before we start working out one business model in the next chapter, we can first write down some of your ideas. This is often described as a mindmap. The authors of Business Model Generation (Osterwalder and Pigneur, 2009: 162) also call this “prototyping”. An important moment for you to think about the several directions you can go with a business model.

***Requirements:** Again, use a large sheet of paper or a window (large surface), post-its, felt-tips, all you can use to visualise ideas.*

**Step 1:** Use post-its to write down as many ideas, combinations and solutions as you can think of and stick these to the paper (or a different surface). These ideas, combinations and solutions might be/seem strange, challenging or impossible, but that doesn’t matter in this phase of your design. Add key landscape elements, critical success factors and key actors. This includes the mission, vision and strategy of the entrepreneur you’re developing a possible business model for. Or those of different entrepreneurs and other actors you think will be a good combination. **Note:** always make sure the key elements and actors and the critical success factors don’t get in the way of original ideas. Eventually, you might (have to) leave out something or someone you deemed essential earlier.

**Step 2:** Try to structure your ideas a bit more. Look for logical relations and for less obvious ones. Group ideas together or remove them. Connect the groups and also try to connect ideas that don’t seem to match at first glance. This way, you make yourself see things from new perspectives, instead of walking the beaten paths.

**Step 3:** Perhaps several prototypes come up. See if you can put the essence of each of these prototypes into words. Can you determine how these prototypes contribute to nature conservation? Select the prototype you like best and which you think has a good chance of succeeding.

## 4. Developing a business model for nature conservation

In the last phase you made an environmental analysis. This gave you, the nature entrepreneur, more insight into the different factors and actors playing a role in the landscape you plan to set up a business in. You have also been mind-mapping and you've selected a prototype from your first ideas. You can directly translate these insights into a business model for nature entrepreneurship in that landscape. Using a tool called *CANVAS Business Modelling* (Osterwalder and Pigneur, 2009), you will make combinations between elements, factors and actors, in order to come up with innovative business models for nature.

**Aim:** At the end of this chapter you will be able to develop a business model for nature. Alternative collaborations and new combinations between markets and nature are central to this model. You use earlier insights and knowledge about the landscape you want to set up your business in.

On the following page you will find the CANVAS-model (Osterwalder and Pigneur, 2009). Take a good look at it. Then watch the [CANVAS introductory film](#) (2.20 minutes) and [the online course](#) (42.30 minutes) by Alexander Osterwalder about the CANVAS-model.

# The Business Model Canvas

Designed for:

Designed by:

On:

Iteration:

Key Partners



Key Activities



Value Propositions



Customer Relationships



Customer Segments



Key Resources



Channels



Cost Structure



Revenue Streams



## 4.1 The building blocks of a business model

The films show all nine building blocks and the mutual relations of the CANVAS-model. That is, in the way these are often used to look at business models from the viewpoint of a single business. In this textbook, however, we're looking for business models for nature with an emphasis on alternative collaborations and inventive combinations between markets and nature. So, we will apply the CANVAS-model in a slightly different manner. We will now give a short description of our approach to the various building blocks of the CANVAS. We will split the CANVAS in four different segments, as you can see in illustration 6.

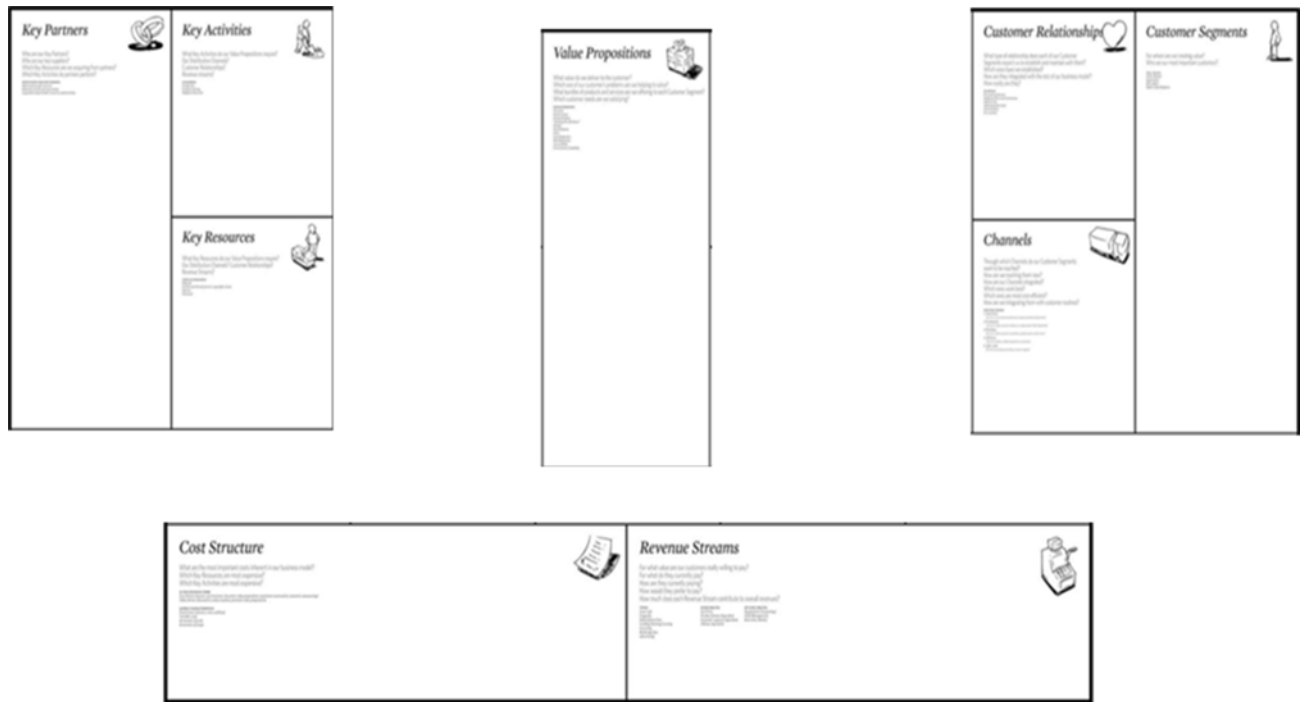


Illustration 6: The CANVAS-model in four sections

It doesn't really matter where you start in the CANVAS-model; all blocks are related. We will start with the segment consisting of *customer segments*, *customer relationships* and *channels*. It is important to identify the markets/segments you're developing a certain product for. So when looking for innovative nature-market combinations, you have to pay attention to potential market segments. You can also look into new ways of reaching customer segments, or linking these to a (new or existing) product/service.

**Customer segments.** In this building block you indicate the customer segments for which you develop your products/services. You can look beyond traditional distinctions between producers and consumers. In collaborations, key partners might not only be producers for each other's activities, but they might also be consumers (see point 2 in the box). This doesn't mean you don't have to define your customer segments clearly.

**Customer relationships.** In this block you have to indicate what kind of relation you want to enter into with the customer segments and other actors. Think about things like: will you approach your customers in a personal or an impersonal way? Can customers become members of a certain club related to a product/service? Or does the current model pay no attention to customer relations? You can enter into different relations with different customer segments.

**Channels.** In this block you therefore indicate *how* you're going to support customer relationships. What channels can you use to reach customers, and what channels would they prefer? Internet, blogs, advertisements, but also membership cards are examples of channels supporting customer relationships. You also need channels to get the product itself to the customer. Think of shops and distribution channels.

**Note:** When you need certain means for this, you'll have to indicate those in the building block *key resources*.

Think back to [the online course](#) by Alexander Osterwalder, especially the mini-case of Nespresso (19:30 – 25:10). What relation do you see between *customer segments*, *channels* and *customer relationships* in Nespresso's advertising?

