

## Chapter 5 WMO: the stakeholder debate

### 5.1 Introducing the company: WMO

WMO is located in a glass and concrete building with the looks of a technical university, maybe 20 or 30 years old. Possibly some parts have been added later, such as the restaurant. The more or less triangular shape of the reception hall signals that this was not the most important space for the architect. A grey marble floor and white walls make a cool, businesslike impression. However, it is decorated with several intriguing pieces of art: a large 'ear' from wood and red leather hangs from a wall, and a matching, more or less circular bench of blue leather and wood with a hole in the middle. One wall shows a colourful triptych that seems to depict the creation of life. The two receptionists usually don't sit behind their desk, but somewhat to the back of their room. One door in the reception hall is labeled as 'consulting room' and has a PIN-sticker on it. I see no other visitors while I wait (description of WMO's entrance on the 28th of August, 2000).

WMO's year report of 2000 starts like this: "This year a new strategy has been laid out which has to lead to an increase in scale, further expansion of market activities, and the development of water chain activities. On these three terrains initiatives have been taken and progress has been made. The three main pillars are production and supply of drinking water to captive customers, development of services and products for free customers (market activities) and cooperation with municipalities and water boards in the water chain."



*WMO's building in Zwolle*



*Piece of art in WMO's reception hall*

*Table 5.1: Main figures according to WMO's year report 2000*

	2000	1999	unit
Total operating income	241,1	224,1	Dfl. 1 million
Net profit	20,2	10,2	Dfl. 1 million
Solvency (hard)	10,1	7,7	%
Water sales	75,8	76,1	1 million m <sup>3</sup>
Customers water	488,479	480,558	
Tariff drinking water small use	2,50	2,45	Dfl. / m <sup>3</sup>
Yearly use per customer	156	160	m <sub>3</sub>
Leakage/own use/measurement differences	6,4	6,6	%
Active pumping stations	26	27	
Employees	468	462	fte

It must be emphasized that the interviews took place in 2000, while WMO merged in 2001 with two other companies into a company named Vitens. Many aspects of WMO have changed since then, for example, the division into business units. This chapter describes a WMO that does not exist anymore.

## 5.2 How is the term 'sustainability' used at this company?

To answer the research question about perceptions of sustainability, it was analyzed what meanings the respondents attributed to sustainability. As described in Chapter 2, these meanings were sorted into themes. The set of themes presented here characterizes the views of WMO.

The term sustainability is used very often at WMO:

I : Sustainability. At this company, is this term...

R2 : Used a lot.

I : It is?

R2 : Yes. (70:21)

The term is used in internal communication:

R3 : Oh, and I have something else here: ‘Sustainable, sustainable, and sustainable once more’, maybe that’s also nice to have. (Gives me an internal newsletter.) (63:23)

And in communication with the outside world:

R2 : Look, I also ask customers if their solutions are really sustainable. (70:38)

Therefore, the term ‘sustainability’ is integrated in the daily language at WMO. Why does the term play such an important role in this company?

R1 : It has something to do with the values that are embedded in this organization. Not in just one person, but in a whole lot of people. (...) at times we asked ourselves, “Why does that concept appeal to us so strongly?” You don’t have to explain it to anyone here! (...) and when they are working on it, everybody simply understands what it’s about. (59:6)

It seems that the concept of sustainability is in accordance with the existing company culture.

### **5.3 Themes associated with sustainability at WMO**

At WMO, it is recognized that the meaning of ‘sustainability’ evolves over time and that its meaning is influenced by the opinions of other actors. Below, the themes that emerged over time are discussed.

#### **5.3.1 Protect groundwater**

For a long time, WMO has associated the term sustainability with the protection of groundwater resources:

R5 : You could say that it is well-informed self-interest, because at WMO, we still mostly use groundwater resources. (...) And that means (...) that sustainability is important to us, because it means protection of our resource. (92:6)

The pressure on WMO’s groundwater resources is high. Large concentrations of inhabitants coincide with vulnerable groundwater layers. For WMO, the consequence of asking other societal actors to reduce their impact on groundwater is that WMO itself has to reduce its impact on the environment as well:

R5 : It’s at least 25 years since we first ran into the problems of a polluted environment and started to think about what exactly would be sustainable and what we could do about it ourselves as a company. So we decided to appeal to others, but take action ourselves as well. (92:6)

WMO was interested in this theme at least a decade before the term sustainability came into common use. Things that fell under the term ‘environment’ in the past are grouped under ‘sustainability’ in contemporary accounts. At this early stage, there already was a dependency on external actors and dialogue with them on environmental issues.

### 5.3.2 Sustainable groundwater extractions

Around 1997, the term sustainability was chosen as a guiding principle in a strategic planning process. The WMO department 'Strategy & Resources' started an investigation to assess the need for large-scale surface water installations:

R4 : "Sustainable Drinking Water Production in Overijssel"; we wrote it in 1997 and this plan was originally meant to be the foundation for the building of large surface water extraction sites. (...) for example, we have thirty extraction sites and a number of them is not sustainable and will be closed down. And we have a sustainable capacity of about 105 million per year. And we expect a future demand of 140 million, so we need, this is a matter of subtraction, a new capacity of 35 million. (51:1)

WMO worked with the concept of sustainability in an effort to deal with its capacity problems in a systematic way. It considered the Brundtland definition, but that could not be translated into concrete guidelines for the company:

R4 : The Brundtland definition, well, we wanted to use it too, but then for drinking water supply. Well, we tried many, many definitions, but we found out that each of them looked at it from a different angle. I mean, we all think it's about the future, and it's about the effects of extraction, but we cannot find a good, unambiguous definition. (51:18)

WMO's strategic department decided to fall back on its own ideas about sustainability:

R4 : So we turned it around, we said, "We don't really know what sustainability is, but we do know what unsustainability is. We do know what we don't want." (...) So we looked at it from four angles: (...) water, protection, environment, or environmental protection, and operational technology. And from those four angles, we defined what, well, what an unsustainable extraction is, or in any case, what we do not want. (51:18)

The four themes, water system, groundwater protection, environmental effect, and techno-economic aspects, were defined as follows:

An extraction is sustainable when

- its undesirable negative effects on wet and dry nature and agriculture are as small as possible;
- it uses a reliable and qualitatively good resource. This means that the risk of pollution of the resource has to be as small as possible.;
- the environmental problems the extraction causes (energy, waste, resources) are as small as possible;
- it is properly and continuously managed at acceptable costs.

(From: Memo Revision of the Integrated Plan for Drinking Water Supply in Overijssel, Discussion paper for WMO's external stakeholders 9 Feb 2000)

Based on these four themes, WMO and external consultants developed a multi-criteria analysis to assess the sustainability of groundwater extraction sites. Each theme was defined by three criteria. The method integrated the data by calculating the amount of money needed to solve all sustainability problems.

R4 : On one hand, you have to formulate a goal, (...) and then you have to think about what you can do to reach that goal. (...) And the degree of effort that is necessary defines its sustainability. (51:20)

If these costs were too high, an extraction site was considered 'unsustainable' and WMO planned to close it down. The report resulted in a learning process. WMO's original intention was to switch from groundwater to surface water resources, but through the systematic analysis, it developed a different view of reality, namely, that using groundwater is not so harmful:

R4 : But that report also made us aware that the present extraction sites, in terms of sustainability, offer many possibilities. A lot more possibilities than we thought in advance. (51:1)

After the multi-criteria analysis, WMO decided to rely on its existing groundwater extraction sites and to improve the sustainability of these sites with compensating measures.

### 5.3.3 Sustainability depends on stakeholders

WMO started to implement measures based on its own analysis of sustainability. Its main solution was to compensate for agricultural drought problems by surface water infiltration. However, other societal actors did not support these solutions:

R4 : Although we took many measures in the past, (...) now we ask ourselves, (...) "Were they the right investments?" I'm thinking of the water transport plans, which did not turn out to be a contribution to sustainability. (99:6)

This experience caused WMO to try again to understand what sustainability means:

R4 : So now we focus much more on cooperation and on creating consensus about the concept of sustainability. (99:6)

The sustainability of extraction sites was discussed with all relevant organizations affected by groundwater extraction in an effort to come to a shared understanding:

R4 : Together with a number of actors in the area, we took one extraction site at a time, and then we asked, "What is the problem in that area and how can we solve it?" And that problem may be water extraction or pollution, or the fact that agriculture does not flourish there, or that nature needs to be developed. So we started to look more at the local sustainability of extraction, instead of implementing the same kind of measure everywhere. (99:20)

This implies that sustainability has a local meaning.