According to Giles Davies, a well-known nature entrepreneur who's worked on numerous [Conservation Enterprises](#) in Africa, a number of things are important in this segment of the CANVAS.

1. *Studying the "viability" and "functionality" of a market. Viability means a market is sufficiently large to support the business model. Functionality means this market is actually able to use a product/service from the business model. Think of things like price, distance and infrastructure.*
2. *Finding out who actually profits from the business model. Is it beneficial to local interest groups as well? If so, how? These benefits can be financial or social, but also think of benefits that are harder to define. The local interest groups will have to be convinced of the advantages the business model offers them, before they will support it. They can be considered to be key partners and/or customer segments.*
3. *Making sure the business model responds to trends and developments in society. What do people want, how would they like to be approached, through which channels can you reach people, today and in the future? Continue on the next page.*

The second segment consists of *key partners*, *key activities* and *key resources*. These building blocks have to be closely interrelated. Here, you indicate which actors (including yourself as nature entrepreneur or the person you are developing the business model for) will do what to supply a certain product or service, and how they will be able to do that.

**Key partners.** In this building block you write down the most important actors you have identified in the map of actors, and that you want to incorporate in your business model. Think of essential parties such as landowners, nature organisations and recreational entrepreneurs. Also look for actors that are less obvious. Remember the collaboration between the fishermen and the divers.

**Key resources.** You can enter all kinds of physical, cultural and financial elements you've identified in your environmental analysis into this building block.

Note that you can use your essential landscape elements, critical success factors and (the means of) key actors/partners. Examples: a river, unique flora and fauna, the cultural and historical significance of a windmill, regional narratives or farmer Williams's tractor. Less tangible resources like patents and ownership rights may also be valuable to the success of the business model.

**Key activities.** Which activities should the different actors take on within the business model? And how do these activities relate to each other? The activities should be linked to the various resources you have already indicated. Think of: research and development, production, maintenance, communication, marketing, training, interacting with customers. Literally everything that has to be done within a business model to generate added value has to be written down here. Make good use of your environmental analysis again. If, for instance, you would like to connect key landscape elements, factors and/or production chains, this is where you show how you will do this. Will you add something, will you create a platform, or will you optimise a certain process? Can other actors play a part here?

For inspiration on collaborations in nature conservation and development, see [partners in conservation](#) (the nature conservancy, 2014).

*Giles Davies also indicates it is important to remember:*

4. *The bigger the threat to a species/ecosystem, the greater the potential for a business model for nature conservation. The so-called "last chance to see" logic.*
5. *It has to be clear which factors are threatening a certain species/ecosystem. How else would you be able to use a business model to adequately respond to these threats?*
6. *Working with landowners and parties that can provide resources, money and activities is important to look after mutual interests and create new opportunities for nature conservation.*
7. *You have to comply with rules and regulations and you have to get all permits you need to make a success of your business model.*

The third segment consists of *cost structure* and *revenue streams*. Many activities and resources in the business model cost money and/or take time. You have to get these investments back, one way or another. There has to be a balance between costs and revenues. Organisations often strive for a positive balance in the long term. You draw up this balance with the *cost structure* and the *revenue streams* at the bottom of the CANVAS.

**Cost structure.** What activities are part of the business model and what resources are needed? Which costs come with these and how are these divided between the collaborating partners? All building blocks projected above *cost structure* in the CANVAS-model have to be represented in the *cost structure*.

High-end tourism is an important concept of some of Giles Davies' Conservation Enterprises. High-end in this case stands for a "smaller" market segment of guests that can and will spend a lot of money. For instance for enjoying superb service and the beautiful surroundings of the African savannah in a luxurious setting. Think of a resort on a hilltop that has an air of exclusivity because of the price and the location. This price doesn't only help with high revenues. It simultaneously provides exclusivity and thus a small group of returning customers. In this model, the price, the exclusivity, the surroundings and the customer segments are all interrelated.

**Revenue streams.** What price is the customer willing to pay for your product/service? And how do these revenues come back to the organisation? There are several ways of paying, think of paying in cash or using a credit card to do so, but also think of leasing and donations. Sometimes people can also pay by doing some work or with other means. The price you can ask for a certain product or service partly depends on the costs you have to make for it. The price can also be part of the *value proposition* of a certain product (see box on the upper right).

**Tip:** to fill out the bottom of your CANVAS-model, you need to know the costs and revenues. You can estimate these by getting a number of people to give their approximation of the price of a service/product. Use the average of those estimates.

For inspiration regarding financing mechanisms you can visit the following sites:

- [Conservation finance alliance](#)
- [Conservation finance \(WWF\)](#)
- [Surf nature: the Danube river basin](#)

The building blocks of the CANVAS-model are closely interrelated, as Alexander Osterwalder's story ([online lecture](#)) clearly demonstrates. Nespresso, for example, uses different marketing strategies for its coffee-products *coffee-capsules* and *coffee-machines*. The company uses different *channels* for both products, and thus generates different *revenue streams*. Nespresso builds a clear and exclusive relationship with its customers specifically for the *capsules* (and not for the *machines*). With the low prices and ample availability of the *coffee-machines*, customers can easily switch to Nespresso. By making the *capsules* more expensive, and selling them through special clubs and websites, the Nespresso-model is profitable. The clubs, advertisements and online stores simultaneously support the company's exclusive image.

By filling in all building blocks, you can combine actors, resources, activities and markets. But what exactly is the eventual value proposition of the business model? To answer this question, we have to look beyond a product itself. For it is also about the value built around it, like Nespresso's exclusivity. This comes from the mentioned relationship between the building



blocks. The relation you enter into with your customers, the collaborations you create, the prices you charge and the costs you avoid, how easily accessible or exclusive you want your product to be. There are many ways to add to the value of a product. This is why *value proposition* is at the centre of the CANVAS. It is the heart of the business plan. It also is the central point of your story when you tell it to other people, such as investors. In what way does your proposal address an existing problem? What new problems have you found for which your business model is a logical solution? Make sure your product/service is a unique and well thought-out offer that possible partners, investors and customers can't refuse.

**Value proposition** is a short summary of all things happening within a business model adding value to a product/service. The *value proposition*, therefore, is so much more than just a cup of coffee or a glass of beer, or a safari. It's what makes the coffee, the beer or the safari special and unique. Eventually, all the different building blocks of the CANVAS have to show up in/relate to the *value proposition* in some way.

In this textbook, nature conservation is of course an important part of the *value propositions* you have to make. We have already seen a number of examples. For more inspiration, here is another list of sites where you can find nice examples:

- [Rewilding Europe](#)
- [Conservation Capital](#)
- [Prairie Restorations Inc.](#)
- [Lifescape your landscape](#)
- [Business 2 Nature](#)
- [Conservation Gateway](#)
- [The Nature Conservancy](#)

**Integral assignment:** make a CANVAS-model for Western-Iberia

**Requirements:** poster/ A1 size CANVAS (you can find the poster in the appendix), post-its in three colours, and the PESTEL-analysis and Actor-map you made before.

In this chapter you have learned how to use the different building blocks of the CANVAS for innovative business models. The goal of this textbook is for these business models to be based on the knowledge and insights you have gained from your environmental analysis. To this end, you can use your PESTEL-analysis and Actor-map again. The post-its from the PESTEL-analysis and the actors from the Actor-map can be translated directly into the CANVAS (see images below). As a workshop exercise, we can work on an original business model for nature conservation in Western-Iberia. The results of the last workshops can be very useful for this.

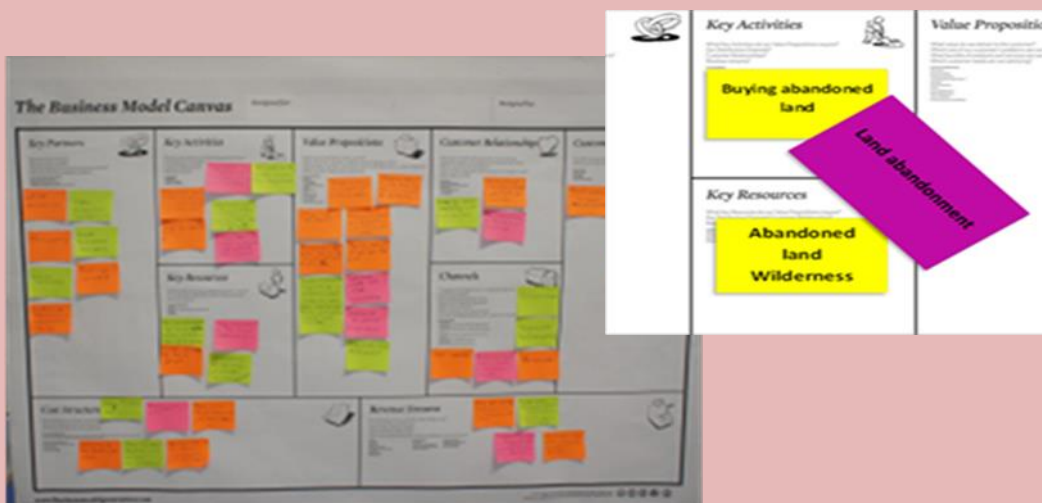


Illustration 7: Completed CANVAS posters

Be sure to at least use the critical success factors we identified in the last chapter. In some cases it is better to work out these factors a bit more. For example: the factor 'land abandonment' can lead to barren land you can buy and develop into new wilderness. Finding and buying the land can then be considered a *key activity*, and the barren land itself a *key resource* (see image above).

You can write down the actors you've identified in your actor-map on post-its and add these to the CANVAS. Three different colours were used for the CANVAS depicted above. Each of these colours refers to factors, actors and the way these are specifically translated into the different building blocks of the CANVAS. Make sure your *value proposition* is well-founded and that you can explain the exact relationships between the building blocks. You should also be able to explain how the model contributes to nature conservation.

**Note:**

- There has to be a relationship between the different building blocks of the CANVAS-model. For a more personal way of building customer relations, for instance, you need specific *channels*. Such as a club or a shop. This will result to a building being needed in the *key resources* block, and perhaps customer relationship training in *key activities*. Remember What Alexander Osterwalder said about Nespresso. All of these will of course bring new costs. So pay good attention to how the building blocks relate to each other.
- Always keep in mind that essential landscape elements, critical success factors and important actors should not stand in the way of innovative ideas. It can turn out you don't (or can't) incorporate an element, success factor or actor you have assessed as essential at an earlier stage. You will have to be prepared to explain why you will not incorporate these in your model.
- In collaborations, it can be difficult to distinguish between customers and partners. Making a distinction is not the aim here. Factors and actors, partners and customers, can be placed in several building blocks. If this is the case for your CANVAS-model, do argue why.
- Explicitly show how the product or service in your CANVAS-model contributes to nature conservation. For instance by generating funds, by executing certain (maintenance) activities, or raising awareness. Here, the goal of the business model is to support nature conservation without depending on government subsidies.
- Indicate who the different partners are and what they contribute to the model. This clarifies the roles of the different parties involved. You can elaborate on this in writing. Should one of the initiators have a very specific business model for just his/her organisation, you can make a second CANVAS. One specifically about the initiator's business processes.

**Tip:** *Indicate perspective, overlap, relationships and nature conservation in an informal matter on the CANVAS itself, but be prepared to explain these in the accompanying text. You want other people to be able to understand your CANVAS as well.*

## 4.2 CANVAS is more than a design tool

This chapter offered a tool you can use to develop original business models for nature. You do this by combining the building blocks in the CANVAS-model. Together, these lead to an original *value proposition*, the heart of the business model. In management terms of vision and strategy, your *value proposition* can be seen as your vision. This is what the business model stands for and what it can achieve. In combination with the landscape elements, factors and actors from the



Illustration 8: Students look at a vision for the future of Western-Iberia

environmental analysis, it has to be very clear what the business model is and how it responds to trends and developments in the landscape. You then elaborate the strategy (how the vision is achieved) in all the other building blocks. Note: you can base a vision and strategy on the business model from the CANVAS. Partners you would like to involve in the business model will probably also be curious as to how it responds to their own vision and strategy. Make sure you can explain this.

The strength of working with CANVAS is that you visually show how your business model works. Visualising not only helps in the development stage, it is also very helpful for explaining your vision to others. Think of investors or local interest groups. Illustration 8 shows how the organisation [Rewilding Europe](#) envisions the future landscape of Western-Iberia. This poster is in the appendix. Rewilding Europe uses this poster to explain to others what they think should happen in that landscape.

You can use your CANVAS-model the same way. You can show your strategy in the business model by giving a short description of the 9 building blocks of the CANVAS and their mutual relationships. Besides, you could illustrate your vision by making a drawing of your *value proposition*, designing a logo or coming up with a slogan. Put this next to the CANVAS with all the post-its, and you'll have a 'catching' depiction of your vision and strategy.

### Key points chapter 4:

- 1: Understanding and being able to work with the building blocks of "CANVAS Business Modelling".
- 2: Being able to translate identified factors and actors into these building blocks.
- 3: Using a filled in CANVAS to write a business plan, including the vision and strategy for it.

## 5. Integrating your business model into the local context

In the last chapter we've offered you tools to help you develop business models for nature conservation. You have taken the actors and factors you identified in chapter 3 into account. You have to be able, however, to implement the business model you developed. That is why it is important to find out what different partners and interest groups think of your designed business model. It is also important to know how environmental factors influence the model. Especially when we assume that this environment is constantly changing (chapter 1). And that, because of that, the influence of factors and the attitude of actors might also change. In this chapter, we will introduce a tool for gaining these insights.

**Aim:** Gaining insight into the force field into which you will integrate your business model. With these insights you might elect to make certain changes to the business model and/or make strategic choices in the way you will integrate it.

### 5.1 A business model in the landscape

The eventual objective of every business model is to connect markets to a product. You can use different strategies to make the best connection. In case of nature entrepreneurship, these strategies depend on developments in both the market and the landscape.

The CANVAS doesn't tell you how different partners and actors will react to your designed business model. There also hasn't been much attention for *how* the factors you've identified will actually influence your business model. You do need these insights when you want to implement the business model. Perhaps you have already gotten some reactions from local interest groups or investors when you presented your business model. Besides that, you may have noticed that some factors have a positive or negative influence on the business model you developed. Or that their influence might still be unclear.

When you want to implement your business model you have to have a strategic approach to the attitude of partners and interest groups and the influence of factors. Not only at the start, but continuously. Even when your business model is a success, changes might occur in the attitude of partners and interested parties and the influence of factors. This may partly be a result of your own strategy, but it can also result from changes in the landscape or in others. So outside of your business. Think of changing public opinions, regulations or economic growth or decline.

So it's important to always know where other parties stand when it comes to your business model. And to always know what influence factors have on it. You can obtain this information in many different ways. Think of presenting your business model to possible partners and parties interested. From their reactions you can deduct their attitudes. Another possibility is using interviews and/or negotiations to gain a better understanding of their attitude and perhaps changing it. You could also hand out questionnaires to find out what larger groups of people think.