### 5.3.4 Human-oriented approach

During their efforts to reach consensus, WMO researched the sustainability literature. It discovered the existence of two basic approaches to sustainability: the 'environment-driven' approach, and the 'human-driven' approach:

... different approaches to sustainability can be identified. They can be divided roughly into two basic approaches (...) In the human-driven approach, several interests are always weighed, and the natural environment is one of them. In the nature-driven approach, the possibilities and the limitations of the natural environment are most important. (...) Considering our primary goal, the supply of good and reliable drinking water, we use a human-driven approach (...) The water system approach, which was introduced in the 4th Bill on Water Management (...) is an example of a nature-driven approach.

(from WMO's concept document 'Winning with water: A view of a sustainable drinking water supply in Overijssel', 22 May 2000) (27:3)

This deliberate choosing of the human-oriented approach shows the sophisticated level of discussions on sustainability within WMO. According to the human-oriented view of sustainability, the method of judging whether a production unit is 'sustainable' changes over time. It does not depend on abstract principles such as 'the water system', 'nature', or a set of natural-scientific indicators. On the contrary, nature is a human interest that WMO approaches by negotiating:

R5 : Some companies, such as PWN, have defined nature management as a primary process. (...) So they really have a far-reaching approach to sustainability. (...)

I : And WMO does not do that?

R5 : No, we think it's important, but it's not a primary process for us. No.

I : So you think it is important, and what does that mean?

R5 : It means in practice that we (...) discuss it with stakeholders. (...) with nature organizations, agricultural organizations, licensing agencies, the provincial government (...) in order to achieve a way of extracting water that is acceptable to all parties. (92:9)

Therefore, WMO depends on other societal stakeholders to decide what kind of solution is acceptable.

### 5.3.5 Balance of societal and company interests

Although consensus has not yet been reached with important external partners, the whole discussion has led to consensus about sustainability at WMO. Balance is a keyword for the shared understanding of sustainability at WMO:

R3 : If you look at sustainability the way we look at it now (...) then you see sustainability as a balance. So, on one hand, the customers' wishes, on the other hand the, well, the carrying capacity of the environment, what society accepts, and you have business economics. And when you look at water extractions or at company infrastructure, then you are looking for a balance between those three aspects. (44:3)

By 'company interests', they mainly refer to financial sustainability. The balance is applied both ways: an environmentally beneficial idea does not work if there is no income, and a profitable idea does not work if it is harmful to the environment:

R1 : So, we look not only for sustainable solutions in the sense that nature and the environment are accounted for, but also for financially sustainable solutions. So that's how we understand it. So our daughter companies, even the ones that are more commercial, also have to contribute to the improvement of sustainability. And if we come up with solutions that harm sustainability, or an inferior solution, then it's bad luck, we don't do it. (59:1)

Apparently, the shared understanding of sustainability is used to make business decisions.

### 5.3.6 Broadening the concept

Though there is a shared understanding about sustainability, the concept is still being discussed at WMO:

R2 : You can see a shift from (...) the extraction sites, which have to become sustainable, (...) to much more social and cultural aspects (...) Sustainability is also the development of your personnel (...) and also money. (...) (99:9)

R4 : But do you think the term sustainability is used unnecessarily?

R2 : Yes but that's how it is! But it...

R4 : Yes, it's used when it suits, isn't it. (99:34)

Eventually, this broadening of the term will lead to losing its meaning, but then it will have fulfilled its function within WMO:

R2 : In the end, such a term becomes so general and so broad that it dies away and another one is used. (...) But that's OK, it doesn't matter. (70:24)

### 5.3.7 Theme overview

WMO willingly adopted the term sustainability. Internal study and debate has led to a sophisticated elaboration of the concept. In Figure 5.1, the themes associated with sustainability by WMO are shown. WMO recognizes the process in which stakeholders influence each others perceptions of sustainability.

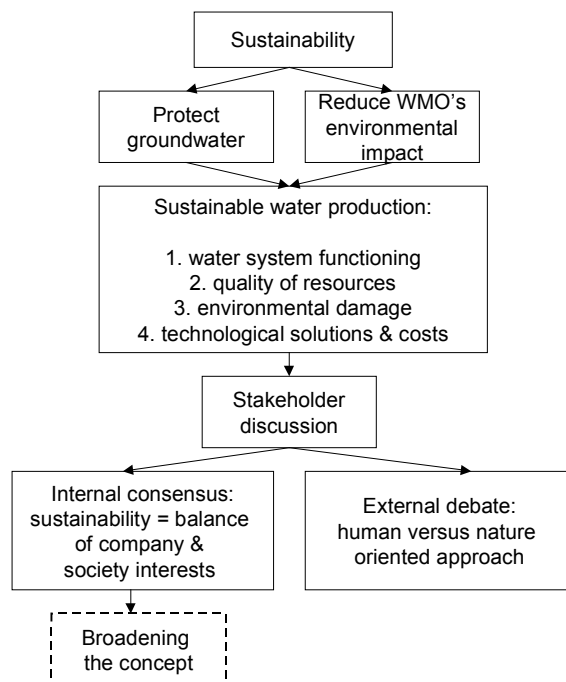


Figure 5.1: Development of the concept of sustainability at WMO.

In this overview we see that balancing different aspects has been part of WMO's plan from the beginning. The range of aspects involved in this balance grew from environmental issues only to a broad company strategy. The concept is used in deciding on investments in future production capacity and on engagement in commercial projects.

Another important characteristic is that WMO uses the concept to articulate its interests to the outside world. At first, it appears that WMO uses a sustainability discourse to hold on to its groundwater resources, but if we look at the interview material more closely, we see that WMO intends to learn from its own analyses as well as its external discussions.

WMO's conceptualization of the Planet aspect of sustainability seems to be somewhat underdeveloped. It cares most about People, and is working on balancing People better with Profit. The Planet aspect is collapsed into one of the People interests, or 'societal interests', in WMO's terms. The respondents from WMO do not identify with nature interests and do not develop their own views of nature. There are no ecologists in high positions who can internalize nature interests.

## **5.4 How does sustainability fit into WMO's strategy?**

All respondents from WMO promptly reproduced the formal strategy. This strategy was designed about a year before the interviews took place, after an intensive internal debate. Below, the process of strategy formulation within WMO is described.

### **5.4.1 Influence of the liberalization debate**

Five years ago, WMO was a technically oriented company, with an 'old Delft mentality':

R3 : A lot has changed here over the past five years. Traditionally, engineers from Delft dominated the water companies, which led to a high quality awareness, especially concerning the product. (63:4)

R2 : Four years ago, this was simply a dull business. (...) drinking water needs to be available always, 24 hours per day, 7 days a week. That demands a high level of security and reliability. People who choose to work at a company like this are also, well, focused on security and reliability, not only for the product, but also for themselves. (70:2)

This mentality had to change because of upcoming liberalization discussions:

R3 : Then market competition became an issue and, with that, a whole new generation of managing directors was hired. We got a managing director whose background was policy science (...) Since then, we went through a complete turn-around with the company. (63:4)

The newly hired director thought that many cultural aspects were worth keeping:

R1 : This company deals well with the government. The high environmental awareness in the whole company is all right. (...) I think it's a very honourable company. Yes, that's simply what I think, I really want to preserve that. And the dedication and the loyalty, (...) people work hard. All of these are good aspects of the company. (59:24)



However other aspects called for renewal:

R1 : There were also departments which were neglected in my eyes. No new technology, inefficiency (...) and we needed to do a lot about it. Also the management, we had to do a lot about that too. (59:25)

The hierarchical management structure no longer functioned:

R1 : When I came to WMO, the organizational structure was totally hierarchical. (...) such a bureaucracy does not function anymore. Nobody accepts that kind of management anymore. (...) And there was very little to replace it. Well, eventually, it was replaced by ISO. (45:38)

The quality management system WMO introduced is called EFQM. It balances different aspects, including efficiency and client-orientedness:

R1 : That's really an integrated quality model that suits us very well. And I see those aspects as inextricably linked. It's not either financially good or politically good, or good for nature and the environment. No, it is good in every way. It's no longer possible to neglect aspects. (59:22)

One of the outcomes of this model is an inventorisation of customer wishes:

R3 : For the customers, we did research among 20,000 households and companies into what they thought about the quality of the product, such as colour and the quantity of calcium, and what they thought about the service. That resulted in all kinds of improvement projects. (63:14)

To make sure that the new values were internalized by the organization, the management personnel were screened. The operation of getting a new management in place was thorough:

R3 : All of the 70 managers were relieved of duty and now we have only 40. Everyone could state his interest in a management function and the ones who wanted it were (...) screened externally. (...) The capable and potentially capable ones got positions in the new company. There were 30 of them and 10 people were hired externally. (...) Of those 30, there are 12 left, after 3 years... Because that was not the end of the story; their functioning was evaluated and if they did not score well they were moved to other posts or lost their jobs. There was a good outplacement program but it was also tough. (63:13)