In this textbook it suffices to make an estimation of the attitude of other parties. Use the feedback you get from for example the presentation of your business model.

## 5.2 A force field analysis of actors

A force field analysis is designed to clarify the attitude of interested parties towards a project, and what influence they have on the project (Bekkering en Walter, 2009). A force field analysis is thus suitable for gaining the insights mentioned in the paragraph above.

To make a force field analysis, you need to use the actors that play a role in your business model, such as *key partners* and *customers*. In this textbook, we would like for you to include other interest groups as well. You should assign a colour to all actors according to their attitude towards the business model. Assign a green colour to actors willing to contribute to the projects or supporting it in another way. Use a red colour for actors opposing the business model, or those unwilling to cooperate or having conflicting interests. Use orange for actors with an undefined role. You can also assign the actors to the following categories:

- Partners (*the key-partners from your CANVAS*);
- Customer segments (*the customer segments from your CANVAS*);
- Decision-makers (*regulating institutions you depend on for your business model*);
- Other interest groups (*interest groups not part of your CANVAS that might have an influence on it nonetheless*).

The project leader takes the lead when it comes to the business model. In this textbook, that means you.

Let's take another look at the actor-map and the articles concerning 'Le Serpent' (chapter 3). The professional fishermen, the 'Natuur- en Recreatieschap de Grevelingen', the Dutch Underwater-sports Association and the recreational divers can all be part of the force field analysis.

In this project you could see the Dutch Underwater-sports Association (NOB) as the *project leader* for sinking the boat 'Le Serpent' as a diving attraction. The NOB is thus placed in the middle of the model. The professional fishermen (PF) can be regarded as *partners*. In the project, they could first be depicted as opponents to this plan. At the start of this project there was even some real animosity between the divers and the fishermen. Because the professional fishermen have a great say in this project, they are placed close to the middle of the circle. The *decision-maker*, the Natuur- en Recreatieschap de Grevelingen (NG), takes up a neutral position. This party does, however, have a big influence on the project. For they will

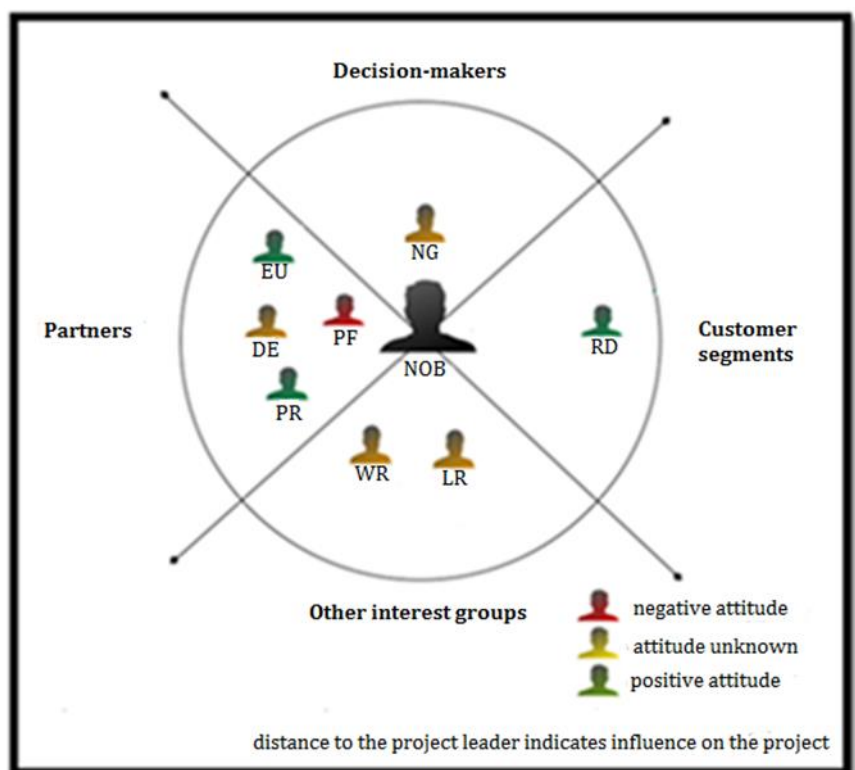


Illustration 9: force field analysis translated into a CANVAS-model



only give their permission if all parties, including the fishermen, agree to the plan. Recreational divers (RD), as *customer segment*, are positive about the plan, but at the start of the project they themselves don't really have much influence on it.

Besides these actors we described earlier, some other actors were also important to the project. The NOB needed investors. Among others, these were the European Union (EU) and the provinces of South Holland and Zeeland (PR). To get these investors on board, the NOB also needed the local diving entrepreneurs (DE) to contribute. The NOB thought that they would be willing to do so. At the start of the project, the diving entrepreneurs could thus be regarded as *partners*. But because this was just estimation, their role must be depicted as unclear. What the local residents (LR) and other people recreating on the water (WR) thought about the plan to sink 'Le Serpent' wasn't really clear at the time. They are therefore placed under *other interest groups*.

In illustration 9 we tried to depict this force field in the 'Le Serpent' project as it was at the start of the project.

With a force field analysis you can get an overview of the attitude and influence of actors regarding the business model. You can use this overview for your strategy. In the case of 'Le Serpent', for instance, you could think of negotiating with the professional fishermen, trying to involve them in the project (see chapter 3). If the influence of an actor is unclear, such as the diving entrepreneurs, who might want to invest, you can choose to do more research. You can also involve other actors in the project.

Negotiations with partners and interest groups as well as adjustments to your business model can eventually lead to changes in your force field analysis. In the case of Le Serpent, the negotiations between the professional fishermen and the NOB resulted in the fishermen's reasonably favourable attitude towards the sinking of the wreckage (see chapter 3). Research however also showed that too few diving entrepreneurs were willing to invest. This led to problems getting the project financed. Instead, the NOB approached recreational divers themselves to donate 10 euros (a kind of crowd funding). That was a success. Besides that, local shopkeepers and the hospitality industry also contributed financially.

By repeating the force field analysis, you can see how the force field around your business model evolves. The changes in the force field around the sinking of Le Serpent are depicted in

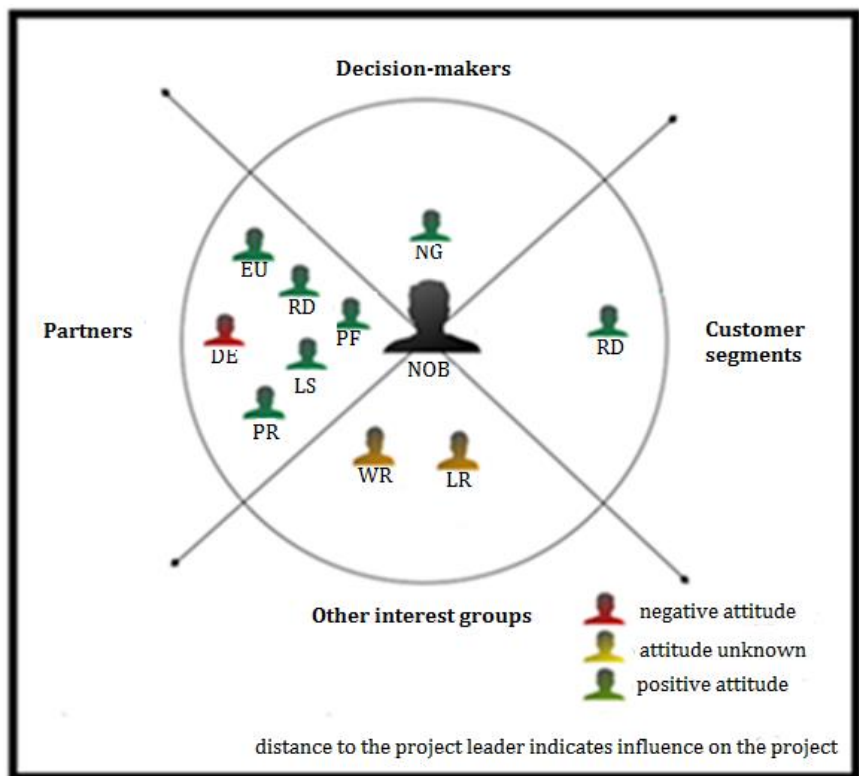


Illustration 10: Second force field analysis translated into a CANVAS-model

illustration 10. Some recreational divers became financial supporters of the project, although many divers didn't make a donation. The recreational divers are thus depicted both as *partners* and as *customer segment*. Local shopkeepers (LS) decided to back the project. So there are not only shifts in the force field; new actors have appeared as well.

Of course, the example above isn't complete yet. To sink 'Le Serpent' contractors were also needed. They weren't taken up into the model. Also, you're not only dependent on actors, but there is also a whole range of factors involved in the realisation of the project. When they released 'Le Serpent', for example, the boat sunk too deep. Consequently, and because of all kinds of physical limitations to diving, the wreckage is now inaccessible to a large group of recreational divers; see '[Le Serpent](#)' (after 17:00 minutes). We will discuss these factors in the following subchapter.

### 5.3 A force field analysis of factors

In chapter 3 you made a PESTEL-analysis. In it you indicated a number of critical factors for your business model. Some of these factors were directly incorporated in your business model. It might also be that some of these factors do influence your business model, even though you haven't incorporated them. Just like we have seen in the force field of actors, the influence of factors can shift as well. Or new factors can come into view. That is why you can decide to make a force field analysis of the factors on a regular basis too. The insights you get from these can be used for strategic choices and adjustments.

In the example on the following page, we have made a force field analysis of factors we identified earlier in the landscape of Western-Iberia. We did so from the perspective of the Rewilding Europe project in that area. Within this project, the focus is on restoring the natural dynamics on abandoned farmlands, and using for instance tourism as an alternative economic impulse. In the landscape of Western-Iberia a great number of factors influence this project. Some of these factors have a positive effect on the project; others influence it negatively. The influence of some factors is unclear as of yet. As an example, we will analyse this force field, as it is perceived by us at the time of writing.

Rewilding Europe sees the abandonment of agricultural lands (AL) as a chance to use these for nature conservation and development. New regulations for agricultural subsidies (RS) from the European Union could, however, bring new life to the agricultural sector here. The future effect of these regulations is still unknown.

Many local entrepreneurs would like to welcome more people to the region, because more and more residents are leaving (LE). Although this is a negative factor for the economy in the region, it stimulates the search for alternative economic models like ecotourism.

Mechanisation of agriculture enables some farmers to make a profit from large areas of land: farming on larger scales (MF). This especially could pose a problem for Rewilding Europe if they prefer large areas of nature. Up till now, however, there has been no competition over land.

Western-Iberia is susceptible to forest fires (FF). According to Rewilding Europe, restoring the original/natural dynamics will help control these fires. Large herbivores such as cows and horses keep the combustible shrubs short, thus preventing fires. Not everyone is convinced of



this. Some fear rewilded land is extra susceptible to fires. The role of the fires in realising rewilding is thus unclear. It is a sensitive subject, so it could have a big influence on the project.

Rewilding Europe doesn't just want to bring large herbivores to the region. The initiative is looking for primitive cattle breeds with characteristics of their ancestors, the aurochs. Technological developments "probably" will make it possible to get DNA from the aurochs. For example from bones that have been found. Scientists can then compare this DNA with primitive cattle breeds. Based on this comparison, they can try to breed a cow as close to the aurochs as possible (BA).

The local politicians and mayors (LP) are positive about the project, especially since it aims for an alternative economy. Buying land, however, is not without difficulty. Ownership-rights (OR) of abandoned areas of land are often unknown, and the regulations for acquisition are obscure. To get tourists to come here, you need attractive nature. The biodiversity (BD) is there. The number of animals (NA), however, is much lower than in Africa, for instance. Naturally, these are very important factors for the success of the Rewilding Europe model, since it is based on nature and tourism.

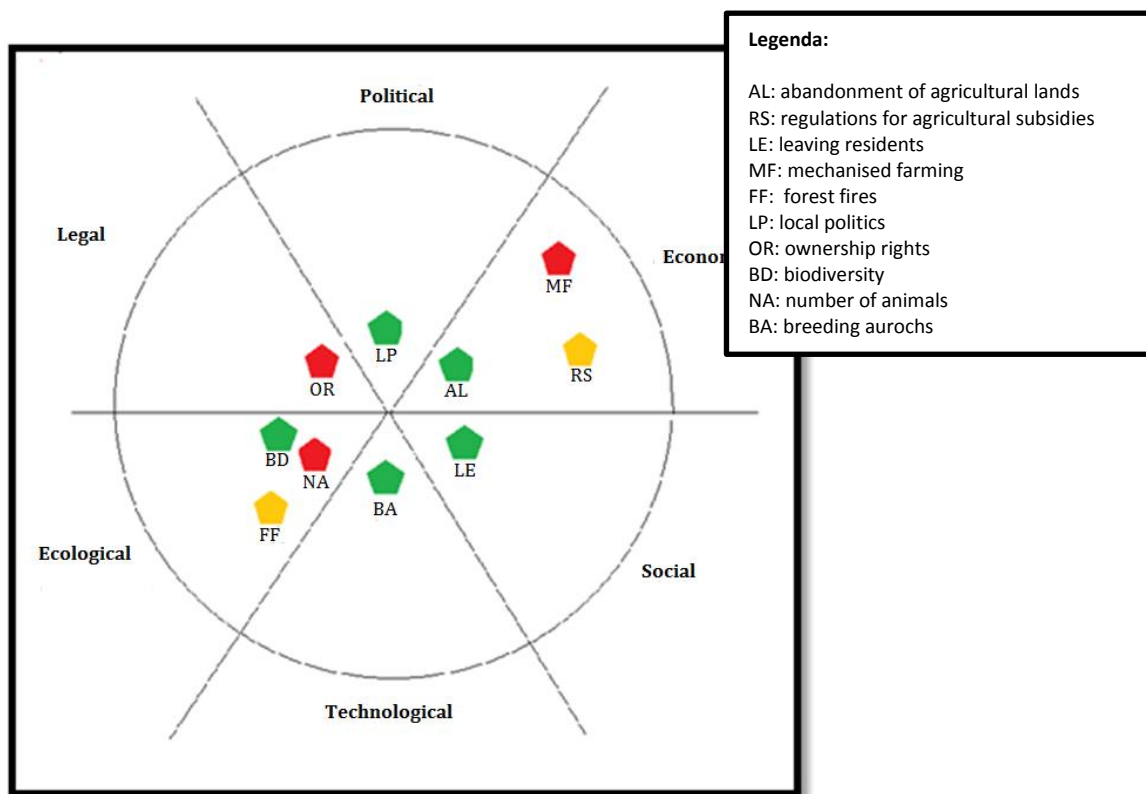


Illustration 11: Force field analysis of factors

**Note:** Just like in the PESTEL-analysis, factors can be assigned to different categories. Fire, for instance, can be considered an environmental factor. But the way people think about the causes and effects of the fires might well be considered a social factor. To which category a factor belongs is not the point here. It is, however, of vital importance to know the influence a factor has on a business model.