This process led to a culture change:

R3 : It has become more businesslike; it's more about standing by agreements, being critical of each other. Some people think it has also become less convivial. (99:14)

This culture change does not imply that WMO wants to switch to a free market system. The public monopoly allows it to integrate societal concerns in its business practices:

R4 : We also pretend to be a, well, to have societal values. After all, we have not been privatized yet, so... And we don't want to be either. (51:6)

Liberalization causes companies to ignore sustainable solutions or to slow down their implementation:

R1 : Leakages, they are very limited in our system, other countries have much more. (...) Metering costs 15% of turnover and costs extra money for maintenance and all that. So metering is actually bad for a company. (...) in England, only 10% is metered and in the Netherlands, that's 90% (...) The way you deal with nature, for example, closing down extraction sites because of negative effects in nature. I think it's much easier to make us cooperate than a commercial company. (59:16)

However, WMO expects that liberalization might happen in the medium to long term:

R1 : We wrote in our yearly report, and we still mean it, that water should not be privatized at this moment. But it is possible that, in the course of time, it will have to be, and we want to be prepared for that. (45:25)

Because of this, WMO works on its solvability:

R5 : With these privatization tendencies, it has been concluded that our solvability is much too low compared to what is normal in the commercial market. (...) Which means we have to make a profit, because otherwise we cannot improve solvability.

I : Is it simply called 'profit'?

R5 : Oh yes, it's OK to call it profit. (...) But we are not aiming for profit maximization and we won't do that in the future either. (92:5)

There are somewhat diverging views of liberalization within WMO. The following respondent cannot identify with multi-utility strategies:

R4 : If we compare ourselves with Nuon and Essent, they have very different ideas at the moment (...) all they talk about is 'it has to become cheaper, it has to be more efficient'. And we are talking about making better use of water, and paying attention to the environment. We have very different values from those guys. (51:31)

Another respondent admires the risky experiments of multi-utility companies:

R2 : And these are the companies which do the wildest, most exciting stuff. They're doing things you can come forward with. (...) Those multi-utility companies, they really... develop rampantly! (70:17)

#### 5.4.2 Stabilizing demand

While WMO is working on achieving a better balance, another development threatens the organization, namely, a stabilizing market for drinking water:

R4 : With water saving and losing business to farmers, (...) water sales have tumbled. And now we are at 81 - 82 million. (...) in 5, 6, 7 years, it has been reduced by 10 million. And that's pretty significant. (51:41)

For WMO, this means a fundamental shift in its strategic planning process. It used to extrapolate a growth curve, but now it has to deal with an unpredictable future demand. Instead of aiming for extra capacity, it has chosen small-scale technology:

R4 : A few years ago, our strategy was to develop surface water on a large scale (...) we had to prepare for strong growth, which we were still expecting then (...) The new plan

is more about (...) looking at what we have, optimizing existing extractions (...) more flexibility, large uncertainties with respect to prognoses. (51:37)

Because WMO depends on groundwater, a relatively small-scale infrastructure has been built since water supply started in this region. The advantages of this are that water transport requires less energy and the company has more flexibility in managing its production capacity. These advantages have an effect on how the company deals with sustainability:

R3 : When sales go down, and you have less income, and you also have to do a major restructuring of extraction sites, well, that's very inconvenient. So you have to stay on top of the debate and make sure you safeguard the sustainability continuously. (99:5)

Reduced demand led to the decision to stick to existing infrastructure. This means that WMO has to manage the extraction sites cautiously in order to ensure that they are seen as sustainable. WMO does not want to build new production capacity because this may become obsolete after liberalization:

R3 : For a long time, the energy sector only looked within the borders of the Netherlands: 'we'll build this and we'll build that', and then liberalization came, and the open market. And now they have stones around their necks which they would not have had if they had looked to European policy sooner. So we want to be prepared for that as well as we can. (63:16)

From this viewpoint, the membrane filtration facility built by PWN in Heemskerk is an old-fashioned strategy rather than daring new technology:

R2 : Building pumping stations. You can't do that anymore! (...) all the big projects have been cancelled. (...) That's not the way to produce drinking water anymore (...) that's the last one that has been built, they won't be built that big anymore. That's really old-fashioned. (70:19)

Besides the reduced demand, the cost pressures arising from the liberalization discussion play a role in the strategy. Reduced demand and the focus on cost efficiency render WMO financially incapable of changing its infrastructure. Because of these pressures, WMO is sticking to its existing production infrastructure, 80% of which is based on groundwater extraction. Groundwater pumping stations are small compared to surface water facilities. Surface water resources also lead to a more expensive product, and in a privatized company, it is not advisable to raise prices.

It is in this context that WMO's process of defining sustainability is of importance. Continued groundwater extraction is only made possible by 'making those extraction sites sustainable'. WMO fears losing societal (or provincial) support for the use of groundwater resources. At the same time, it is experiencing progressive groundwater quality problems. The concept of sustainability was introduced to WMO by its department of 'Strategy and Resources', as was mentioned in the previous section, and now it is a strategic goal:

R1 : Our mission statement says we want to be a sustainable water enterprise. And sustainable has two meanings. (...) Firstly, it is oriented towards the environment and the future, to make these things sustainable. (...) The other aspect is that it has to be financially sustainable. (59:1)

Financial sustainability means that projects have to be rewarding.

#### 5.4.3 WMO's cultural values

The stabilized market for drinking water called for a strategic reorientation of the whole organization. In order to decide what strategic future would best fit WMO's ambition, a discussion about basic values was started:

R2 : Firstly, we looked at, well, what our values and norms were; we made them the starting-point of the whole strategy. (70:3)

WMO's most basic value was its integrity and trustworthiness:

R1 : Our integrity is of utmost importance, because water is, of course, a vulnerable product. If you are not trustworthy as an organization, nobody will believe that they can rely on the water. (45:2)

Integrity is further translated into values concerning customers, water, employees, and the organization as a whole:

R2 : The customer is the reason for our existence. Secondly, we associate special values with water (...) so we want to do only vertical integration within the water sector and, also, water is not only for now but also for the future. A third value is that we believe in our own strength. So we don't need all kinds of knowledge from outside; we can do a lot on our own. And the fourth is that we want to be a strong player. So (...) we are ambitious. Those norms and those values, they are the basis of our, well, how we want to proceed. (70:3)

The concept of sustainability seems to be a part of the 'values of water':

R4 : Then you're talking about user value. So that's purely functional (...) But you're also talking about the experienced value, (...) about the way society looks at water. And you're talking about the future value of water (...) which means that you (...) produce in such a way that you can still use the water system in the long term. (51:7)

Based on this set of values and norms, WMO looks for growth possibilities within the water sector. These can be found in three areas:

R4 : We have three strategies, so to speak. In the short term, our strategy is to enlarge our scale, because we are rather ambitious in a number of fields and we can't do that alone (...) the second strategy is to broaden our set of tasks, so we will supply not only drinking water but also water for industry, and become active on the market. (...) And for the longer term, and that process is a bit more difficult, as end goal, we see the water chain. (51:50)

The three growth strategies are described in more detail in the following subsections.

#### 5.4.4 Aim for larger scale

WMO must develop on a larger scale to avoid being left behind and to safeguard its basic values:

R2 : The players around us, who decide largely what is happening, are the multi-utility companies and they definitely also develop outside of their concessions. (...) if you want to participate, you need to become bigger. (...)

I : I see, so it's actually a kind of identity, an idea you want to safeguard...

R2 : Norms and values are what you want to safeguard. That's what you want. (...) how much power (...) how much money you have, how much knowledge you have; all those things are important. (...) (70:11)

WMO negotiated about a merger with its neighbouring water company, 'Waterbedrijf Gelderland' (WG). Infrastructure can be shared with this company:

R4 : We decided to start with Gelderland. (...) Our companies are quite similar (...) we can also benefit from each other's infrastructure. (51:51)

The process was complicated by the fact that two provincial governments were involved. Interestingly, the merger process brought WMO closer to Nuon. The Province of Overijssel agreed with WMO's plans to merge with WG, but the Province of Gelderland preferred a merger between WG and Nuon.

R1 : In Overijssel, everyone agreed, that was fine with them. (...) And in Gelderland, there were other agendas (...) the provincial government and the municipalities, (...) who (...) are also shareholders of Nuon, also wanted to cater to the needs of Nuon (...) and this caused some conflict. (45:21)

WG had resisted a merger with its neighbour, Nuon, for a long time. After the interviews for this research were finished, a solution was found: a merger of the *three* companies. WG is no longer afraid of domination with WMO at its side; WMO has the merger it wants; and Nuon has finally acquired the number of customers it needs to succeed on foreign markets. The provincial shareholders arranged that the water section would be separated when Nuon energy became privatized. The new company is called 'Vitens'. In the mission statement of the new company, we can recognize WMO's values:

As a result of the merger of Nuon Water, Water Company Gelderland, and Water Company Overijssel on 17 May, 2002, Vitens N.V. came into being. With about 1,5 million connections and about 4 million customers, Vitens is the largest public water company in the Netherlands. Vitens aims to work as an innovative, modern, careful, and responsible company, where people work with pleasure and pride, knowing that they contribute to the liveability and sustainability of society.