For example: if it turns out that the new subsidies for agriculture (RS) give a fresh economic impulse to the region, from the perspective of Rewilding Europe, you could place the subsidies closer to the centre, marked in red. In that case you should start thinking about how you could integrate these subsidies into the business model. Perhaps Rewilding Europe could start collaborating with farmers, implementing alternative agricultural models.

You can use the insights from the actor and factor force field analyses for your next steps. With whom do you need to start negotiating? Which factors need to be studied further? Do you have to make certain adjustments to your business model? It is important for you to not only visualise your force field analysis. You have to be able to substantiate it, and you should always explain what steps you're planning to take next.

**Key points of this chapter:**

- 1:** To integrate your business model into a landscape, you need to know what partners and stakeholders think of it.
- 2:** The landscape you're developing a business model for is constantly changing.
- 3:** It is important to regularly make an environmental analysis while you are implementing your business model.

## 6. Reflection

You have completed several phases in this textbook. We started out by approaching the landscape as an ecological, social and economic environment for you to start a business in. You studied the landscape from this perspective. During this research, you found many different factors and actors influencing the landscape. You then used these insights to look for new collaborations and think of new market-nature combinations. The business model you developed features these combinations and collaborations. Subsequently, you focused on how to integrate this model into the landscape. To this end, you made a map of how different actors view the business model and how they influence it. You also studied the effects different factors have on the business model. With these insights, you might have made some changes to your model. You also formulated which steps have to be taken next to actually implement your business model.

This doesn't mean you have finished developing business models for nature conservation. According to nature entrepreneurs like Giles Davies, this is just the start. After you've designed a business model, there are at least three stages you have to go through next. According to the African Wildlife Foundation (2011), these are:

- *Coming to agreements and making an operation schedule*
- *Starting up the business model*
- *Keep the business model running*

These stages are outside the realm of this textbook. To give you an idea of what these entail, we have included a checklist in appendix a. This list is derived from the checklists the African Wildlife Foundation uses to make sure they don't overlook anything when they develop, start up and run a business model. We hope this textbook helped you develop a business model for nature conservation and/or development and think it through. We are very curious about the results, and wish you the best of luck when you actually start implementing the business model you developed.

## Bibliography

- Aarsen, R. (7 April 2011). Nederland: duikvrije zone achter Le Serpent. Accessed on 10 June 2013 via <http://www.duiken.nl/index.php?pageid=33&newsitemtitle=nederland---duikvrije-zone-achter-le-serpent>.
- African Wildlife Foundation (2011). Conservation Enterprise: A Decision Support Toolkit. Washington D.C.: AWF.
- Anderson, T.L., and Leal, D.R. (1998). ENVIRO-CAPITALISTS: Nature's Entrepreneurs. PERC 16 (4): 4-20 [special edition].
- Baltus, P., and Hugan, R. (2011). De Serpent. Accessed on 12 December 2013 via <http://www.youtube.com/watch?v=sDq5MN2M30Y>
- Bekkering, T., and Walter, J. (2009). Management van Processen: Het realiseren van complexe initiatieven. Houten: Spectrum.
- Business 2 Nature (2014). Home page. Last accessed on 15 January 2014 via <http://www.business2nature.eu/index.htm>.
- Business Model Generation (2011). Business Model Canvas Explained. Accessed on 3 December 2013 via <http://www.youtube.com/watch?v=QoAOzMTLP5s>.
- Connif, R. (18 October 2012). What's Wrong with Putting a Price on Nature? Environment 360. Last accessed on 12 January 2014 via [http://e360.yale.edu/feature/ecosystemservices/whats\\_wrong\\_with\\_putting\\_a\\_price\\_on\\_nature/2583/](http://e360.yale.edu/feature/ecosystemservices/whats_wrong_with_putting_a_price_on_nature/2583/).
- Conservation Finance Alliance (2014). Innovative Finance Mechanisms Working Group. Last accessed on 14 January 2014 via <http://conservationfinance.org/wg.php?pg=3>.
- Conservation Gateway (2014). Home page. Last accessed on 13 January 2014 via <http://www.conservationgateway.org/Pages/default.aspx>.
- Dale-Harris, L. (14 February 2013). Nature conservation ignored in EU move to green energy. Euractive. Last accessed on 14 January 2014 via <http://www.euractiv.com/sustainability/nature-conservation-ignored-eu-m-analysis-517833>.
- Debating Europe (2014). Arguments for and against the Common Agricultural Policy. Last accessed on 14 January 2014 via <http://www.debatingeurope.eu/focus/arguments-for-and-against-the-common-agricultural-policy/>.
- Deja Boo Ad (2012). Nespresso: Like a Star [video sample]. Last accessed on 14 April 2013 via <http://www.youtube.com/watch?v=ClbwrwWDXfc>.
- Diels, L. (no date). Gulpener korenwolf: om te hamsteren. Last accessed on 14 June 2013 via <http://www.gulpener.nl/wpcontent/uploads/2009/03/Korenwolf-Witbier-Korenwolf-Ros%C3%A9.pdf>.
- European Commission (2014). Natura 2000: Sites - Habitats Directive. Last accessed on 28 January 2014 via [http://ec.europa.eu/environment/nature/natura2000/sites\\_hab/index\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/sites_hab/index_en.htm).
- Görg, C. (2007). Landscape governance: The "politics of scale" and the "natural" conditions of places. Geoforum 38 (5): 954-966.
- Hedwigepolder toch onderwater (12 oktober 2012). NOS. Last accessed on 14 June 2013 via <http://nos.nl/artikel/434297-hedwigepolder-toch-onder-water.html>.
- Howarth, R. B., and Farber, S. (2002). Accounting for the value of ecosystem services. Ecological Economics 41: 421-429
- Johnsons, G., Scholes, K., and Whittington, R. (1998). Exploring Corporate Strategy: texts and cases (6<sup>th</sup> edition). Harlow: FT Prentice Hall.

- Jowit, J. (20 October 2010) Spending review: 'Greenest government ever' reserves worst cuts for Defra. The Guardian. Last accessed on 14 February 2014 via <http://www.theguardian.com/environment/2010/oct/20/spending-review-cuts-environment>.
- Korenwolfcommissie Roermond (2006). Korenwolfwereld. Last accessed on 11 February 2013 via [www.korenwolfwereld.nl](http://www.korenwolfwereld.nl).
- Larsen, R. (20 June 2012). Impacts of the world recession and economic crisis on Tourism: North America. Journalist's Resource. Last accessed on 13 January 2014 via <http://journalistsresource.org/studies/economics/business/tourism-impacts-world-economic-crisis-north-america>.
- Latour, B. (2007). Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: OUP.
- Lambooy, T., and Levashova, Y. (2011). Opportunities and challenges for private sector entrepreneurship and investment in biodiversity, ecosystem services and nature conservation. International Journal of Biodiversity Science, Ecosystem Services & Management 7 (4): 301-318.
- LIFESCAPE (2013). Lifescape your landscape. Last accessed on 5 november 2013 via <http://www.lifescapeyourlandscape.org/index.html>.
- Melman, T. C. P., and Heide, C. M. van der (2012). Ecosysteemdiensten in Nederland: verkenning betekenis en perspectieven. Wageningen: Natuur & Milieu, Wageningen UR.
- Natuur- en Recreatieschap de Grevelingen (2014). Home page. Last accessed on 14 January 2014 via <http://www.grevelingen.nl/>.
- Nederlandse Onderwatersport Bond (2009). Masterplan Onderwatersport in Zeeland Divers' Delta. Last accessed on 14 October 2013 via <http://www.onderwatersport.org/Portals/1/Duiken%20in%20Zeeland/Masterplan%20Onderwatersport%20in%20Zeeland-klein.pdf>.
- Office for National statistics (2012). Accounting for the value of nature in the UK: A roadmap or the development of natural capital accounts within the UK Environmental Accounts. Last accessed on 13 January 2014 via <http://www.ons.gov.uk/ons/guide-method/user-guidance/well-being/publications/roadmap-on-natural-capital-accounting.pdf>.
- Oosten, C. J., van (24 June 2011). Nature conservation as a right-wing hobby or via polder model? Centre for Development Innovation, Wageningen UR. Last accessed on 28 January 2014 via <http://www.wageningenur.nl/en/show/Nature-conservation-as-a-rightwing-hobby-or-via-polder-model.htm>.
- Osterwalder, A. & Pigneur, Y. (2009). Business Model Generation. Amsterdam: Self- Published.
- Osterwalder, A. (2012). How to Design, Test and Build Business Models [video sample]. Accessed via <http://www.youtube.com/watch?v=RzkdJiax6Tw>.
- Prairie Restorations, Inc. (2013). Restoring the Minnesota landscape since 1977 [video sample]. Last accessed on 4 February 2013 via <http://www.prairieresto.com>.
- Quinn Patton, M., and Cochran, M. (2002). A Guide to Using Qualitative Research Methodology. Mediscins Sans Frontieres (2007).
- Rewilding Europe (2011). Rewilding Europe: making Europe a wilder place. Last accessed on 11 February 2013 via <http://www.rewildingeurope.com>.
- Stoll-Kleemann, S. (2000). Barriers to nature conservation in Germany: a model explaining opposition to protected areas. Journal of Environmental Psychology (online). doi:10.1006/jevp.2001.0228.