(from the Vitens website <http://www.vitens.nl/output/data/vitens/>, 13 June 2002)

#### 5.4.5 Develop market activities

The second growth strategy is the development of market activities:

R5 : WMO is one of the companies, which wants to add a commercial component, because we think this is necessary to maintain a healthy and strong company, since drinking water sales are decreasing. (92:31)

Market activities have been initiated in the past by WMO:

R1 : Wavin originated from WMO. (...) CCW, Computer Centre Water Companies originated from us. (...) We are working on Aqualink. So there are all kinds of initiatives because this has always been an entrepreneurial company. (59:24)

Wavin produces PVC pipes for water transport and had an annual turnover of 900 million Euros in 2001. It was started by a WMO director in the nineteen fifties:

WAVIN started 45 years ago as a solution to a problem: corroding pipelines in the Dutch Province of Overijssel caused a serious threat to the safe supply of drinking water.

In 1953, Mr. J.C. Keller, director of the water [company] at that time, experimented with the making of PVC pipes to ensure a clean and affordable water supply. After numerous experiments, Keller produced the world's first large-diameter PVC pressure-pipe. A small workshop in the Dutch town of Zwolle was quickly turned into a pipe factory to serve (...) WMO and external clients.

(Wavin website <http://www.wavin.com/> 13 June 2002)

WMO is not able to appropriate the financial benefits that go with shareholdership of a big commercial company. The shares of Wavin are, in fact, owned by the owners of WMO, the Province of Overijssel, and a number of municipalities. These shareholders may eventually decide to split WMO and Wavin:

R1 : We are a very rich company. But (...) the risk exists that we may simply be cut off (...) and that we will be left behind with a poor company. (45:30)

The profits are invested in new enterprises in the Province of Overijssel:

R1 : Together with Wavin, we started Wadinko, our investment fund. We invest in about 14 or 15 companies. (45:19)

WMO has some organizational learning benefits through Wavin and Wadinko:

I : Why is WMO a different company because of Wavin and Wadinko?

R1 : Well, because my experience is that we are able to do take-overs and to buy shares from other companies. That's something we've learned.

I : So it's not because of the financial capital of Wavin?

R1 : No, that is separate and we keep it separate. But we did learn how to do business (45:24)

The other participant in Wavin was Shell (until 1999, when it sold its shares) and WMO also learnt from it:

R1 : What we saw with Shell, in its participation in Wavin, we were in it together with Shell for years, was also steering very strongly in that direction. Shell (...) was very active with quality systems. And they made that imprint on Wavin (45:4)

The entrepreneurial culture does not imply that WMO is a commercial company:

R3 : We are a company with public shareholders, with a mandate to organize (...) the drinking water supply as well as possible. (...) within that task it is appropriate (...) to do supplementary work (...) And the term commercial, that gives me the feeling of aiming purely for profit maximization. Well, that has never been an option and it still is not an option. (44:15)

The commercial activities are organized in separate business units so that commercial and non-commercial cultures can develop next to each other. WMO's organizational future is a network organization:

R1 : We want to work with many independent entities (...) where a Board of Directors (...) focuses on synergy in the network and mutual cooperation, instead of (...) having to deal with all these operational issues (45:39)

The business unit that provides large industrial customers with water solutions is called Aqualink. It was started by WMO together with the Water Board, Regge and Dinkel. Aqualink provides, for example, large industrial companies with a cheaper kind of water, which is less pure than drinking water. For example, this large customer:

R2 : It bought water from WMO for 500,000 guilders per year (...) So it asked Aqualink to supply it (...) we provide other water, for a different price (...) And that way, we still have an income. And with projects, maintenance, and operation, and things like that, we try to get more business out of it. (70:35)

Other new businesses are a service unit for legionella advice, a laboratory for water and environmental research, and a unit for small-scale waste-water treatment.

#### 5.4.6 Water chain

The third strategy is to cooperate more closely with water boards and municipalities in the water chain. For WMO, vertical integration only has advantages:

R1 : We run into each other a lot in the water domain. (...) we also do our invoicing together. And the customer finds it hard to distinguish water boards from water companies. (...) if you look at company strategy and also at societal optimization, there are actually many advantages in combining sewerage and water treatment and water production in one company. (59:33)

The operational tasks of water boards should be transferred to drinking water production because this would be more efficient:

R1 : A water board is a real government. And it has to deal with government tasks. And the water treatment, why don't we leave that to a company that's good at it. (59:34)

WMO participates in the first Dutch water chain organization, 'Waterpact', in the Twente region. It is the result of cooperation between the Province of Overijssel, four municipalities, a water board, and WMO. The main goal of this organization is to reduce the environmental burden of water use by 95%. In addition, it intends to save costs and serve customers better.

#### 5.4.7 Strategy overview

The above shows that WMO has a good network in society. Its aim is to proactively formulate solutions and act on them. Although WMO does not have the power to change the running of the water sector, its initiatives influence discussion throughout the Netherlands. Therefore, externally, WMO makes a strong impression.

The drinking water demand in WMO's region demand was reduced with 10%, which made large new investments impossible. The liberalization discussion put costs on the agenda more sharply, though WMO opted for a future as a public monopoly. A merger was decided on in order to safeguard the continuity of the organization. Therefore, internally, WMO is not feeling strong.

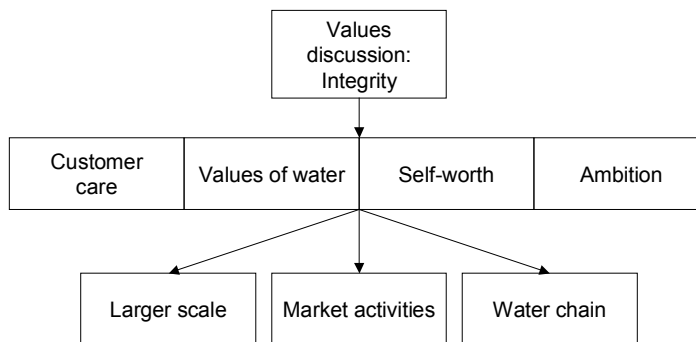


Figure 5.2: Overview of WMO's strategy

WMO's strategy aims for growth in the water sector only. Each of the growth strategies will require much management attention, so there is a chance that one or two of them will be abandoned. The water chain goal seems mostly at risk, because it develops only slowly. It conflicts to some extent with the 'larger scale' goal. If WMO merges with a supra-provincial organization, it will no longer be comparable in size with a water board and cooperation is not on an equal basis anymore.

## 5.5 To what kind of 'sustainable practices' does this lead?

### 5.5.1 Preventing desiccation

WMO uses mostly groundwater. Its greatest problems are desiccation and pollution of resources. Groundwater extraction sites are the most important targets for implementation of sustainability measures. WMO does not favour the generic measure of switching to surface water because it is too expensive:

R5 : We could decide to use surface water from now on. That would mean the destruction of assets; we'd have to close down all extraction sites we've had from our early days, and we'd have to build new ones. Well, that would be rather expensive for the customers. (92:10)

Therefore, the groundwater extractions have to become sustainable. A multi-criteria analysis assessing the sustainability of all groundwater extraction sites (described in a previous section) aims at implementation of this goal:

R4 : It's translated into money, it's translated into effort, and into measures we have to take. Well, I think that's a great advantage of this method. (51:24)

When the analysis shows that it is impossible to make extractions sustainable at acceptable costs, they are closed down. This already happened at two locations and WMO plans to close down four more locations. Other groundwater extraction sites may cause environmental damage, too, but as long as the damage is accepted by society, WMO keeps them operational. The environmental impact of the sub-optimal extraction sites is reduced, preferably by means of low-cost solutions:

R3 : You can solve it by moving the extraction elsewhere. That would cost tens of millions. You can also solve the problem by talking to people in the neighbourhood, and seeing if some compensating measures are possible (...) That way, you may be able to achieve an acceptable level of sustainability for much less money. Maybe the end result is somewhat less satisfactory for ecological sustainability, but I think the total sustainability, if you look at a higher level, becomes better. (99:19)



WMO has tried several measures to solve the desiccation problem. In the past, it transported surface water to compensate for a lack of water in agricultural areas, as was explained in section 5.3.3. WMO has also tried extraction of groundwater at the end of the water system, as was suggested by the water boards, but the resulting water quality was disappointing:

R4 : That water has run through the whole system, so it's much dirtier. So we have to purify it. That means a higher waste production and a high energy [use]; often, the product does not taste so good. The customers complain about these extraction sites in our surveys. (89:14)

In principle, WMO is willing to implement a broad range of measures. Moving extraction sites to the 'end of the system' leads to water quality problems, which can probably be solved technically in the future.