- Surf Nature (2011). Innovative financing mechanisms for nature conservation: Practice from the Danube river basin. Last accessed on 14 January 2014 via [http://www.surfnature.eu/index.php?id=32&tx\\_ttnews%5Btt\\_news%5D=90&cHash=7ef6de64a67e12f1d63adb94f0626b1c](http://www.surfnature.eu/index.php?id=32&tx_ttnews%5Btt_news%5D=90&cHash=7ef6de64a67e12f1d63adb94f0626b1c).
- Swyngedouw, E. (2004). Scaled geographies: Nature, place, and the politics of scale. In E. Sheppard & R. B. McMaster (red.) Scale and geographic inquiry: Nature, society, and method (p. 129-153). Oxford: Blackwell publishing.
- TEEB (2013). The Economics of Ecosystems and Biodiversity. Last accessed on 10 January 2014 via <http://www.teebweb.org/resources/ecosystem-services/>.
- The Nature Conservancy (2014). Our Partners in Conservation. Last accessed on 14 January 2014 via <http://www.nature.org/about-us/our-partners/>.
- Timmers, W. & Kok, I. (2013). Rewilding Europe: the case of Western-Iberia [video samples]. Last accessed on 28 January via <http://www.youtube.com/channel/UC4f5DDgIRbE4XkVj7t4IRYQ>.
- Viner, D., and Agnew, M. (1999). Climate Change and Its Impacts on Tourism. Report Prepared for WWF-UK. Last accessed on 13 January 2014 via [http://awsassets.panda.org/downloads/tourism\\_and\\_cc\\_full.pdf](http://awsassets.panda.org/downloads/tourism_and_cc_full.pdf).
- Visscher, M. (31 July 2008). Eigenwijs bier. The Optimist. Accessed via <http://odenow.nl/Eigenwijs-bier/>
- Witteveen, L. (2009). The Voice of the Visual. Visual Learning Strategies for Problem Analysis, Social Dialogue and Mediated Participation, PhD Thesis Wageningen University. Delft: Eburon.
- World Wildlife Fund (2014). Conservation finance. Last accessed on 15 January 2014 via <http://worldwildlife.org/initiatives/conservation-finance>

## **Appendices**

**Appendix 1:** Poster-sized CANVAS-model with questions

**Appendix 2:** Artist's impression of Western-Iberia by Jeroen Helmer, as used by Rewilding Europe

**Appendix 3:** Checklist based on the operation schedule toolkit "Conservation Enterprise: a decision support toolkit" (African Wildlife Foundation, 2011: 55 pp. Washington, D.C.)

**Appendix 4:** Flowchart of this textbook



# The Business Model Canvas

Designed for:

Designed by:

On:  Day  Month  Year  
Iteration:

## Key Partners



Who are our Key Partners?  
Who are our key suppliers?  
Which Key Resources are we acquiring from partners?  
Which Key Activities do partners perform?

**MOTIVATIONS FOR PARTNERSHIPS:**  
Optimization and economy  
Reduction of risk and uncertainty  
Acquisition of particular resources and activities

## Key Activities



What Key Activities do our Value Propositions require?  
Our Distribution Channels?  
Customer Relationships?  
Revenue Streams?

**CATEGORIES:**  
Production  
Problem Solving  
Platform Network

## Value Propositions



What value do we deliver to the customer?  
Which one of our customer's problems are we helping to solve?  
What bundles of products and services are we offering to each Customer Segment?  
Which customer needs are we satisfying?

**CHARACTERISTICS:**  
Novelty  
Performance  
Customization  
"Getting the Job Done"  
Design  
Brand/Status  
Price  
Cost Reduction  
Risk Reduction  
Accessibility  
Convenience/Usability

## Customer Relationships



What type of relationship does each of our Customer Segments expect us to establish and maintain with them?  
Which ones have we established?  
How are they integrated with the rest of our business model?  
How costly are they?

**EXAMPLES:**  
Personal assistance  
Dedicated Personal Assistance  
Self-Service  
Automated Services  
Communities  
Co-creation

## Customer Segments



For whom are we creating value?  
Who are our most important customers?

**Mass Market**  
**Niche Market**  
**Segmented**  
**Diversified**  
**Multi-sided Platform**

## Key Resources



What Key Resources do our Value Propositions require?  
Our Distribution Channels? Customer Relationships?  
Revenue Streams?

**TYPES OF RESOURCES:**  
Physical  
Intellectual (brand, patents, copyrights, data)  
Human  
Financial

## Channels



Through which Channels do our Customer Segments want to be reached?  
How are we reaching them now?  
How are our Channels integrated?  
Which ones work best?  
Which ones are most cost-efficient?  
How are we integrating them with customer routines?

**CHANNEL STRATEGIES:**  
1. Awareness  
How do we make customers aware of our company's products and services?  
2. Evaluation  
How do we help customers evaluate our organization's Value Proposition?  
3. Purchase  
How do we allow customers to purchase specific products and services?  
4. Delivery  
How do we deliver a Value Proposition to customers?  
5. After sales  
How do we provide post-purchase customer support?

## Cost Structure



What are the most important costs inherent in our business model?  
Which Key Resources are most expensive?  
Which Key Activities are most expensive?