### 5.5.2 Hesitant implementation of sustainability

The respondents from WMO talked relatively little about operational activities linked to sustainability. This was partly due to their interest in fundamental sustainability discussions, and was partly because there has not been much activity yet:

R3 : At our regional offices, they sometimes say, "You are non-committal, why don't you tell us clearly what is sustainable and what is not, then we can start investing in it." But we take these societal discussions into account. (63:19)

WMO's top-level managers have postponed implementation because societal discussion has not yet provided clear directions. The respondents from WMO agree that they are quite slow with implementation. Sustainable measures require large investments and at the same time it is not clear whether they will satisfy societal actors:

R3 : We are not really in a hurry to make large financial investments. (...) We judge it by the level of debate among other stakeholders. (...)

R2 : And that is changing constantly (...)

R3 : And that's exactly the trouble. First, it's agriculture, and when you've solved the problem in agriculture, nature organizations have a problem and then the water board has a problem. It's a different stakeholder every time. So... what strategy do we choose? Or should we simply temporize and talk some more (...) and that's more or less our strategy now. (99:18)

WMO is waiting for an acceptable level of consensus before it starts investing in long-term infrastructure. Other stakeholders struggle with the concept of sustainability, too:

R2 : Actually, we are waiting for stakeholders who don't know what to do either. And we did not take the lead in that process. (99:17)

This shows that the difficulties of defining sustainability and reaching a consensus can be a barrier to implementation.

### 5.5.3 Overview of sustainable activities

An overview of sustainable activities is presented in Table 5.2. In addition to the interviews, some written sources have been used.

Table 5.2: Sustainable activities at WMO

Code	Example quotation	Outcome
reduce waste & emissions	"we try to reuse all waste streams, collecting waste separately" (99:28)	reuse of all waste
save energy/green energy	"pumping in such a way that energy is saved" (99:26)	programmes to reduce energy use
choose materials	"PVC has (...) a number of characteristics which are extremely useful; it's very stable (...) if it were recycled in the future, then there would be no problem at all with PVC" (45:18)	use PVC and hope it will be recycled some day
protect nature	"we don't do it because we consider the nature area important; we do it because we want to continue the water extraction, preferably forever." (92:14)	nature is managed the way stakeholders wish in order to ensure societal support for water production
prevent desiccation	"you can also (...) look for some compensating measures (...) then, maybe you can achieve an acceptable level of sustainability for much less money" (99:19)	looking for inexpensive solutions to desiccation
protect groundwater	Cleaning up of contaminated soil, preventing activities with a potentially negative impact, and nature development *	soil decontamination and influencing spatial planning
reallocate water production	"Closing down extraction sites based on sustainability assessment." (99:26)	unsustainable pumping stations are closed
promote water saving	"We have done a lot (...) we've had the greatest reduction (45:17) we don't do any collective activities at the moment" (59:11)	optimization of individual companies; no collective activities
develop household water	"In Overijssel, we did not find a single project where it was justifiable to implement a household water project." (44:8)	no household water
optimize the water system	"The water board told us, "Hey, we have an agricultural area there with a lot of groundwater seepage (...) Couldn't you catch that water, because otherwise we'll have to drain it?" Three production sites were built that way." (89:17)	3 new pumping stations at the end of a system, in cooperation with the water board
develop industrial water	"Custom-made water (...) to find projects that reduce the need to transport water." (99:26)	develop eco-efficient solutions for industry

\* from WMO memo 'Sustainable Drinking water supply Overijssel'

WMO has taken action in almost all areas, in a cautious way and always considering the financial consequences. It did not choose one or two main items in which to invest large amounts of money and on which to base the company identity. This may be because WMO is interested in acquiring the skills attached to an activity:

R3 : We would like to add a household water project to our company's profile. Until now we have not (...) found a situation in which this solution would have positive effects. (44:8)

However, demand does not call for large investment.

## 5.6 WMO's network

For WMO, four external respondents were interviewed: two from the Province of Overijssel (PROV1 and PROV2), one from a nature organization (NAT), and one from a water board (WB). In the following sections, we present the views of WMO on external network partners as well as the external views on WMO.

WMO maintains relations with many societal actors:

R3 : With all the other water companies; with the Provinces Overijssel, Drenthe, and Gelderland; with all the water boards in our area; with all of the nature organizations; estate owners, recreation organizations, with the farmers and their organizations. And then I'm forgetting the municipalities, many municipalities. We also have contact with a German water company across the border (...) That is the added value of this department for the company, that we have so many external contacts.

I : And who takes the initiative?

R3 : Usually us, because we need something from them. (63:21)

This active approach possibly is the result of WMO's physical circumstances: its groundwater resources are sensitive to pollution by farmers, industry, and other human activities. WMO started a discussion to protect its resources about 25 years ago. Today, WMO has become a strong player, up to the point that other actors consider WMO a threat. Therefore, the director emphasizes WMO's cooperative intentions:

R1 : We believe (...) that makes us less threatening. (...)

I : Who sees WMO as threatening?

R1 : Well, maybe the water boards because we think that WMO could also do some of those operational tasks, like water treatment. Industrial companies, who say, "(...) they are trying to take away our business. They don't see us as a customer, but as unwarranted groundwater users", for example. The provincial government, who says, "They are busy making policy, but that's our job." We hear complaints regularly, so... (59:38)

The concept of sustainability generally requires an active approach of external actors:

R4 : Sustainability is about communication. It's about support, about the opinions of people, about cooperation with other parties. (51:25)

Unfortunately, the other actors have diverse and vague ideas about sustainability, which forms a barrier to implementation, as we already saw in section 5.5.2. This makes us wonder how the concept of sustainability has helped WMO. It widened its view but it limited the company as well. Why does WMO put so much effort in to trying to define sustainability and to reach a consensus about it?

R2 : Because, otherwise, others will impose their ways of doing it on us and we would not be able to participate anymore. (...) we would be sitting here at WMO and something would be stuffed down our throats like, "this is how we deal with sustainability around here". (99:35)

The respondents from WMO realize that discussing sustainability will continue to be a necessity:

R4 : Our environment is changing. So the debate on sustainability is also changing constantly. (...) September 11th put the concept of sustainability in a whole new light. (...) at this moment, we are having a discussion with the provincial government about whether we should deny the public access to all our extraction areas. (...)

R3 : Before that date, it was considered necessary to be as open as possible, accessible. (...) And now inaccessibility is considered better. (99:7)

Because of the perceived threat of terrorism, the provincial government has changed its policy from one of opening up nature areas for recreation purposes, to one of limiting access for the public.

Below we will take a closer look at separate actors in WMO's network. We consider the views of sustainability held by these actors, and investigate whether they are in accordance with WMO's views. We also describe how these actors try to influence WMO, and their degrees of success.

#### 5.6.1 The Province of Overijssel

According to the respondents from WMO, the provincial government is the most important actor influencing WMO's general strategy:

R5 : The provincial government has a direct involvement in our internal processes. (...) I think the provincial government is clearly first on the list. (92:19)

The two respondents from the provincial government confirmed the influence of the provincial government on WMO, but added that negotiations were more or less on an equal basis:

PROV2 : The provincial government has a lot of influence on WMO. It works both ways, you know; WMO also makes sure that we know what it wants. (47:30)

The provincial government has three ways of influencing WMO. Firstly, it reserves geographical space for the company. Secondly, it influences the water price. Thirdly, it decides on the granting of groundwater extraction licenses:

PROV2 : We decide where it's allowed to extract water and provide the license, which can include a number of conditions. (47:61)

The respondents from WMO describe the relationship with the Province of Overijssel as not entirely positive:

I : Do you have a good relationship with the Province of Overijssel?

R2 : I wouldn't call it good, but... They have several roles (...) as shareholders they are fine. (...) Licenses are a big problem. We're assumed to have too much water already and if we want to extract more, we can hardly get a license. (70:33)

The provincial government plays a number of roles, in some of which it functions smoothly, and in others, not. The Board of Directors works fine, because it puts WMO's company interests first:

R1 : If something is going on and a person of the provincial government accidentally talks from the position of politics, he is immediately reproached by the others. That is not done. (...) So here in the company, you just take a stand for the company. (59:29)

The relationship with shareholders is especially important in the event of mergers, because then shareholders have a leading role. WMO and the Province of Overijssel agree on WMO's merger plans, as we already saw in a previous section. WMO's shareholders prefer a public limited company to a private company:

PROV1 : Water is such an important product that you definitely need governmental dominance, also where business practices are concerned, through shareholdership. That is a very explicit opinion held by our Board of Directors and also among our shareholders. There is no debate, for example, on whether we are going to sell (54:16)

This gives the provincial government an extra argument in favour of promoting sustainable improvements:

PROV2 : We also address it as such. For example, when [WMO] is making an extraction site sustainable, then it's quite important; as a public utility, you can do something extra, that you wouldn't do as a normal company, because you also sense some societal responsibility. (47:7)

Conclusion about influence on strategy: the provincial government has a steady influence on WMO. It is the most important external actor. WMO positions itself as a strong negotiator and the respondents from the provincial government appreciate this. The power balance is probably slightly more in favour of the provincial government. WMO and the provincial government agree on the general strategy. WMO works within the provincial government's Water Management Plan where groundwater extractions are concerned, though there is some debate on policy interpretation. Groundwater issues are negotiated with the licenses department but not through the shareholder contact. The provincial government might have more influence if it used its role as shareholder to promote its groundwater policy.

Below, we consider the opinions from the provincial government on the concept of sustainability and compare these with those of the respondents from WMO. The use of the term sustainability is by no means discouraged by the provincial government. The president of WMO's Board of Directors uses the term more often than his colleagues can bear:

PROV1 : Then they said to me, "You use the word sustainable too often." (...) so we are positively searching for a way to use our provincial responsibility to operationalise sustainability. (54:1)

The two the respondents from the provincial government had different opinions. One respondent combined aspects of human-driven as well as nature-driven approaches in his understanding of sustainability:

PROV1 : Responsibility for long-term interests. There will be people here in the future, and the environment has an intrinsic value of which water is a part. (...) By intrinsic values I mean (...) that apart from human beings who want to be able to use this resource in the long term, (...) water in itself has a value: in itself and for its natural environment. We have a certain responsibility for that. (54:3, 54:5)

The other respondent from the provincial government revealed a purely human-driven view of sustainability:

PROV2 : It's a different term for looking for a societally acceptable solution. (...) it's possible to say in certain areas, "I think it's so important to have drinking water production here that other functions will have to yield (...)." Because we can simply define the desired groundwater situation, including drinking water production, in such a way, that it's sustainable the way it is right now. (47:3, 47:8)

In his opinion, sustainability depends on local circumstances. Therefore, if human actors in a certain area agree on a solution, then it is sustainable. This view is in accordance with WMO's human-driven approach. The next quotation confirms that there is consensus between this respondent from the provincial government and WMO:

PROV2 : We consider (...) the supply of good-quality drinking water so important that we are not in a hurry to remove those extractions, because they are hardly polluted. They are high up in the system. (...) voices are heard, especially from the water boards, saying that they want the extractions all the way down to the end of the system, to

allow each drop to pass all through the system and be useful everywhere. That creates a risk from the viewpoint of water quality. (47:18)

These different opinions expressed by the respondents from the provincial government may cause WMO to describe the provincial government as harbouring a diversity of opinions.

Conclusion regarding influence on perceptions of sustainability: many ideas on sustainability are shared by the Province of Overijssel and WMO. WMO finds it hard to deal with diverging opinions on sustainability within the provincial government and tries to speed up decisions by taking initiative.

The provincial government is indicated as the most important influence on sustainability issues within WMO:

R2 : The provincial government towers above the others, let me emphasize that once more. (...) And we work it all out peacefully, I must say.

I : So what are the issues for the Province of Overijssel?

R2 : Groundwater reduction, so that's desiccation. (70:32)

The provincial government was involved in the 1997 research project determining the sustainability of WMO's groundwater extraction sites. The respondent from WMO described this involvement as having been much more active than did the respondent from the provincial government:

R4 : This is a cooperative product of the provincial government and WMO, only the provincial government (...) said in the end, "No, we don't want our name on it." (51:28)

PROV2 : Oh yeah, that little book of theirs. (...) We had some workshop about it together. (47:22)

Apparently, the involvement was more important to WMO than it was to the provincial government. Another difference is that WMO includes financial aspects in its definition of sustainability, and officials from the provincial government do not:

R3 : At the provincial government, they think we spend too little money on sustainability. That's true in a way (...) because we are looking for a balance. (...) we start by looking at what closing down an extraction site would mean in financial terms, and if it is favourable, we offer that to the provincial government. For the provincial government, to close down a site means to score; then they can say, "Look, we forced WMO to close down that site." (63:10)

This causes some irritation and disagreement, because financial issues are more important to WMO than to the provincial government. WMO closes down extraction sites that cause financial trouble anyway, but it does not want too many changes in the infrastructure:

R1 : They sometimes talk about sustainability in a pointed and single-minded way; then I say, "Well, guys, if we listened to you we'd have to close down six extraction sites, we'd have to develop alternatives, and that would cost our customers a lot more money. And you should take that into account." (...)

I : How does the influence of the provincial government work? (...)

R1 : Licenses, directly through licenses. No, in the Board of Directors, they have a say too, but they do not use a policy agenda. (59:9)

The provincial government is not allowed to pursue groundwater interests through the Board of Directors, but the groundwater department, on the other hand, is asked by WMO to take

responsibility for WMO's economic interests. The respondents from the provincial government know that WMO's decisions to close extraction sites are based mainly on economic arguments:

PROV2 : The smaller extraction sites, which are more difficult to operate economically, are the ones that are closed down. (...) And they also want to make them sustainable, the extraction sites. By doing that, they want to show a positive attitude. (47:60)

Meanwhile, the provincial government is working on a groundwater policy plan to deal with desiccation problems in a more systematic way. Because this is not yet finished, the provincial government has asked WMO to postpone investments:

PROV2 : But we also say to WMO, "Just wait a while before you start implementing measures, until a Desired Ground- and Surface water Regime has been laid down in an area. Because then (...) you have a reference from which you, from the water perspective, sustainable water perspective, can extrapolate." (47:16)

PROV2 : WMO says, "We want to do something, please decide what we should do." (...) So we do experience an urge to act within WMO. (47:22)

This is a reason why WMO cannot invest in changes yet, and why the WMO respondent said, 'We are waiting for stakeholders who don't know what to do either'.

Conclusion regarding influence on operations: WMO appears to be quite dependent on the provincial government. WMO has chosen a pro-active debating strategy in an effort to speed up the process, but in the end, WMO has to wait until the provincial government has decided upon its policies.

## 5.6.2 Water boards

The leaders of WMO and of the water board, Regge & Dinkel, know each other well, because they both participated in 'The Water Circle', a small group of leaders from the Dutch water sector that published the 'Water Manifesto' in 1998. This manifesto contains an argument in favour of water chain cooperation and against liberalization. It describes the 'values of water' that WMO later used in its internal strategy discussion. The respondent from the water board participated in WMO's strategy discussion:

WB : I was involved in that strategy discussion myself (...) there are two pillars (...) namely, societal functioning and economic functioning. (90:43)

He prefers a public utility structure for WMO, because this would enable a more equal relationship between the water board and the water company:

WB : If you look at Vivendi and other large players on the drinking water market, well, then it seems impossible for us to have a sustainability debate with some distinguished gentlemen in Paris. (...) So we are strongly in favour of a utility having a public character, instead of a private character.

I : Yes, so you mean a regional tie?

WB : Yes, a regional tie to the water system, and, on that basis, some extra measures can be taken which may cost some money, even if this is a bit contrary to economic functioning. (90:44)

The Waterpact is a shared project of WMO and Regge & Dinkel. The organization tries to put water chain ideas into practice, but it is developing more slowly than expected. There are several reasons for this, according to a respondent from WMO:

R4 : A water board is a governmental body. (...) it needs to be voted upon. And we are more business oriented (...) we are an organization that can make decisions more quickly and, therefore, we can change more quickly (...) So it has something to do with history, with culture, with organizational structure. (89:2)

Aqualink is a more successful result of cooperation between WMO and Regge & Dinkel:

R1 : The business market, developing services and products. We do that with Aqualink, the business unit we initiated together with Regge and Dinkel. There is a long list of projects, from optimizing the water system to providing different water qualities. (45:1)

Conclusion regarding influence on strategy: the water board does not have any formal power over WMO. The influence has an informal character and is probably mutual. WMO and the water boards form a coalition to develop and promote new ideas. They also cooperate structurally to operationalise the water chain concept.

What influence does the interaction between these organizations have on the definition of sustainability used at WMO? At the water board, the term sustainability is also used frequently, for example, in project designs. The water board's opinion on sustainability is influenced by national water policy. Instead of fast drainage of rainwater out to sea, the water has to be stored in natural processes:

WB : So now we are going to conclude a deal with the farmers there; they will allow those 500 hectares to be flooded about twenty times each year.