**BY VALUE BUSINESS MODEL:**  
Cost Driven (lowest cost structure, low price value proposition, maximum automation, extensive outsourcing)  
Value Driven (focused on value creation, premium value proposition)

**SAMPLE CHARACTERISTICS:**  
Fixed/Cost (salaries, rents, utilities)  
Variable costs  
Economies of scale  
Economies of scope

## Revenue Streams

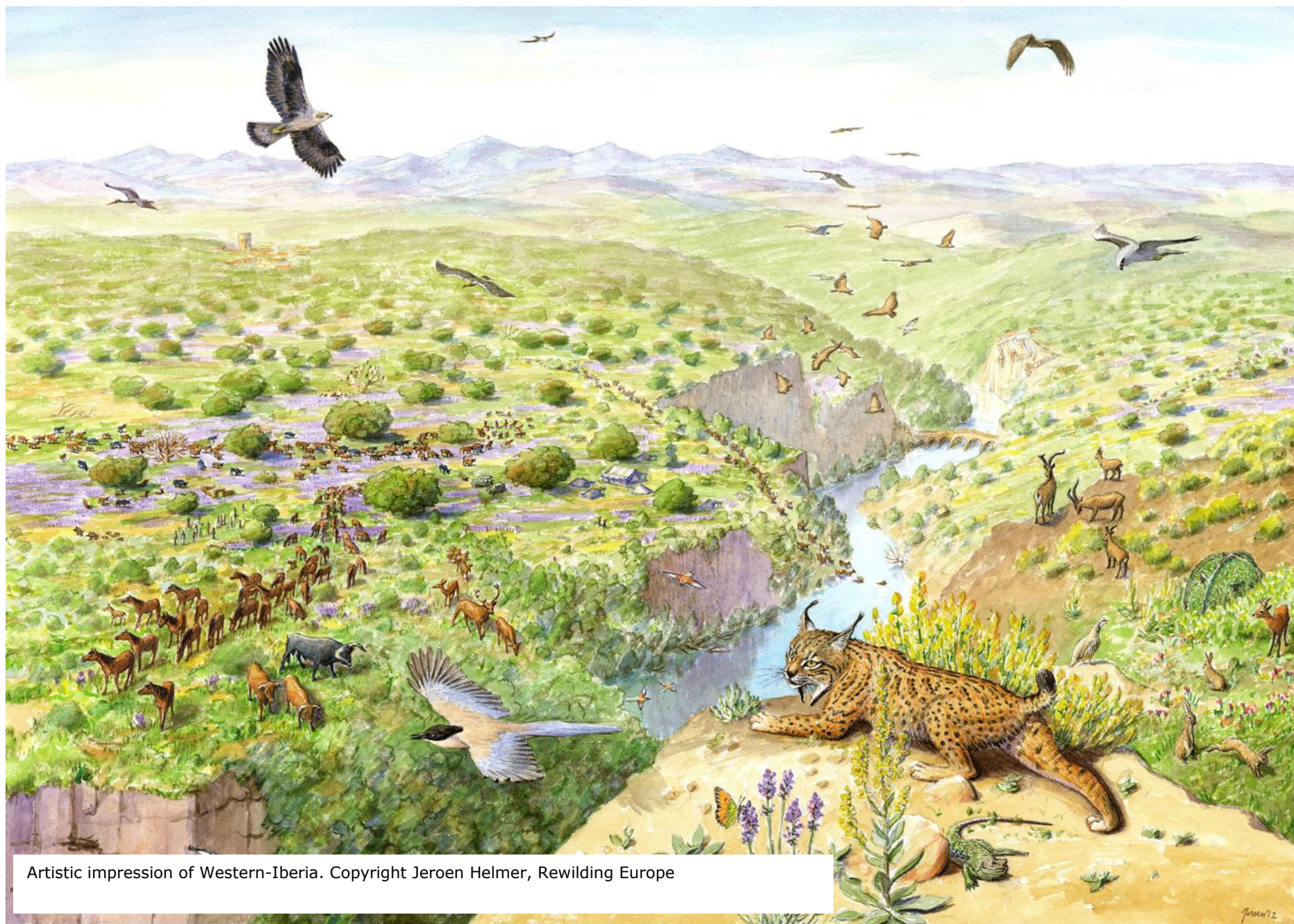


For what value are our customers really willing to pay?  
For what do they currently pay?  
How are they currently paying?  
How would they prefer to pay?  
How much does each Revenue Stream contribute to overall revenues?

**TYPES:**  
Asset sale  
Usage fee  
Subscription Fee  
Licensing/Royalty Licensing  
Referral fee  
Advertising

**FIXED PRICING:**  
List Price  
Product feature dependent  
Customer segment dependent  
Volume dependent

**DYNAMIC PRICING:**  
Negotiation/Bargaining  
Yield Management  
Real-time Market



Artistic impression of Western-Iberia. Copyright Jeroen Helmer, Rewilding Europe



Checklist business planning	
<b>Partners</b>	
	All possible partners are identified
	What kind of co-operation will be designed
	Which partners will have which responsibilities
	How do you formulate these responsibilities in legal terms
	Negotiate about the details of your business model
	Design contracts
<b>Business planning</b>	
<b>Co-operational planning</b>	
	Legal and contractual structures
	Organisational and decision making structures
<b>Operational planning</b>	
	Capital assets required
	Resources are secured
	Key-activities are identified
	People: tasks and positions identified
	People: recruitment planning
	People : training activities/capacity building
	Risk management planning
	Stakeholder management
	Benefits management
<b>Marketing planning</b>	
	Marketing focus, core product attributes
	Pricing policy
	Market-segments identified
	Marketing activities are planned
	Market research (continuously)
<b>Financial planning</b>	
	Capital assets required
	Investment structures
	Cash flow models (excepted revenues and costs for the first 3 years)
	Financial controls are planned
	Contribution to nature conservation
<b>Monitoring planning</b>	
	Success indicators
	Management reports
	1. Financial
	2. Business performance

**Source:** African Wildlife Foundation (2011) *Conservation Enterprise: A Decision Support Toolkit*. 50 pp. AWF, Washington, D.C.

## Approaching nature entrepreneurship and landscape (Chapter 2)

### Multiplicity of the landscape

In this first phase we describe how the landscape in which business model for nature will be designed, can be approached. We argue that landscape is more than a physical and spatial environment. There furthermore exist multiple meanings and uses of landscape. These are shared in networks of actors. Decision-making on what to do with landscape also takes place in these networks. As a nature-entrepreneur you are therefore always dependant on the meanings of-, uses of- and decisions on- landscapes shared by actors in networks.

### The entrepreneur(s):

The entrepreneur practises in and is part of this multiple landscape. If you design business models for an existing entrepreneur, his vision, strategy and practises need to be part of your actor-analysis.

## Analysing landscapes (environmental analysis) (Chapter 3)

### Sketch of the landscape:

Getting a first impression of the physical landscape in which you want to design your business model. Which key physical elements can you identify in the landscape? Which uses of the landscape do you see? Key physical features of the landscape can be used in the design of the business model.

See chapter 3.2

### Factor-analysis:

Gaining better insight in the social, economic and ecological factors that exist in and influence the landscape and/or your future business model. In order to gain these insights, a PESTEL-analysis can be undertaken.

See chapter 3.3

### Actor-analysis:

Gaining better insight in the different actors that are part of the landscape. This can be done by making an actor-map and by asking specific questions to the different actor-groups identified. Actors and production chains can play an important role in your business model.

See chapter 3.4

### Prototyping (visievorming)

A creative process in which: key elements form the physical landscape, critical success factors and important actors are combined to create a first set of connections that can form the basis of your business model.

Important in this process is to create different sets of combinations. These combinations do not yet have to be realistic.

### Business modelling (CANVAS)

Developing one of the prototypes into a more "thought-through" business model.

Use the CANVAS to work on this business model. Through your CANVAS you will also be able to identify your vision and strategy of the business model for nature conservation. What are you offering (vision) and how do you realise that (strategy).

## Evaluate the business model (Chapter 5)

### Force Field Analysis

In this phase you have already designed your business model. It now becomes important to get an insight into how the business model is perceived by different involved stakeholders, and how factors influence your business model. Because the landscape is constantly changing, it is important to do a force field analysis on a regular basis.

A short description of the different phases of designing a new business model for nature conservation. The coloured squares resemble the different phases. The texts shortly describe what happens in these different phases.

## Designing a business model for nature conservation (Chapter 4)