I : Why is that more sustainable?

WB : Because you maintain the flexibility of the water system. So if there is a water problem here, you need to make sure it is more or less solved by the area's own natural circumstances. (90:18)

The water board feels that it has been working against nature by removing the surplus of relatively clean rainwater in the winter, and then having to import polluted river water to solve drought problems during the summer. Now it is trying to slow down drainage by restoring natural water systems.

Conclusion regarding influence on perceptions of sustainability: Regge & Dinkel chose a nature-oriented approach to sustainability. This is opposed to the human-oriented approach of WMO.

According to the respondent from the water board, its vision document on the catchment-area of the river Regge is an answer to the discussion on sustainable groundwater extractions:

WB : Of course WMO started the discussion themselves by asking, "Which extraction sites are sustainable and which ones are less sustainable and what can we do about it?" We are actively involved in that discussion now. And because of that, it's necessary for us to clarify how we understand it exactly and, if I'm correct, our view is stated in this document. (90:6)

The water board claims that the drinking water company disturbs the natural system. It wants WMO to move extractions to the end of the water system:



R4 : They are telling us (...) especially the water board Regge and Dinkel, (...), “All extractions have to be at the end of the system, (...) because the water system needs to use the water, it has to have ecological functions, and only at the end of the system should the water company extract water.” (51:10)

The respondent from WMO disagrees with Regge and Dinkel for two reasons; firstly, because it addresses only a few of the actors causing desiccation:

R4 : That would mean the water extractions having to move, and agriculture having to leave certain areas, but also houses and roads. Well, the water board is not working on this. It looks mainly (...) at drinking water companies, and at farmers, too. But it looks at the ones who are easy to address. (89:12)

Secondly, he thinks that moving drinking water production to the end of the system would not be effective:

R4 : The water board says, “(...) we don’t really know what will happen when a water extraction moves out.” (...) I do know what will happen, the moment drinking water moves out, the area will become wet (...) the water board will build a pumping station, will start draining the area, (...) because agriculture has to produce. So you only shift the problem.

I : And waste the groundwater.

R4 : And waste the groundwater. (89:13)

The respondent from the water board is aware of WMO’s views:

WB : It’s very easy to pump up water from deep aquifers; it is of very good quality so they can make drinking water of it without effort. And that’s much more difficult with (...) surface water extraction. (...) That makes drinking water more expensive and, from an economic point of view, it is troublesome (...) I can imagine all that very well (90:5)

But Regge & Dinkel cannot accept WMO’s technical solution:

WB : ‘Making it sustainable’..., well, our opinions are somewhat different (...) if there were an extraction and a very complicated water transport plan had to be realized because too much water was being extracted from the area (...) then this would pass WMO’s sustainability test but not ours. That’s the difference. (90:1)

As we can see in the quotations, dialogue already is going on between WMO and the water board. Both organizations know what the other’s position is, and some cooperative projects have been realized. However, part of the gap still needed to be bridged at the time the interviews took place. An interesting question is whether taking an extreme position on sustainability gives an actor more influence.

Conclusion regarding influence on operations: although the respondents from WMO stated that the water board removed itself from the discussion by taking such an extreme position, it did, in fact, cause much debate. The good relations between the two organizations, resulting from cooperation in the past, may help to bring this debate to a constructive conclusion.

### 5.6.3 Nature organizations

WMO is in regular contact with nature organizations because of flooding or desiccation problems in nature areas. Relations between WMO and the nature organizations vary depending on the situation:

R3 : Sometimes, we agree, when we develop nature together, and sometimes we are diametrically opposed to each other, when it's about desiccation and about closing down extraction sites. (63:12)

The nature organizations seek an ally in the provincial government:

PROV2 : Nature and Environment is also shouting that these extraction sites have to come off the hills. (...) eventually it's the provincial government's job to say if an extraction site can stay somewhere or not. But we do listen to signals from outside. (47:64)

Therefore, nature organizations probably have some influence through the provincial governmental.

Conclusion regarding influence on strategy: the influence of nature organizations on WMO is probably weak. All they can do is try to persuade, and maybe win some goodwill from the provincial government.

The term sustainability is not used in the nature organizations, according to the respondent. The concept is more useful for economic issues:

NAT : I think the challenge of sustainability lies mainly within the real economical sectors: (...) sustainable energy supply, sustainable water supply. For nature, well, that's as sustainable as can be, because it takes care of itself. (91:2)

However, from the viewpoint of sustainability, it is advisable to watch nature, because problems in nature often forebode problems for humanity:

NAT : The first warnings often come from environmental conservation and nature conservation groups (...) they are the first to notice a trend that will become a problem for all other societal interests in the end. (91:29)

He thinks the most sustainable solution for the water sector is to look for synergism with nature:

NAT : Our interests are largely aligned. (...) the purification of water through sand in the dunes, the purification in large swamps (...) the buffering effect of large ecosystems on pollution or the disturbance of water balances. These are all processes that have to do with nature (...) You can, of course, choose to eliminate all these ecological processes, but then you'd have to replace them by human-made ones. You'd need to build a water purification unit or filter artificially. (...) I think it's important to maintain or restore all natural processes with an output that is helpful to society, and it's also the most sustainable way. Also, economically, the most efficient way if you ask me. (91:11)

According to this respondent, nature is not opposed to human interests. It provides ecological functions for human survival, and it provides an early warning for problems in the human-nature system. If we look at this respondent's argument more closely, we see that his most important concern is the natural systems. He connects them to human interests by saying that natural systems serve human interests.

Conclusion regarding influence on perceptions of sustainability: although WMO likes the idea of synergy between drinking water and nature, we did not find many similarities between the nature organization's view and WMO's view of sustainability. The respondents from WMO

talk about nature as an external, societal concern and not as a common interest of nature organizations and water companies.

The respondent from the nature organization tried to influence WMO's operational activities by discussing with WMO how nature development and water extraction can be combined:

NAT : So we said, "In the future, you could think about nature development on a more regular basis, and make it functional for water extraction." (...) And I think (...) it might possibly be cheaper from a business perspective than expanding groundwater extractions. (91:23)

The respondent from the nature organization is aware of WMO's interest in economic goals. He has also noted WMO's wish to hold on to its infrastructure:

NAT : But anyway, some difficult issues remain. One is the enormous depreciation period for groundwater extraction; I believe it is eighty years or so. In that case, then, you can never change anything (...) then there is not much left to talk about. (91:19)

Conclusion regarding influence on operations: the debate between WMO and the nature organization is still at an abstract level. It may have concrete consequences in the end, but the nature organizations do not seem to have much influence on WMO yet.

#### 5.6.4 Municipalities

Municipalities do not seem to have much influence on the general strategy. They are mentioned, as shareholders, in an obligatory way:

R2 : By the way, municipalities are shareholders, too (92:20)

Municipal shareholders possibly form a counterweight in the Board of Directors against the provincial government values, because municipalities tend to give more priority to the tariff for the inhabitants they represent.

Conclusions in influence on strategy: municipalities do not have much influence on WMO.

Municipalities try to have an influence on sustainability by asking for grey water systems, but, so far, they have not succeeded in convincing WMO:

R2 : We have a disagreement with the municipality of Enschede, because a grey water system is not economically feasible, so we do not cooperate, and now we are the bad guys. (70:31)

Conclusion regarding influence on sustainable operations: municipalities ask for household water but cannot force WMO to cooperate.

#### 5.6.5 Customers

Customers, divided in consumers and industries, also form a group of actors. Consumers complain when they detect deterioration in water quality:

R4 : The moment we supply poor quality water, complaints start pouring in. (89:6)

These complaints can be seen as the wish of customers to have an influence on WMO. However, they have no real power because they cannot choose another supplier:

R2 : Customers do not have enough influence at all yet. (...)

I : Which customers, the big ones or the small ones?

R2 : All of them. The big ones have little influence now. We do consider them important, but they cannot choose. (70:30)

Therefore, the impulse for customer-friendliness must come from the management:

R2 : For a drinking water company, the customer is never the main criterion for decisions (...) within this company, the awareness has grown that if you want something done, the impetus has to come from the management because it's the only driver that can change things. (99:15)

This is why WMO commissioned customer research, as was already mentioned in the strategy section. This shows that in some areas the water quality was not satisfactory, and it led to several improvement projects.

Conclusion regarding influence on strategy: customers have no power over WMO. Because of the importance it attaches to customer-friendliness, WMO offers customers a voice through surveys. Signals that customers are not satisfied with product quality are a reason for WMO to act.

The influence of customers on sustainability issues within WMO is small:

R4 : We hold customer opinion surveys but (...) they consider environmental effects less important than simply receiving good quality water for an acceptable price. (51:9)

WMO tries to reach large customers with tailor-made products:

R2 : They are large users, so they are the first to be interested in alternatives, and this makes them important as customers. (70:34)

Conclusion regarding influence on operations: according to WMO, small customers are not interested in sustainability, so they do not influence WMO in this respect. Large customers provide opportunities for technological innovation. This cooperation can be influential.

#### 5.6.6 Farmers

Because of the rising price of water, many farmers have switched to their own water sources. This has led to reduced drinking water demand for WMO. Disconnecting from the supply network ("Waterflight") is possible in WMO's region because good groundwater resources are available. The farmers are considered a lost market:

I : What about farmers? (...) Are they an important group for you in this province?

R2 : Well, they have all left us, actually. (...) they make their own water extractions, which are so small that they do not need a license; we can't do anything about that. (70:36)

The reduced demand led to a profound strategic reorientation within WMO. The provincial government plans to draw up extra regulations to make it more difficult for farmers to extract their own water:

PROV2 : We want everyone who extracts groundwater (...) to contribute to that fund. (...) also the farmers, who think they can leave WMO (...) They also extract water and influence the water system in an area. Well, necessary recovery measures can be subsidized by that fund. (47:28)

Conclusion regarding influence on strategy: farmers have an important impact. They turned their back on the company, leading to reduced demand, with the result that WMO had to develop a new growth strategy.

Regarding sustainability issues, farmers are an important group for WMO. They pollute groundwater resources, and, on the other hand, WMO causes drought problems:

R5 : Agricultural organizations, because we contribute to desiccation and agriculture is affected by that. So we have to pay for the damage or take measures; anyway, we are always in debate with them. The reverse side is that farmers often pollute our future resource by over-manuring, so it's in our interest if farmers near our extraction areas produce in a way that does not bother us. (...) negotiating with these people contributes to sustainability. (92:22)

Conclusion regarding influence on operations: farmers influence WMO's functioning in several important ways. Coming to terms with pollution and drought issues is important for sustainability and receives continuous attention from WMO.

#### 5.6.7 The Ministry of Environment

The Ministry of Environment was mentioned as an important influence. The Ministry has an enforcement agency that controls drinking water quality:

R5 : The supervision of drinking water companies has always been a task of the Inspector of Public Health. (...) He supervises us and forces us, for example, to become certified. (92:21)

More importantly, the Ministry has an impact through the Drinking Water Law:

R4 : Everyone is waiting for clarification. The moment Pronk says no multi-utility companies and no privatisation and it becomes legally embedded, the pressure will be released and many companies will find each other and start to merge. (51:52)

WMO has tried to influence the liberalization debate with the above-mentioned Water Manifesto. Although the Dutch debate settled for a public monopoly in 1998, WMO is not yet at ease. The power of the Ministry of Environment may become less because of the European Union:

R3 : In the Netherlands, we tend to see The Hague as the centre of the universe, but, in the meantime, policy is coming more and more from Brussels. (63:16)

Conclusion regarding influence on strategy: the Ministry of Environment has a profound influence as a result of its legislative power.

The decision not to liberalize the sector means that WMO feels more responsible for the impact of groundwater extractions:

R4 : We also claim (...) to have societal values. We have not been privatized yet, and we don't want to be either.

I : What kind of societal values?

R4 : Societal values are about looking further. Now I'm only focusing on the concept of sustainability. We look beyond strictly supplying drinking water. So we are aware of the effects of extraction. We are aware of the resource we are using. (...) The water system has to function in a good way. (51:6)

Conclusion regarding influence on perceptions of sustainability: the Ministry influences WMO's view of sustainability. By choosing not to liberalize, WMO feels it can expand the concept more.

## 5.6.8 Overview of influences

The sections on WMO's stakeholders show how good WMO's network is. It actively engages in discussion with a number of different actors. Interviews with its network partners show that WMO manages to get its points across regarding its intentions concerning sustainability issues and its business interests. WMO and its stakeholders use the term sustainability frequently. This does not mean, however, that they perceive sustainability in the same way.

An overview of stakeholder influence is presented in Table 5.3. The table shows that several actors influence WMO's strategy, but have little influence on WMO's views of sustainability. In the second column, the internal and external views of sustainability are compared. Several actors in WMO's network wish to give more priority to nature and natural water systems. WMO gives priority to human interests. Among the respondents, only the official from the provincial government supports WMO's view.

Table 5.3: Stakeholder influences

	Influence on strategy		Ideas about sustainability		Influence on sustainability activities	
Province	formal power through shares and licenses	++	acceptable solution for society/ long-term human interests and intrinsic value of nature	+/-	diverging opinions within provincial government give WMO room to choose its own best interest	-
Water boards	cooperating, friendly argument	+	natural water systems	-	heated debate but inconclusive without prov. government intervention	-
Nature organizations	indirect or based on goodwill of WMO	-	protect natural processes because of economic output	-	only win-win solutions realized	-
Municipalities	diluted shareholder influence	-	- *)		household water not realized	-
Farmers	operational influence on sales and resources	+	- *)		negotiations lead to compromises on both sides	+
Customers	no real power but invited by WMO to share views	+	- *)		small customers not interested in sustainability; large customers provide opportunity for (sust) innovation	-/+
Ministry of Environment	legislative power: liberalization or not	++	- *)		liberalization makes a difference in sustainability issues	+

\*) no data

How can we explain this difference in opinions? Firstly, WMO has already formed a strong and internally shared opinion on sustainability. WMO's present values (public health and a

healthy business) are focused on human interests, and these values influence WMO's interpretation of 'sustainability'. Secondly, the provincial government's influence is inconclusive, because its members hold different opinions. Thirdly, the other actors have no formal power over WMO. A dialogue with opposing actors may lead to change, but this is likely to happen only if these opposing ideas are supported by the provincial government.

## 5.7 Case-specific conclusions

WMO uses the concept of sustainability, because it fits in the existing company culture. It actively tries to give meaning to the concept by referring to the literature and through internal and external debate. Its conceptualization is consciously human-oriented, with emphasis on the People and Profit aspects. Given this meaning, the concept is in accordance with the company strategy of balancing company and society interests.

One of the reasons why the company likes the concept is that it is involved in a long-term business. The concept helps in defining a long-term strategy, something WMO needs badly because its social and economic environment is changing quickly. However, when working with the concept, its meaning changes continually. During the external debate, WMO came to realize that many of its network partners have different views of sustainability. The water board is an important opponent because it wants more emphasis on water system interests, which would mean that WMO would have to relocate groundwater extraction sites. Because the most influential actor, the provincial government, is internally divided, and other actors have no formal power, the matter remains undecided.

A second problem is that, although WMO is willing to innovative technologies, reduced demand has robbed it of the financial ability to invest. The liberalization debate has urged WMO to watch costs even more and to invest profits in solvability. Therefore, the operationalisation of sustainability is limited to cheaper solutions. Thirdly, the surface water installations which it tested produced water of poor quality.

WMO chooses to be a hybrid organization, prepared for both a monopoly and liberalization. The organization of its activities in separate business units allows it to encourage the development of different cultures. A disadvantage of this is the loss of an integrated approach, especially when the top management retreats to a strategic position and no longer interferes in operational issues.

WMO is an interesting case because it combines enthusiastic use of the term with hesitant implementation. Analysis of the sustainability of its production structure did not lead to rigorous change: the company did not switch to using surface water or membrane filtration technology, and the relocation of groundwater extraction sites was kept to a minimum. This can be explained as follows:

1. Vagueness of the concept of sustainability: the concept is broad enough to allow WMO to adapt it to ideas that already exist in its culture. Its interpretation of the concept is human oriented. The human-oriented goals of supplying drinking water are clear because consensus has been reached on this issue over the past century (see also Chapter 3). The company has problems with the nature goals because they are still changing. The respondents from WMO spoke about nature goals in a way that suggests that they have not really internalized them. Measures to ensure the protection of nature are implemented in order to realize the goals of other organizations/people, and not as relevant goals in themselves.
2. External indecision: the ideas of other societal actors diverge. Especially if the most powerful actor, the provincial government, is internally divided, this does not help WMO to

make decisions. Indecisiveness and diverging views of sustainability form an important barrier to operationalisation. Only when an actor dares to operationalise can the value of a solution be judged. A failed operationalisation, such as the supply of household water, has the advantage that it finally clarifies where the dead ends are.

3. Economic limitations: parallel developments such as stabilized demand and possible liberalization block new investments. A switch to the use of surface water or the relocation of groundwater extraction sites would mean the destruction of assets. Groundwater extraction is also cheaper than using surface water. Therefore, WMO continues to extract groundwater for financial reasons.